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MASTERWORKS

OF Philosophy

DIGESTS OF 11 GREAT CLASSICS



Edited by S. E. Frost, Jr.

Doubleday & Company, Inc., Garden City, N. Y., 1946

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PRINTED IN THE UNITED STATES

AT
THE COUNTRY LIFE PRESS, GARDEN CITY, N. Y.

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ACKNOWLEDGMENTS

THE EDITOR wishes to thank Longmans, Green and Co., Inc., for permission to include our condensation of *Pragmatism* by William James, and Henry Holt and Company for permission to include our condensation of *Creative Evolution* by Henri Bergson.

S. E. F., JR.

PREFACE BY THE EDITORS

This volume is one of a series of books which will make available to the modern reader the key classics in each of the principal fields of knowledge.

The plan of this series is to devote one volume to each subject, such as Philosophy, Economics, Science, History, Government, and Autobiography, and to have each volume represent its field by authoritative condensations of ten to twelve famous books universally recognized as masterworks of human thought and knowledge. The names of the authors and the books have long been household words, but the books themselves are not generally known, and many of them are quite inaccessible to the public. With respect to each subject represented, one may say that seldom before have so many original documents of vital importance been brought together in a single volume. Many readers will welcome the opportunity of coming to know these masterworks at first hand through these comprehensive and carefully prepared condensations, which include the most significant and influential portion of each book—in the author's own words. Furthermore, the bringing together in one volume of the great classics in individual fields of knowledge will give the reader a broad view and a historical perspective of each subject.

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All these books have had a profound effect upon the thinking and activities of mankind. To know them is to partake of the world's great heritage of wisdom and achievement. Here, in the Masterworks Series, epoch-making ideas of past and present stand forth freshly and vividly—a modern presentation of the classics to the modern reader.

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MASTERWORKS OF PHILOSOPHY

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INTRODUCTION

THE goal of philosophy is to suggest solutions to man's most persistent problems—the problems of knowledge, of existence, of history, of politics, of art, of religion, of human reason, and of human conduct. Most of us see fragments of the universe, parts of a whole, and many of our "solutions" are fragmentary, partial, seldom satisfying. The philosopher strives to see all the parts and to fit them together so that they make a satisfying whole.

Whether or not we consider ourselves philosophers, all of us are confronted with the problems which are the primary concern of philosophy. We may not approach the problems of good and evil, of immortality, of the nature of God, so systematically as the philosophers do, but we reflect often on these and related problems, and often wish that we could see clearly in the universe a pattern which would give us satisfying answers to these problems. It is for this reason that we turn to the writings of men who have devoted their lives to philosophy, and who have found, at least for themselves, answers to these ever-present and ever-challenging problems of thought and action and belief.

It is with this search for the pattern of life as a whole and the universe as a whole that the following pages are concerned. Here the Masterworks of eleven of the most famous philosophers of all time are presented in condensed form in the authors' own words, with the main arguments of each earefully preserved. These condensations form, in brief, a summarized history of philosophy from Plato to Bergson.

The reader of these pages will find amidst the great diversity of ways of thinking and often contradictory opinions and conclusions an underlying thread of unity, a belief that by thinking man can solve the riddles of the universe and of his place in the scheme of things. The great minds at the height of their philosophic genius are clear-visioned and sure. They rest their faith upon man's ability to think through the maze of conflicting evidence to some order and system.

Perhaps the most universal of all problems is: What is this universe in which man lives and of which he is a part? Whether one kneel at sun-

set before the majesty of nature's beauty, or cringe in mortal fear before the fury of a storm, whether he hold out his hands in supplication or shake his fist in defiance, whether he cry with the poet, "I am master of my fate," or tremble before the thunder from some Sinai, man yearns to know of what stuff the universe is made. Plato saw the world of sense as an imperfect copy of the "ideal" or real world. Here, for him, are impressions of the ideal upon very un-ideal matter. But Aristotle was convinced that this world which we sense is the real world where form, inherent in matter, is ever striving to realize itself. By the time of Francis Bacon man had begun to sense the consistency of happenings in this universe. Where others had seen miracles and mere chance, Bacon saw law and order and told his fellows what he had seen. Here was a universe that could be depended upon, once thinking discovered the regularities. Descartes found the laws of the universe to be those of mathematics, and the universe composed of matter in motion according to these laws. This matter, or substance, fills all space so that there is no empty space or vacuum. The whole, however, is divided into an infinite number of small particles which are constantly changing position according to definite laws. To account for thinking, Descartes developed a theory of dualism, which considers the ultimate nature of the universe to be twofold, and to consist of two substances. One of these he called matter and the other mind. Spinoza carried this thinking further by proposing that matter and mind are two ways of looking at the same substance, and this substance he called God. Substance is the basic "stuff" of the universe, infinite, uncaused, and self-determined. In the writings of Locke we find the view that all that man knows about the universe comes through his senses; and along with this there arose the question: How can we be certain that the evidence of the senses is true? Although Locke agreed with Descartes in holding that there are two kinds of substances constituting the universe, bodies and souls, he was not able to establish this belief beyond the point of probability. For him the cause of our sensations is substance, but beyond this fact he was unable to go with scientific assurance. Kant took up this problem and admitted that man is unable to know the universe which exists outside of his thinkingthe "thing-in-itself." Reason constructs a universe of idea, and this is the universe we can know. This universe, according to Kant, has no beginning in time, contains bodies which can be divided infinitely, and is characterized by freedom. In this universe is an absolutely necessary being, God. Thus Kant teaches of two worlds or universes: the phenomenal world of experience and the noumenal world of reason. The one is scientific while the other is practical. James turned from all this speculation to the "practical" world of experience, human experience. Since man cannot experience the world outside of experience, James admitted that he could know nothing about it and must be content with the world he has. Bergson held that the universe as described by the scientists is inadequate—it leaves too much out. His universe, on the other hand, is a moving, growing, living, creative, and constantly creating thing. For him the universe is a process of "creative evolution."

Of equal challenge to human thinking is the nature of man and his eternal destiny. He finds himself a living, thinking, hoping being which, in the course of growth, develops a self, an ego, characterized by an intense desire to continue living and growing eternally. Is this desire evidence of immortality or is it a bubble doomed to burst with death? The majority of philosophers have reached the conclusion that there is some kind of eternal existence for man, either as an individual or as part of an immortal world-soul. Plato saw the soul as living eternally before birth and after death. Life, for him, was a moment during which this immortal soul became enmeshed in matter only to strive to free itself and return to its star and there spend eternity. Aristotle found soul and body everywhere, but in man it is supreme. For him, however, personal immortality is impossible, since at death all perishes save creative reason. This surviving part of the soul is part of God and returns to be absorbed in God. Descartes taught a dualism of the soul and the body with the soul as part of the Whole, part of God or Absolute Substance. As such it cannot disappear, but, with the death of the body, is freed to continue to live indefinitely. Locke's position was similar to that of Descartes. For Locke, however, the immortality of the soul is a matter of faith and not of pure reason or of science. It is above reason. Kant, true to his fundamental position, held that the idea of the soul is a product of reason and, since this idea has value, it is legitimate for us to think of it. We cannot prove the existence of the immortal soul, but we can act as though the soul exists and is immortal, since by so acting we secure values which have justification. Schopenhauer's "will" is the soul of other philosophers. It is immortal, since it is part of the universal will. There can be no individual immortality, but rather there is a return of the will to its source. James harks back to Kant when he teaches that man's belief in the existence of the soul and its immortality has a certain usefulness in the moral life. His is the answer of many modern philosophers. The belief has definite moral value. Anything that has such value must have some basis in reality. It must be true in some way. At least, man is justified in believing in the existence and the immortality of the soul.

A third problem which has challenged philosophers throughout the ages is concerned with the nature of the personality, power, or force which rules the universe. No great philosopher has ignored this problem and none can, since the solution determines one's whole thinking. Plato, in common with the Greeks of his day, believed that the world was ruled by many gods, each very much like human souls. He is not clear, however,

at this point, and the reader feels at times that he is reaching out toward the idea of one supreme being who is master of the universe. Aristotle was much clearer in his thinking in this respect. At the end of the creative process, the process in which form is realized, stands pure form. This is the "unmoved mover" of the universe, "God." It remains unchanged but is the cause of change. It is the attractive cause of all motion. By the time of Bacon there had grown up a conviction that man's reason was incapable of knowing fully this supreme power in the universe. This belief was typified in Bacon, who held that reason can give only proof of the existence of God. All else must come through revelation. Descartes did not share this defeatism but rather believed that he was able to learn much about God through thinking. He found among his ideas an idea of an absolutely real, perfect, infinite being. He argued that it is impossible for imperfection to create this idea of perfection; therefore, that this Being exists. Further, this God is, for Descartes, self-caused, eternal, all-knowing, all-powerful, perfect goodness and truth, and the Creator of all things. He is also the basic substance of the universe. When Spinoza worked through the problem he came to the conviction that God is the sole independent substance of the universe. Everything in this universe is a part of God. Man and nature are aspects of God. Thus, God is all. This is the theory known as "pantheism." Locke was certain that God exists. He reached this certainty through combining ideas which came to him from experience. As man studies himself, he pointed out, the realization must certainly come that he must have been produced by some Being greater than he. From this he built an idea of God as a real Being who is all-knowing, powerful, and just, the Creator of man and the world. God rules His creation through divine laws which He has established. Kant held that God exists as the Idea of the Whole. His arguments for the existence of God are famous in philosophic history. We cannot know God through reason or by argument, but we can form an idea of the Whole of the universe and personify it. Further, man needs the idea of God as a basis for his morality. Thus, the idea of God for Kant is transcendent—it is above experience, and it is necessary—man's moral life demands it. Later thinkers have followed much in the ways of these earlier minds. Some have struggled to reason God into existence while others have abandoned the attempt and fallen back upon faith. Without exception more recent philosophers have taken the position that even at best human reason can go only part of the way and faith must take up where reason reaches its limits. James held that we cannot prove the existence of God nor can we prove anything about Him. Nevertheless, belief in God is necessary. We have a will to believe in God, and we must satisfy that will. This God, James held, is part of the universe, conscious, personal, good. He is man's Companion but more powerful than man. In the philosophy of Bergson

also, God is the Great Companion of man. Together with us, He is the co-worker, co-creator of our destiny.

Closely related to the problem of God is the problem of man's freedom. What real freedom is possible under the rule of God? At one extreme is the position held by many philosophers that God is absolute and supreme, and man is a mere puppet on a string, jumping as the string is pulled. At the other extreme is the position that God created the world, set it in motion, and left man free to work out his destiny alone. Plato's philosophy is rich with affirmations of man's freedom. Man is able to defeat the purposes of the universe. Indeed, this freedom is necessary to attainment of the good life. Goodness, for Plato, comes when man has met evil and overcome it. A like freedom is to be found in Aristotle's philosophy. Both thinkers are certain that there can be no morality without freedom. A man cannot be good unless there is freedom for him to choose either the good or the bad. Bacon attempted to free man from the strong forces of medieval religion, and set him upon the way to discover the true laws of the universe. He could not, however, get rid of the idea that man is in the last analysis subject to the will of God and thus has no real freedom. Further, as philosophers began to escape from the Middle Ages and scholasticism, they found all about them the laws of nature which put new bondage upon man. He was not, they discovered, subject to arbitrary pronouncements of God, but he must obey the inevitable laws of nature. Descartes tried to solve this new problem by holding that while the body is subject to all the laws of nature, the mind is free. For him the volitional part of man is in the soul, and this is free. Spinoza could find no real freedom in the universe. Every event is caused by some other event, and the chain cannot be broken by freedom. God alone is free, but every part of God, or substance, is caught in a rigid, deterministic scheme. Man does not see the chain of cause and effect and thinks he is free, but this is a false belief. When a person comes to an understanding of the real nature of things, he sees that there can be no freedom. Kant, also, could find no freedom in experience. Here he found only cause and effect. But he argued that the idea of freedom was necessary for man's moral nature. Thus it is legitimate for man to believe in freedom. We cannot prove that the will is free. Since, however, belief in such freedom is necessary, we can act as though there is free will. So acting, we discover moral insights and live better. More modern thinkers have tended to follow in the line of Kant. They realize that complete proof of free will is not possible. They recognize the moral necessity of such a belief, however, and affirm it on that basis. James finds the will to believe fundamental, and argues that on the basis of this man is free.

Thus, from those earliest days when man began to think even to the present, the great minds have struggled with problems which have baffled

all men. Each in his own way has sought to discover the pieces and fit them together into some satisfying solution. Many answers have been given, but basic to all is the deep, undying faith in the power of human reason to penetrate the secrets of the universe, and eventually answer the questions it propounds. That faith runs through the pages that follow, making them alive and challenging. It is the great unity amid diversity, the underlying faith of all philosophers.

DIALOGUES

by
PLATO

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PLATO

427-347 B.C.

GREEK LIFE was becoming dangerously confused in the later years of the Peloponnesian War—the struggle between Athens and Sparta that had been dragging on for more than a quarter of a century. The old standards were crumbling, and moral and civic virtues were being discarded for an easy, unthinking existence. Many, especially the young men, were accepting the new ways without discrimination, and the greatness that was Athens was being sneered at. Others, largely the older men, were yearning for the "good old days," but found themselves able to do little more than yearn.

Into this situation came two individuals whose names and ideas are so closely interwoven that it is impossible to speak of one without considering the other. Socrates and Plato sought a way out of the confusion. They realized that the old order was going and that nothing could be done to save it. They also saw the dangers of the new. Consequently they endeavored to think their way through the perplexity of the times to a firm basis for right living and for a high moral idealism.

Little is known of the life of Plato. It is certain that he was born of wealthy and noble parents. His father was a descendant of Codrus, the last king of Athens. His mother traced her ancestry to the great lawgiver, Solon.

Thus Plato was heir to the finest tradition of Athenian aristocracy, and this aristocratic tradition colored much of his thinking.

During Plato's early manhood he was a devoted pupil of Socrates, and his first writings are believed to reflect the teachings of this "wisest man of the ages." The contrast between teacher and pupil was unique. Socrates was ungainly in appearance, a man of no wealth or family prestige, a "vagabond saint" who wrote nothing but who spent his time walking about the streets of Athens and talking to anyone who cared to listen. Plato was stately in face and figure, a dashing young nobleman whose wealth made it possible for him to enjoy tranquillity and to perfect himself in all the social and cultural graces of his time. He wrote extensively, developing his philosophy in the form of *Dialogues*—that is, dramatic conversations in which his characters clashed with one another.

The chief character in Plato's dialogues is Socrates, whose method of developing a philosophic idea has become known as "Socratic." Whenever he met with a group of Athenians, Socrates feigned ignorance and encouraged them to express themselves on some matter of general interest. Then he began to question them in such a way as to reveal their ignorance and to impart to them "a glimmering of the truth" as he saw it.

It was under this system of "modest inquiry" after the truth that Plato got his early training in philosophy. When he himself became a teacher, he opened a school in a public garden known as the *Akademia*. This academy became world-famous and continued to function long after his death. It was here that Plato wrote many of his immortal dialogues.

In all Plato wrote twenty-four dialogues, out of which we have selected nineteen for this book. Two of the remaining dialogues, the *Republic* and the *Laws*, deal largely with matters of government. The *Republic* is included in another volume of this series. The other three dialogues, the *Cratylus*, the *Sophist*, and the *Statesman*, have been omitted since they make no significant additional contribution to the understanding of Plato's philosophy.

The philosophy of Plato is coextensive with the world. Referring to the universality of Plato's work, Emerson exclaims: "Burn the libraries; for their value is in this book." Indeed, there is hardly a subject of human interest that Plato did not touch upon in his pilgrimage of thought. The brotherhood of man, eugenics, socialism, communism, feminism, birth control, free love, free speech, the double and the single standards of morality, the public ownership of wealth, of women, of children—these are only a few of the problems that he discusses in his dialogues. But underlying all these discussions there is a single purpose, Plato's steadfast desire to see rightness—today we call it righteousness—established on earth. The world, he

maintains, is founded upon the Idea of Rightness, of Harmony, of Justice.

The Idea of Justice—this is the centermost core of the Platonic philosophy, the Doctrine of Ideas. This Doctrine of Ideas has stimulated not only the thinking of the Christian Church, but a great many other branches of modern thought.

Here, in brief, is the Platonic philosophy of Ideas: Every object in the world, believes Plato, is an imperfect copy of a perfect idea. Every human being is a material and temporary image of the eternal idea of Man. The temporary image dies: the eternal idea lives on. The world of our earthly experience is but a fleeting picture of the Ideal World in the mind of God. This Idea of God, the Divine Secret of Life, is like a shining light in heaven. But our ordinary minds here below are distorted bits of mirrors in which the Idea becomes broken up into blurred and grotesque and unrecognizable reflections. "Now [in the perishable material of our human body]," writes the Christian Platonist, St. Paul, "we see in a mirror, darkly; but then | when the material of our body is dissolved | we shall see face to face." It is the business of the philosopher, says Plato, so to shape and to polish the mirror of his mind as to get a clear image of the Idea of God, the Divine Secret, the Harmonious Pattern that guides the stars in the heavens and the affairs of men. And having received this clear indication of God's purpose, it is the further business of the philosopher • to reveal it to his fellows so that they may adjust their lives to the harmony of beauty, under the light of reason, in the interest of justice between nation and nation and between man and man.

DIALOGUES

LACHES, OR COURAGE

Socrates. The question is, Which of us is skilful or successful in the treatment of the soul, and which of us has had good teachers?

Laches. Well but, Socrates; did you never observe that some persons, who have had no teachers, are more skilful than those who have, in some things?

Socrates. Yes, Laches, I have observed that; but you would not be very willing to trust them if they only professed to be masters of their art, unless they could show some proof of their skill or excellence in one or more works.

Laches. That is true.

Socrates. And therefore, Laches and Nicias, as Lysimachus and Melesias, in their anxiety to improve the minds of their sons, have asked our advice about them, we too should inform them who our teachers were, if we say that we have any, and prove them to be men of merit and experienced trainers of the minds of youth and really our teachers. Or if any of us says that he has no teacher, but that he has works to show of his own; then he should point out to them, what Athenians or strangers, bond or free, he is generally acknowledged to have improved. But if he can show neither teachers nor works, then they should ask him to look out for others; and not to run the risk of spoiling the children of friends, which is the most formidable accusation that can be brought against any one by his near and dear relations. As for myself, Lysimachus and Melesias, I am the first to confess that I have never had a teacher; although I have always from my earliest youth desired to have one. But I am too poor to give money to the Sophists, who are the only professors of moral improvement; and to this day I have never been able to discover the art myself, though I should not be surprised if Nicias or Laches may have learned or discovered it; for they are far wealthier than I am, and may therefore have learned of others. And they are older too; so that they have had more time to make the discovery. And I really believe that they are able to educate a man; for unless they had been confident in their own knowledge, they

would never have spoken thus decidedly of the pursuits which are advantageous or hurtful to a young man. I repose confidence in both of them: but I do not understand why they differ from one another. And therefore, Lysimachus, as Laches suggests that you should detain me, and not let me go until I have answered, I in turn earnestly beseech and advise you to detain Laches and Nicias, and question them. I would have you say to them: Socrates says that he has no knowledge of the matter, and that he is unable to decide which of you speaks truly; neither discoverer nor student is he of anything of the kind. But you, Laches and Nicias, should either of you tell us who is the most skilful educator whom you have ever known; and whether you invented the art yourselves, or learned of another; and if you learned, who were your respective teachers, and who were their brothers in the art; and then, if you are too much occupied in politics to teach us vourselves, let us go to them, and present them with gifts, or make interest with them, or both, in the hope that they may be induced to take charge of all our families, in order that they may not grow up inferior, and disgrace their ancestors. But if you are yourselves original discoverers in that field, give us some proof of your skill. Who are they who, having been inferior persons, have become under your care good and noble? For if this is your first attempt at education, there is a danger that you may be trying the experiment, not on the "vile corpus" of a Carian slave, but on your own sons, or the sons of your friend; and as the proverb says, "break the large vessel in learning to make pots."

CHARMIDES, OR TEMPERANCE

Socrates Is the Narrator

I THINK, I said, that I had better begin by asking you, What is Temperance?

At first Charmides hesitated, and was very unwilling to answer:

At first Charmides hesitated, and was very unwilling to answer: then he said that he thought temperance was doing things orderly and quietly, such things for example as walking in the streets, and talking, or anything else of that nature. In a word, he said, I should answer that, in my opinion, temperance is quietness.

Are you right, Charmides? I said. No doubt the opinion is held that the quiet are the temperate; but let us see whether they are right who say this; and first tell me whether you would not acknowledge temperance to be of the class of the honorable and good?

Yes.

But which is the best when you are at the writing-master's, to write the same letters quickly or quietly?

Quickly.

And to read quickly or slowly?

Quickly again.

And when the soul inquires, and in deliberations, not the quietest, as I imagine, and he who with difficulty deliberates and discovers, is thought worthy of praise, but he who does this most easily and quickly?

That is true, he said.

And in all that concerns either body or soul, swiftness and activity are clearly better than slowness and quietness?

That, he said, is the inference.

Then temperance is not quietness, nor is the temperate life quiet, upon this view; for the life which is temperate is supposed to be the good. And of two things, one is true,—either never, or very seldom, do the quiet actions in life appear to be better than the quick and energetic ones; or, granting ever so much that of the nobler sort of actions, there are as many quiet, as quick and vehement ones: still, even if we admit this, temperance will not be acting quietly any more than acting quickly and vehemently, either in walking, talking, or anything else; nor will the quiet life be more temperate than the unquiet, seeing that temperance is reckoned by us in the class of good and honorable, and the quick have been shown to be as good as the quiet.

I think, he said, Socrates, that you are right in saying that.

Critias had long been showing uneasiness, for he felt that he had a reputation to maintain with Charmides and the rest of the company. He had, however, hitherto managed to restrain himself; but now he could no longer forbear, and his eagerness satisfied me of the truth of my suspicion, that Charmides had heard this answer about temperance from Critias. And Charmides, who did not want to answer himself, but to make Critias answer, tried to stir him up. He went on pointing out that he had been refuted, and at this Critias got angry, and, as I thought, was rather inclined to quarrel with him; just as a poet might quarrel with an actor who spoiled his poems in repeating them; so he looked hard at him and said—

Do you imagine, Charmides, that the author of the definition of temperance did not understand the meaning of his own words, because you don't understand them?

Why, at his age, I said, most excellent Critias, he can hardly be expected to understand; but you, who are older, and have studied, may well be assumed to know the meaning of them; and therefore, if you agree with him, and accept his definition of temperance, I would much rather argue with you than with him about the truth or falsehood of the definition.

Well, he answered; I mean to say, that he who does evil, and not good, is not temperate; and that he is temperate who does good, and not evil: for temperance I define in plain words to be the doing of good actions.

And you may be very likely right in that, I said; but I am curious to know whether you imagine that temperate men are ignorant of their own temperance?

I do not imagine that, he said.

And yet were you not saying, not so very long ago, that craftsmen might be temperate in doing another's work, as well as their own?

Yes, I was, he replied; but why do you refer to that?

I have no particular reason, but I wish you would tell me whether a physician who cures a patient may do good to himself and good to another also?

I think that he may.

And he who does this does his duty. And does not he who does his duty act temperately or wisely?

Yes, he acts wisely.

But must the physician necessarily know when his treatment is likely to prove beneficial, and when not? or must the craftsman necessarily know when he is likely to be benefited, and when not to be benefited, by the work which he is doing?

I suppose not.

Then, I said, he may sometimes do good or harm, and not know what he is himself doing, and yet, in doing good, as you say, he has done temperately or wisely. Was not that your statement?

Yes.

Then, as would seem, in doing good, he may act wisely or temperately, and be wise or temperate, but not know his own wisdom or temperance?

But that, Socrates, he said, is impossible; and therefore if that is, as you imply, the necessary consequence of any of my previous admissions, I would rather withdraw them, and not be ashamed to confess that I was mistaken, than admit that a man can be temperate or wise, who does not know himself.

Shall I tell you, Socrates, why I say all this? My object is to leave the previous discussion (in which I know not whether you or I are more right, but, at any rate, no clear result was attained), and to raise a new one in which I will attempt to prove, if you deny, that temperance is self-knowledge.

Yes, I said, Critias; but you come to me as though I professed to know about the questions which I ask, and as though I could, if only I would, agree with you. Whereas the fact is that I am, as you are, an inquirer into the truth of your proposition; and when I have inquired, I will say whether I agree with you or not. Please then to allow me time to reflect.

Reflect, he said.

I am reflecting, I replied, and discover that temperance, or wisdom, if implying a knowledge of anything, must be a science, and a science of something.

Yes, he said; the science of itself.

Now I want you, Critias, to answer a similar question about temperance, or wisdom, to which you ought to know the answer, if, as you say, wisdom or temperance is the science of itself. Admitting this, I ask, what good work, worthy of the name, does wisdom effect? Answer me that.

That is not the true way of pursuing the inquiry, Socrates, he said; for wisdom is not like the other sciences, any more than they are like one another: but you proceed as if they were alike. For tell me, he said, what result is there of computation or geometry, in the same sense as a house is the result of building, or a garment of weaving, or any other work of any other art? Can you show me any such result of them? You can not.

Tell me, then, I said, what you mean to affirm about wisdom.

I mean, he said, that wisdom is the only science which is the science of itself and of the other sciences as well.

But the science of science, I said, will also be the science of the absence of science.

Very true, he said.

Then the wise or temperate man, and he only, will know himself, and be able to examine what he knows or does not know, and see what others know, and think that they know and do really know; and what they do not know, and fancy that they know, when they do not. No other person will be able to do this. And this is the state and virtue of wisdom, or temperance, and self-knowledge, which is just knowing what a man knows, and what he does not know. That is your view?

Yes, he said.

Now then, I said, making an offering of the third or last argument to Zeus the Savior, let us once more begin, and ask, in the first place, whether this knowledge that you know and do not know what you know and do not know is possible; and in the second place, whether, even if quite possible, such knowledge is of any use.

That is what we must consider, he said.

And here, Critias, I said, I hope that you will find a way out of a difficulty into which I have got myself. Shall I tell you the difficulty?

By all means, he replied.

Does not what you have been saying, if true, amount to this: that there must be a science which is wholly a science of itself, and also of other sciences, and that the same is also the science of the absence of science?

True.

But surely we are assuming a science of this kind, which, having no subject-matter, is a science of itself and of the other sciences; for that is what is affirmed. Now this is strange, if true: however, we must not as yet absolutely deny the possibility of such a science; let us rather consider the matter.

You are quite right.

Well then, this science of which we are speaking is a science of something, and is of a nature to be a science of something?

Yes

Just as that which is greater is of a nature to be greater than something?

Yes.

Which is less, if the other is to be conceived as greater?

To be sure.

And if we could find something which is at once greater than self, and greater than other great things, but not greater than those things in comparison of which the others are greater, then that thing would have the property of being greater and also less than itself?

That, Socrates, he said, is the inevitable inference.

Or if there be a double which is double of other doubles and of itself, they will be halves; for the half is relative to the double?

That is true.

And that which is greater than itself will also be less, and that which is heavier will also be lighter, and that which is older will also be younger: and the same of other things; that which has a nature relative to self will retain also the nature of its object. I mean to say, for example, that hearing is, as we say, of sound or voice. Is that true?

Yes.

And therefore, O son of Callaeschrus, as you maintain that temperance or wisdom is a science of science, and also of the absence of science, I will request you to show in the first place, as I was saying before, the possibility, and in the second place, the advantage, of such a science; and then perhaps you may satisfy me that you are right in your view of temperance.

Critias heard me say this, and saw that I was in a difficulty; and as one person when another yawns in his presence catches the infection of yawning from him, so did he seem to be driven into a difficulty by my difficulty. But as he had a reputation to maintain, he was ashamed to admit before the company that he could not answer my challenge or decide the question at issue; and he made an unintelligible attempt to hide his perplexity. In order that the argument might proceed, I said to him, Well then, Critias, if you like, let us assume that there may be this science of science; whether the assumption is right or wrong may be hereafter in-

vestigated. But fully admitting this, will you tell me how such a science enables us to distinguish what we know or do not know, which, as we were saying, is self-knowledge or wisdom. That is what we were saying?

Yes, Socrates, he said; and that I think is certainly true: for he who has that science or knowledge which knows itself will become like that knowledge which he has, in the same way that he who has swiftness will be swift, and he who has beauty will be beautiful, and he who has knowledge will know. In the same way he who has that knowledge which is the knowledge of itself, will know himself.

I do not doubt, I said, that a man will know himself, when he possesses that which has self-knowledge: but what necessity is there that, having this, he should know what he knows and what he does not know?

Because, Socrates, they are the same.

Very likely, I said; but I remain as stupid as ever; for still I fail to comprehend how this knowing what you know and do not know is the same as the knowledge of self.

What do you mean? he said.

This is what I mean, I replied: I will admit that there is a science of science, but can this do more than determine that of two things one is and the other is not science or knowledge?

No, just that.

But how will this knowledge or science teach him to know what he knows? Say that he knows health;—not wisdom or temperance, but the art of medicine has taught him that;—and he has learned harmony from the art of music, and building from the art of building,—neither, from wisdom or temperance: and the same of other things.

That is evident.

But how will wisdom, regarded only as a knowledge of knowledge or science of science, ever teach him that he knows health, or that he knows building?

That is impossible.

Then he who is ignorant of this will only know that he knows, but not what he knows?

True.

Then wisdom or being wise appears to be not the knowledge of the things which we do or do not know, but only the knowledge that we know and do not know?

That is the inference.

Then he who has this knowledge will not be able to examine whether a pretender knows or does not know that which he says that he knows: he will only know that he has a knowledge of some kind; but wisdom will not show him of what the knowledge is?

Plainly not.

But then what profit, Critias, I said, is there any longer in wisdom or temperance which yet remains, if this is wisdom? If, indeed, as we were supposing at first, the wise man had been able to distinguish what he knew and did not know, and that he knew the one and did not know the other, and to recognize a similar faculty of discernment in others, there would certainly have been a great advantage in being wise; for then we should never have made a mistake, but have passed through life the unerring guides of ourselves and of those who were under us; and we should not have attempted to do what we did not know, but we should have found out those who knew, and confided in them; nor should we have allowed those who were under us to do anything which they were not likely to do well; and they would be likely to do well just that of which they had knowledge; and the house or state which was ordered or administered under the guidance of wisdom would have been well ordered. and everything else of which wisdom was the lord; for truth guiding, and error having been expelled, in all their doings, men would have done well, and would have been happy. Was not this, Critias, what we spoke of as the great advantage of wisdom—to know what is known and what is unknown to us?

Very true, he said.

And now you perceive, I said, that no such science is to be found anywhere.

I perceive, he said.

May we assume then, I said, that wisdom, viewed in this new light merely as a knowledge of knowledge and ignorance, has this advantage:—that he who possesses such knowledge will more easily learn anything that he learns; and that everything will be clearer to him, because, in addition to the knowledge of individuals, he sees the science, and this also will better enable him to test the knowledge which others have of what he knows himself; whereas the inquirer who is without this knowledge may be supposed to have a feebler and weaker insight? Are not these, my friend, the real advantages which are to be gained from wisdom? And are not we looking and seeking after something more than is to be found in her?

That is very likely, he said.

That is very likely, I said; and very likely, too, we have been inquiring to no purpose. I am led to infer this, because I observe that if this is wisdom, some strange consequences would follow. Let us, if you please, assume the possibility of this science of sciences, and further admit and allow, as was originally suggested, that wisdom is the knowledge of what we know and do not know. Assuming all this, still, upon further consideration, I am doubtful, Critias, whether wisdom, if such as this, would do us any good. For I think we were wrong in supposing, as we were saying

just now, that such wisdom ordering the government of house or state would be a great benefit.

How is that? he said.

Why, I said, we were far too ready to admit the great benefits which mankind would obtain from their severally doing the things which they knew, and committing to others who knew the things of which they are ignorant.

Were we not right, he said, in making that admission?

I think not, I said.

That is certainly strange, Socrates.

By the dog of Egypt, I said, I am of your opinion about that: and that was in my mind when I said that strange consequences would follow, and that I was afraid we were on the wrong track; for however ready we may be to admit that this is wisdom, I certainly can not make out what good this sort of thing does to us.

What do you mean? he said; I wish that you could make me understand what you mean.

I dare say that what I am saying is nonsense, I replied; and yet if a man has any feeling of what is due to himself, he can not let the thought which comes into his mind pass away unheeded and unexamined.

I like that, he said.

Hear, then, I said, my own dream; whether coming through the horn or the ivory gate, I can not tell. The dream is this: Let us suppose that wisdom is such as we are now defining, and that she has absolute sway over us; then each action will be done according to the arts or sciences, and no one professing to be a pilot when he is not, or any physician or general, or any one else pretending to know matters of which he is ignorant, will deceive or elude us; our health will be improved; our safety at sea, and also in battle, will be assured; our coats and shoes, and all other instruments and implements will be well made, because the workmen will be good and true. Aye, and if you please, you may suppose that prophecy. which is the knowledge of the future, will be under the control of wisdom, and that she will deter deceivers and set up the true prophet in their place as the revealer of the future. Now I quite agree that mankind, thus provided, would live and act according to knowledge, for wisdom would watch and prevent ignorance from intruding on us. But we have not as vet discovered why, because we act according to knowledge, we act well and are happy, my dear Critias.

Yet I think, he replied, that you will hardly find any other end of right action, if you reject knowledge.

And of what is this knowledge? I said. Just answer me that small question. Do you mean a knowledge of shoemaking?

God forbid.

Or of working in brass?

Certainly not.

Or in wool, or wood, or anything of that sort?

No, I do not.

Then, I said, we are giving up the doctrine that he who lives according to knowledge is happy, for these live according to knowledge, and yet they are not allowed by you to be happy; but I think that you mean to confine happiness to particular individuals who live according to knowledge, such for example as the prophet, who, as I was saying, knows the future.

Yes, I mean him, but there are others as well.

Yes, I said, some one who knows the past and present as well as the future, and is ignorant of nothing. Let us suppose that there is such a person, and if there is, you will allow that he is the most knowing of all living men.

Certainly he is.

Yet I should like to know one thing more: which of the different kinds of knowledge makes him happy? or do all equally make him happy?

Not all equally, he replied.

But which most tends to make him happy? the knowledge of what past, present, or future thing? May I infer this to be the knowledge of the game of draughts?

Nonsense about the game of draughts.

Or of computation?

No.

Or of health?

That is nearer the truth, he said.

And that knowledge which is nearest of all, I said, is the knowledge of what?

The knowledge with which he discerns good and evil.

Monster! I said; you have been carrying me round in a circle, and all this time hiding from me the fact that the life according to knowledge is not that which makes men act rightly and be happy, not even if all the sciences be included, but that this has to do with one science only, that of good and evil. For, let me ask you, Critias, whether, if you take away this science from all the rest, medicine will not equally give health, and shoemaking equally produce shoes, and the art of the weaver clothes?—whether the art of the pilot will not equally save our lives at sea, and the art of the general in war?

Quite so.

And yet, my dear Critias, none of these things will be well or beneficially done, if the science of the good be wanting.

That is true.

But that science is not wisdom or temperance, but a science of human

advantage; not a science of other sciences, or of ignorance, but of good and evil: and if this be of use, then wisdom or temperance will not be of use.

And why, he replied, will not wisdom be of use? For if we really assume that wisdom is a science of sciences, and has a sway over other sciences, surely she will have this particular science of the good under her control, and in this way will benefit us.

And will wisdom give health? I said; is not this rather the effect of medicine? Or does wisdom do the work of any of the other arts, and do not they do, each of them, their own work? Have we not long ago asseverated that knowledge is only the knowledge of knowledge and of ignorance, and of nothing else?

That is clear.

Another art is concerned with health.

Another?

The art of health is different.

Yes, different.

Nor does wisdom give advantage, my good friend; for that again we have just now been attributing to another art.

Very true.

How then can wisdom be advantageous, giving no advantage?

That, Socrates, is certainly inconceivable.

You see then, Critias, that I was not far wrong in fearing that I could have no sound notion about wisdom: I was quite right in depreciating myself; for that which is admitted to be the best of all things would never have seemed to us useless, if I had been good for anything at an inquiry. But now I have been utterly defeated, and have failed to discover what that is to which the imposer of names gave this name of temperance or wisdom. And yet many more admissions were made by us than could be really granted; for we admitted that there was a science of science, although the argument said No, and protested against this; and we admitted further, that this science knew the works of the other sciences (although this too was denied by the argument), because we wanted to show that the wise man had knowledge of what he knew and did not know; also we nobly disregarded, and never even considered, the impossibility of a man knowing in a sort of way that which he does not know at all; for our assumption was, that he knows that which he does not know; than which nothing, as I think, can be more irrational. And yet, after finding us so easy and good-natured, the inquiry is still unable to discover the truth; but mocks us to a degree, and has gone out of its way to prove the inutility of that which we admitted only by a sort of supposition and fiction to be the true definition of temperance or wisdom: which result, as far as I am concerned, is not so much to be lamented, I said. But for your sake,

Charmides, I am very sorry—that you, having such beauty and such wisdom and temperance of soul, should have no profit or good in life from your wisdom and temperance. And still more am I grieved about the charm which I learned with so much pain, and to so little profit, from the Thracian, for the sake of a thing which is nothing worth. I think indeed that there is a mistake, and that I must be a bad inquirer, for I am persuaded that wisdom or temperance is really a great good; and happy are you if you possess that good. And therefore examine yourself, and see whether you have this gift and can do without the charm; for if you can, I would rather advise you to regard me simply as a fool who is never able to reason out anything; and to rest assured that the more wise and temperate you are, the happier you will be.

LYSIS, OR FRIENDSHIP

Socrates Is the Narrator

HERE IS Lysis, who does not understand something that I was saying, and wants me to ask Menexenus, who, as he thinks, will be able to answer.

And why don't you ask him? he said.

Very well, I said, I will ask him; and do you, Menexenus, answer. But first I must tell you that I am one who from my childhood upward have set my heart upon a certain thing. All people have their fancies; some desire horses, and others dogs; and some are fond of gold, and others of honor. Now, I have no violent desire of any of these things; but I have a passion for friends; and I would rather have a good friend than the best cock or quail in the world: I would even go further, and say than a horse or dog. Yea, by the dog of Egypt, I should greatly prefer a real friend to all the gold of Darius, or even to Darius himself: I am such a lover of friends as that. And when I see you and Lysis, at your early age, so easily possessed of this treasure, and so soon, he of you, and you of him, I am amazed and delighted, seeing that I myself, although I am now advanced in years, am so far from having made a similar acquisition, that I do not even know in what way a friend is acquired. But this is the question which I want to ask you, as you have experience: tell me then, when one loves another, is the lover or the beloved the friend; or may either be the friend?

Either, he said, may be the friend.

Do you mean, I said, that if only one of them loves the other, they are mutual friends?

Yes, he said; that is my meaning.

But what if the lover is not loved in return? That is a possible case.

Yes.

Or is, perhaps, even hated? for that is a fancy which lovers sometimes have. Nothing can exceed their love; and yet they imagine either that they are not loved in return, or that they are hated. Is not that true?

Yes, he said, quite true.

In that case, the one loves, and the other is loved?

Yes.

Then which is the friend of which? Is the lover the friend of the beloved, whether he be loved in return, or hated; or is the beloved the friend; or is there no friendship at all on either side, unless they both love one another?

There would seem to be none at all.

Then that is at variance with our former notion.

That appears to be true.

Then no one is a friend to his friend who does not love in return? I think not.

Then they are not lovers of horses, whom the horses do not love in return; nor lovers of quails, nor of dogs, nor of wine, nor of gymnastic exercises, who have no return of love; no, nor of wisdom, unless wisdom loves them in return. Or perhaps they do love them, but they are not beloved by them; and the poet was wrong who sings:—

"Happy the man to whom his children are dear, and steeds having single hoofs, and dogs of chase, and the stranger of another land."

I do not think that he was wrong.

Then you think that he is right?

Yes.

Then, Menexenus, the conclusion is, that what is beloved may be dear, whether loving or hating: for example, very young children, too young to love, or even hating their father or mother when they are punished by them, are never dearer to them than at the time when they are hating them.

I think that is true, he said.

Then on this view, not the lover, but the beloved, is the friend or dear one; and the hated one, and not the hater, is the enemy?

That is plain.

Then many men are loved by their enemies, and hated by their friends, and are the friends of their enemies, and the enemies of their friends—that follows if the beloved is dear, and not the lover: but this, my dear friend, is an absurdity, or, I should rather say, an impossibility.

That, Socrates, I believe to be true.

But then, if not the enemy, the lover will be the friend, of that which is loved?

True.

And the hater will be the enemy of that which is hated? Certainly.

Yet there is no avoiding the admission in this, as in the preceding instance, that a man may love one who is not his friend, or who may be his enemy. There are cases in which a lover loves, and is not loved, or is perhaps hated; and a man may be the enemy of one who is not his enemy, and is even his friend: for example, when he loves that which does not hate him, or even hates that which loves him.

That appears to be true.

But if the lover is not a friend, nor the beloved a friend, nor both together, what are we to say? Whom are we to call friends to one another? Do any remain?

Indeed, Socrates, I can not find any.

Then are we to say that the greatest friendship is of opposites? Exactly.

Yes, Menexenus; but will not that be a monstrous answer? and will not the all-wise eristics be down upon us in triumph, and ask, fairly enough, whether love is not the very opposite of hate? and what answer shall we make to them? must we not admit that they speak truly?

That we must.

They will ask whether the enemy is the friend of the friend, or the friend the friend of the enemy?

Neither, he replied.

Well, but is a just man the friend of the unjust, or the temperate of the intemperate, or the good of the bad?

I do not see how that is possible.

And yet, I said, if friendship goes by contraries, the contraries must be friends.

They must.

Then neither like and like nor unlike and unlike are friends.

I suppose not.

And yet there is a further consideration: may not all these notions of friendship be erroneous? but still may there not be cases in which that which is neither good nor bad is the friend of the good?

How do you mean? he said.

Why really, I said, the truth is that I don't know; but my head is dizzy with thinking of the argument, and therefore I hazard the conjecture, that the beautiful is the friend, as the old proverb says. Beauty is certainly a soft, smooth, slippery thing, and therefore of a nature which easily slips in and permeates our souls. And I further add that the good is the beautiful. You will agree to that?

Yes.

This I say from a sort of notion that what is neither good nor evil is the friend of the beautiful and the good, and I will tell you why I am inclined to think this: I assume that there are three principles—the good, the bad, and that which is neither good nor bad. What do you say to that?

I agree.

And neither is the good the friend of the good, nor the evil of the evil, nor the good of the evil;—that the preceding argument will not allow; and therefore the only alternative is—if there be such a thing as friendship or love at all—that what is neither good nor evil must be the friend, either of the good, or of that which is neither good nor evil, for nothing can be the friend of the bad.

True.

Nor can like be the friend of like, as we were just now saying.

True.

Then that which is neither good nor evil can have no friend which is neither good nor evil.

That is evident.

Then the good alone is the friend of that only which is neither good nor evil.

That may be assumed to be certain.

And does not this seem to put us in the right way? Just remark, that the body which is in health requires neither medical nor any other aid, but is well enough; and the healthy man has no love of the physician, because he is in health.

He has none.

But the sick loves him, because he is sick?

Certainly.

And sickness is an evil, and the art of medicine a good and useful thing?

Yes.

But the human body, viewed as a body, is neither good nor evil?

True.

And the body is compelled by reason of disease to court and make friends of the art of medicine?

Yes.

Then that which is neither good nor evil becomes the friend of good, by reason of the presence of evil?

That is the inference.

And clearly this must have happened before that which was neither good nor evil had become altogether corrupted with the element of evil, for then it would not still desire and love the good; for, as we were saying, the evil can not be the friend of the good.

That is impossible.

And therefore we say that those who are already wise, whether gods or men, are no longer lovers of wisdom; nor can they be lovers of wisdom, who are ignorant to the extent of being evil, for no evil or ignorant person is a lover of wisdom. There remain those who have the misfortune to be ignorant, but are not yet hardened in their ignorance, or void of understanding, and do not as yet fancy that they know what they do not know: and therefore those who are the lovers of wisdom are as yet neither good nor bad. But the bad do not love wisdom any more than the good; for, as we have already seen, neither unlike is the friend of unlike, nor like of like. You remember that?

Yes, they both said.

And so, Lysis and Menexenus, we have discovered the nature of friendship: there can be no doubt of that. Friendship is the love which the neither good nor evil has of the good, when the evil is present, either in the soul, or in the body, or anywhere.

They both agreed and entirely assented, and for a moment I rejoiced and was satisfied like a huntsman whose prey is within his grasp. But then a suspicion came across me, and I fancied unaccountably that the conclusion was untrue, and I felt pained, and said, Alas! Lysis and Menexenus, I am afraid that we have been grasping at a shadow.

Why do you say that? said Menexenus.

I am afraid, I said, that the argument about friendship is false: arguments, like men, are often pretenders.

How is that? he asked.

Well, I said; look at the matter in this way: a friend is the friend of some one.

Certainly he is.

And has he a motive and object in being a friend, or has he no motive and object?

He has a motive and object.

And is the object which makes him a friend dear to him, or neither dear nor hateful to him?

I don't quite follow you, he said.

I do not wonder at that, I said. But perhaps, if I put the matter in another way, you will be able to follow me, and my own meaning will be clearer to myself. The sick man, as I was just now saying, is the friend of the physician—is he not?

Yes.

And he is the friend of the physician because of disease, and for the sake of health?

Yes.

And disease is an evil? Certainly.

And what of health? I said. Is that good or evil, or neither? Good, he replied.

And we were saying, I believe, that the body being neither good nor evil, because of disease, that is to say because of evil, is the friend of medicine, and medicine is a good: and medicine has entered into this friendship for the sake of health, and health is a good.

True.

And is health a friend, or not a friend?

A friend.

And disease is an enemy?

Yes.

Then that which is neither good nor evil is the friend of the good because of the evil and hateful, and for the sake of the good and the friend?

That is clear.

Then the friend is a friend for the sake of the friend, and because of the enemy?

That is to be inferred.

Then at this point, my boys, let us take heed, and be on our guard against deceptions. I will no more say that the friend is the friend of the friend, and the like of the like, which has been declared by us to be an impossibility; but, in order that this new statement may not delude us, let us attentively examine another point, which is this: medicine, as we were saying, is a friend, or dear to us for the sake of health?

Yes.

And health is also dear?

Certainly.

And if dear, then dear for the sake of something?

Yes

And surely this object must also be dear, as is implied in our previous admissions?

Yes.

And that something dear involves something else dear?

Yes.

But then, proceeding in this way, we shall at last come to an end, and arrive at some first principle of friendship or dearness which is not capable of being referred to any other, for the sake of which, as we maintain, all other things are dear.

Certainly.

My fear is that all those other things, which, as we say, are dear for the sake of that other, are illusions and deceptions only, of which that other is the reality or true principle of friendship. Let me put the matter thus: Suppose the case of a great treasure (this may be a son, who is more precious to his father than all his other treasures); would not the father, who values his son above all things, value other things also for the sake of his son? I mean, for instance, if he knew that his son had drunk hemlock, and the father thought that wine would save him, he would value the wine?

Certainly.

And also the vessel which contains the wine?

Certainly.

But he does not therefore value the three measures of wine, or the earthen vessel which contains them, equally with his son? Is not this rather the true state of the case? All this anxiety of his has regard not to the means which are provided for the sake of an object, but to the object for the sake of which they are provided. And although we may often say that gold and silver are highly valued by us, that is not the truth; for the truth is that there is a further object, whatever that may be, which we value most of all, and for the sake of which gold and all our other possessions are acquired by us. Am I not right?

Yes, certainly.

And may not the same be said of the friend? That which is only dear to us for the sake of something else is improperly said to be dear, but the truly dear is that in which all these so-called dear friendships terminate.

That, he said, appears to be true.

And the truly dear or ultimate principle of friendship is not for the sake of any other or further dear.

True.

Then the notion is at an end that friendship has not any further object. But are we therefore to infer that the good is the friend?

That is my view.

Then is the good loved for the sake of the evil? Let me put the case in this way: Suppose that of the three principles, good, evil, and that which is neither good nor evil, there remained only the good and the neutral, and that evil went far away, and in no way affected soul or body, nor ever at all that class of things which, as we say, are neither good nor evil in themselves;—would the good be of any use, or other than uscless to us? For if there were nothing to hurt us any longer, we should have no need of anything that would do us good. Then would be clearly seen that we did but love and desire the good because of the evil, and as the remedy of the evil, which was the disease; but if there had been no disease, there would have been no need of a remedy. Is not this the nature of the good—to be loved because of the evil, by us who are between the two? but there is no use in the good for its own sake.

I suppose that is true.

Then the final principle of friendship, in which all other friendships which are relative only were supposed by us to terminate, is of another and a different nature from them. For they are called dear because of another dear or friend. But with the true friend or dear, the case is quite the reverse; for that is proved to be dear because of the hated, and if the hated were away, the loved would no longer stay.

That is true, he replied: at least, that is implied in the argument.

But, oh! will you tell me, I said, whether if evil were to perish, we should hunger any more, or thirst any more, or have any similar affection? Or may we suppose that hunger will remain while men and animals remain, but not so as to be hurtful? And the same of thirst and the other affections,—that they will remain, but will not be evil because evil has perished? Or shall I say rather, that to ask what either would be or would not be has no meaning, for who can tell? This only we know, that in our present condition hunger may injure us, and may also benefit us. Is not that true?

Yes.

And in like manner thirst or any similar desire may sometimes be a good and sometimes an evil to us, and sometimes neither one nor the other?

To be sure.

But is there any reason why, because evil perishes, that which is not evil should also perish?

None.

Then, even if evil perishes, the desires which are neither good nor evil will remain?

That is evident.

And must not a man love that which he desires and affects?

He must.

Then, even if evil perishes, there may still remain some elements of love or friendship?

Yes.

But not, if evil is the cause of friendship: for in that case nothing will be the friend of any other thing after the destruction of evil; for the effect can not remain when the cause is destroyed.

True.

And have we not been saying that the friend loves something for a reason? and the reason was because of the evil which leads the neither good nor evil to love the good?

Very true.

But now our view is changed, and there must be some other cause of friendship?

I suppose that there must.

May not the truth be that, as we were saying, desire is the cause of friendship; for that which desires is dear to that which is desired at the time of desire? and may not the other theory have been just a long story about nothing?

That is possibly true.

But surely, I said, he who desires, desires that of which he is in want? Yes.

And that of which he is in want is dear to him?

True.

And he is in want of that of which he is deprived?

Certainly.

Then love, and desire, and friendship would appear to be of the natural or congenial. That, Lysis and Menexenus, is the inference.

They assented.

Then if you are friends, you must have natures which are congenial to one another?

Certainly, they both said.

And I say, my boys, that no one who loves or desires another would ever have loved or desired or affected him, if he had not been in some way congenial to him, either in his soul, or in his character, or in his manners, or in his form.

Yes, yes, said Menexenus. But Lysis was silent.

Then, I said, the conclusion is, that what is of a congenial nature must be loved.

That follows, he said.

Then the true lover, and not the counterfeit, must be loved by his love. Lysis and Menexenus gave a faint assent to this; and Hippothales changed into all manner of colors with delight.

Here, intending to revise the argument, I said: Can we point out any difference between the congenial and the like? For if that is possible, then I think, Lysis and Menexenus, there may be some sense in our argument about friendship. But if the congenial is only the like, how will you get rid of the other argument, of the usclessness of like to like in as far as they are like; for to say that what is useless is dear, would be absurd? Suppose, then, that we agree to distinguish between the congenial and the like—in the intoxication of argument, that may perhaps be allowed.

Very true.

And shall we further say that the good is congenial, and the evil uncongenial to every one? Or again that the evil is congenial to the evil, and the good to the good; or that which is neither good nor evil to that which is neither good nor evil.

They agreed to the latter alternative.

Then, my boys, we have again fallen into the old discarded error; for the unjust will be the friend of the unjust, and the bad of the bad, as well as the good of the good.

That appears to be true.

But again if we say that the congenial is the same as the good, in that case the good will only be the friend of the good.

True.

But that too was a position of ours which, as you will remember, has been already refuted by ourselves.

We remember.

Then what is to be done? Or rather is there anything to be done? I can only, like the wise men who argue in courts, sum up the arguments. If neither the beloved, nor the lover, nor the like, nor the unlike, nor the good, nor the congenial, nor any other of whom we spoke—for there were such a number of them that I can't remember them—if, I say, none of these are friends, I know not what remains to be said.

PROTAGORAS

Socrates Is the Narrator

WHEN we were all seated, Protagoras said: Now that the company are assembled, Socrates, tell me about the young man of whom you were just now speaking.

I replied: I will begin again at the same point, Protagoras, and tell you once more the purport of my visit: this is my friend Hippocrates, who is desirous of making your acquaintance; he wants to know what will happen to him if he associates with you. That is all I have to say.

Protagoras answered: Young man, if you associate with me, on the very first day you will return home a better man than you came, and better on the second day than on the first, and better every day than you were on the day before.

When I heard this, I said: Protagoras, I do not at all wonder at hearing you say this: even at your age, and with all your wisdom, if any one were to teach you what you did not know before, you would become better no doubt: but please to answer in a different way; I will explain how by an example. Let me suppose that Hippocrates, instead of desiring your acquaintance, wished to become acquainted with the young man Zeuxippus of Heraclea, who has newly come to Athens, and he were to go to him as he has gone to you, and were to hear him say, as he has heard you say, that every day he would grow and become better if he associated with him: and then suppose that he were to ask him, "In what

would he be better, and in what would he grow?" Zeuxippus would answer, "In painting." And suppose that he went to Orthagoras the Theban, and heard him say the same, and asked him, "In what would he become better day by day?" he would reply, "In flute-playing." Now I want you to make the same sort of answer to this young man and to me, who am asking questions on his account. When you say that on the first day on which he associates with you he will return home a better man, and on every day will grow in like manner—in what, Protagoras, will he be better? and about what?

When Protagoras heard me say this, he replied: You ask questions fairly, and I like to answer a question which is fairly put. If Hippocrates comes to me he will not experience the sort of drudgery with which other Sophists are in the habit of insulting their pupils; who, when they have just escaped from the arts, are taken and driven back into them by these teachers, and made to learn calculation, and astronomy, and geometry, and music (he gave a look at Hippias as he said this); but if he comes to me, he will learn that which he comes to learn. And this is prudence in affairs private as well as public; he will learn to order his own house in the best manner, and he will be best able to speak and act in the affairs of the state.

Do I understand you, I said; and is your meaning that you teach the art of politics, and that you promise to make men good citizens?

That, Socrates, is exactly the profession which I make.

Then, I said, you do indeed possess a noble art, if there is no mistake about this; for I will freely confess to you, Protagoras, that I have a doubt whether this art is capable of being taught, and vet I know not how to disbelieve your assertion. And I ought to tell you why I am of opinion that this art can not be taught or communicated by man to man. I say that the Athenians are an understanding people, as indeed they are esteemed by the other Hellenes. Now I observe that when we are met together in the assembly, and the matter in hand relates to building, the builders are summoned as advisers; when the question is one of shipbuilding, then the ship-builders; and the like of other arts which they think capable of being taught and learned. And if some person offers to give them advice who is not supposed by them to have any skill in the art, even though he be good-looking, and rich, and noble, they don't listen to him, but laugh at him, and hoot him, until either he is clamored down and retires of himself; or if he persist, he is dragged away or put out by the constables at the command of the prytanes. This is their way of behaving about the arts which have professors. When, however, the question is an affair of state, then everybody is free to have a saycarpenter, tinker, cobbler, sailor, passenger; rich and poor, high and low-any one who likes gets up, and no one reproaches him, as in

the former case, with not having learned, and having no teacher, and vet giving advice; evidently because they are under the impression that this sort of knowledge can not be taught. And not only is this true of the state, but of individuals; the best and wisest of our citizens are unable to impart their political wisdom to others: as for example, Pericles, the father of these young men, who gave them excellent instruction in all that could be learned from masters, in his own department of politics taught them nothing; nor did he give them teachers, but they were allowed to wander at their own free will in a sort of hope that they would light upon virtue of their own accord. Or take another example: there was Cleinias the younger brother of our friend Alcibiades, of whom this very same Pericles was the guardian; and he being in fact under the apprehension that Cleinias would be corrupted by Alcibiades, took him away, and placed him in the house of Ariphron to be educated; but before six months had elapsed, Ariphron sent him back, not knowing what to do with him. And I could mention numberless other instances of persons who were good themselves, and never yet made any one else good, whether friend or stranger. Now I, Protagoras, when I reflect on all this, am inclined to think that virtue can not be taught. But then again, when I listen to your words, I am disposed to waver; and I believe that there must be something in what you say, because I know that you have great experience, and learning, and invention. And I wish that you would, if possible, show me a little more clearly that virtue can be taught. Will you be so good?

That I will, Socrates, and gladly. But what would you like? Shall I, as an elder, speak to you as younger men in an apologue or myth, or shall I argue the question?

Now I want you to tell me truly whether virtue is one whole, of which justice and temperance and holiness are parts; or whether all these are only the names of one and the same thing: that is the doubt which still lingers in my mind.

There is no difficulty, Socrates, in answering that the qualities of which you are speaking are the parts of virtue which is one.

And are they parts, I said, in the same sense in which mouth, nose, and eyes, and ears, are the parts of a face; or are they like the parts of gold, which differ from the whole and from one another only in being larger or smaller?

I should say that they differed, Socrates, in the first way; as the parts of a face are related to the whole face.

And do men have some one part and some another part of virtue? Or if a man has one part, must he also have all the others?

By no means, he said; for many a man is brave and not just, or just and not wise.

Why then, I said, courage and wisdom are also parts of virtue? Most undoubtedly, he said; and wisdom is the noblest of the parts. And they are all different from one another? I said.

Yes.

And each of them has a distinct function like the parts of the face;—the eye, for example, is not like the ear, and has not the same functions; and the other parts are none of them like one another, either in their functions, or in any other way? Now I want to know whether the parts of virtue do not also differ in themselves and in their functions; as that is clearly what the simile would imply.

Yes, Socrates, you are right in that.

Then, I said, no other part of virtue is like knowledge, or like justice, or like courage, or like temperance, or like holiness?

No, he answered.

Well then, I said, suppose that you and I inquire into their natures. And first, you would agree with me that justice is of the nature of a thing, would you not? That is my opinion, would not that be yours also?

Yes, he said; that is mine also.

And suppose that some one were to ask us, saying, O Protagoras, and you Socrates, what about this thing which you just now called justice, is it just or unjust? And I were to answer, just: and you—would you vote for me or against me?

With you, he said.

Thereupon I should answer to him who asked me, that justice is of the nature of the just: would not you?

Yes, he said.

And suppose that he went on to say: Well now, is there such a thing as holiness?—we should answer, Yes, if I am not mistaken?

'Yes, he said.

And that you acknowledge to be a thing—should we admit that? He assented.

And is this a sort of thing which is of the nature of the holy, or of the nature of the unholy? I should be angry at his putting such a question, and should say, Peace, man; nothing can be holy if holiness is not holy. What do you say to that? Would you not answer in the same way?

Certainly, he said.

And then after this suppose that he came and asked us, What were you saying just now? Perhaps I may not have heard you rightly, but you seemed to me to be saying that the parts of virtue were not the same as one another. I should reply, You certainly heard that said, but you did not, as you think, hear me say that; for Protagoras gave the answer, and I did but ask the question. And suppose that he turned to you and said, Is this true, Protagoras? and do you maintain that one

part of virtue is unlike another, and is this your position? how would you answer him?

Well, he said, I admit that justice bears a resemblance to holiness, for there is always some point of view in which everything is like every other thing; white is in a certain way like black, and hard is like soft, and the most extreme opposites have some qualities in common; even the parts of the face which, as we were saying before, are distinct and have different functions, are still in a certain point of view similar, and one of them is like another of them. And you may prove that they are like one another on the same principle that all things are like one another; and yet things which are alike in some particular ought not to be called alike, nor things which are unlike in some particular, however slight, unlike.

And do you think, I said, in a tone of surprise, that justice and holiness have but a small degree of likeness?

Certainly not, he said; but I do not agree with what I understand to be your view.

Well, I said, as you appear to have a difficulty about this, let us take another of the examples which you mentioned instead. Do you admit the existence of folly?

I do.

And is not wisdom the very opposite of folly?

That is true, he said.

And when men act rightly and advantageously they seem to you to be temperate or moderate?

Yes, he said.

And moderation makes them moderate?

Certainly.

And they who do not act rightly act foolishly, and in thus acting are not moderate?

I agree to that, he said.

Then to act foolishly is the opposite of acting moderately?

He assented.

And foolish actions are done by folly, and moderate or temperate actions by moderation?

He agreed.

And that is done strongly which is done by strength, and weakly which is done by weakness?

He assented.

And that which is done with swiftness is done swiftly, and that which is done with slowness, slowly?

He acknowledged that.

And if anything is done in the same way, that is done by the same; and if anything is done in an opposite way, by the opposite?

He agreed.

Once more, I said, is there anything beautiful?

Yes.

To which the only opposite is the ugly?

There is no other.

And is there anything good?

There is.

To which the only opposite is the evil?

There is no other.

And there is the acute in sound?

True.

To which the only opposite is the grave?

There is no other, he said, but that.

Then every opposite has one opposite only and no more?

He assented.

Then now, I said, let us recapitulate our admissions. First of all we admitted that everything has one opposite and not more than one? To that he assented.

And we admitted also that what was done in opposite ways was done by opposites?

Yes.

And that which was done foolishly, as we also admitted, was done in the opposite way to that which was done moderately?

Yes.

And that which was done moderately was done by moderation or temperance, and that which was done foolishly by folly?

He agreed.

And that which is done in opposite ways is done by opposites? Yes.

And one thing is done by moderation or temperance, and quite another thing by folly?

Yes.

And those are opposite ways?

Certainly.

And therefore done by opposites. Then folly is the opposite of moderation or temperance?

That is evident.

And do you remember that folly has already been acknowledged by us to be the opposite of wisdom?

He assented.

And we said that everything has only one opposite?

Yes.

Then, Protagoras, which of the two assertions shall we renounce? One says that everything has but one opposite; the other that wisdom is distinct from temperance or moderation, and that both of them are parts of virtue; and that they are not only distinct, but unlike, both in themselves and in their functions, like the parts of a face. Which of these two assertions shall we renounce? For both of them together are certainly not in harmony; they do not accord or agree: for how can they be said to agree if everything is assumed to have only one opposite and not more than one, and yet folly, which is one, has clearly the two opposites—wisdom and temperance? Is not that true, Protagoras? I said. What else would you say?

He assented, but with great reluctance.

Then temperance and wisdom are the same, as before justice and holiness appeared to us to be nearly the same. And now, Protagoras, I said, do not let us be faint-hearted, but let us complete what remains. Do you think that an unjust man can be temperate in his injustice?

I should be ashamed, Socrates, he said, to acknowledge this, which nevertheless many may be found to assert.

And shall I argue with them or with you? I replied.

I would rather, he said, that you should argue with the many first, if you will.

Whichever you please, if you will only answer me and say whether you are of their opinion or not. My object is to test the validity of the argument; and yet the result may be that I and you who ask and answer may also be put on our trial.

Protagoras at first made a show of refusing, as he said that the argument was not encouraging; at length, however, he consented to answer.

Now then, I said, begin at the beginning and answer me. You think that some men are moderate or temperate, and yet unjust?

Yes, he said; let that be admitted.

And moderation is good sense?

Yes.

And good sense is good counsel in doing justice? Granted.

If they succeed, I said, or if they don't succeed? If they succeed.

And you would admit the existence of good?

Yes.

And is the good that which is expedient for man?

Yes, indeed, he said; and there are some things which may be inexpedient, and yet I call them good.

I thought that Protagoras was getting ruffled and excited; he seemed

to be setting himself in an attitude of war. Seeing this, I minded my business and gently said:—

When you say, Protagoras, that things inexpedient are good, do you mean inexpedient for man only, or inexpedient altogether? and do you call the latter good?

Certainly not the last, he replied; for I know of many things, meats, drinks, medicines, and ten thousand other things, which are partly expedient for man, and partly inexpedient; and some which are expedient for horses, and not for men; and some for oxen only, and some for dogs: and some for no animals, but only for trees; and some for the roots of trees and not for their branches, as for example, manure, which is a good thing when laid about the roots, but utterly destructive if thrown upon the shoots and young branches; or I may instance olive oil, which is mischievous to all plants, and generally most injurious to the hair of every animal with the exception of man, but beneficial to human hair and to the human body generally; and even in this application (so various and changeable is the nature of the benefit) that which is the greatest good to the outward parts of a man, is a very great evil to his inward parts: and for this reason physicians always forbid their patients the use of oil in their food, except in very small quantities, just sufficient to take away the disagreeable sensation of smell in meats and sauces.

ION

Ion. I am conscious in my own self that I do speak better and have more to say about Homer than any other man, and this is the general opinion. But I do not speak equally well about other poets—tell me the reason of this?

Socrates. I perceive, Ion; and I will proceed to explain to you what I imagine to be the reason of this. This gift which you have of speaking excellently about Homer is not an art, but an inspiration; there is a divinity moving you, like that in the stone which Euripides calls a magnet, but which is commonly known as the stone of Heraclea. For that stone not only attracts iron rings, but also imparts to them a similar power of attracting other rings; and sometimes you may see a number of pieces of iron and rings suspended from one another so as to form quite a long chain: and all of them derive their power of suspension from the original stone. Now this is like the Muse, who first gives to men inspiration herself; and from these inspired persons a chain of other persons is suspended, who take the inspiration from them. For all good poets, epic as well as lyric, compose their beautiful poems not as works of art, but because they are inspired and possessed. And as the Corybantian revellers

when they dance are not in their right mind, so the lyric poets are not in their right mind when they are composing their beautiful strains; but when falling under the power of music and metre they are inspired and possessed; like Bacchic maidens who draw milk and honey from the rivers. when they are under the influence of Dionysus, but not when they are in their right mind. And the soul of the lyric poet does the same, as they themselves tell us; for they tell us that they gather their strains from honied fountains out of the gardens and dells of the Muses; thither, like the bees, they wing their way. And this is true. For the poet is a light and winged and holy thing, and there is no invention in him until he has been inspired and is out of his senses, and the mind is no longer in him: when he has not attained to this state, he is powerless and is unable to utter his oracles. Many are the noble words in which poets speak of actions like your own words about Homer; but they do not speak of them by any rules of art: only when they make that to which the Muse impels them are their inventions inspired; and then one of them will make dithyrambs, another hymns of praise, another choral strains, another epic or iambic verses and he who is good at one is not good at any other kind of verse: for not by art does the poet sing, but by power divine. Had he learned by rules of art, he would have known how to speak not of one theme only, but of all; and therefore God takes away the minds of poets, and uses them as his ministers, as he also uses diviners and holy prophets, in order that we who hear them may know that they speak not of themselves who utter these priceless words in a state of unconsciousness, but that God is the speaker. and that through them he is conversing with us. And Tynnichus the Chalcidian affords a striking instance of what I am saying: he wrote nothing that any one would care to remember but the famous paean which is in every one's mouth, and is one of the finest poems ever written, and is certainly an invention of the Muses, as he himself says. For in this way the God would seem to indicate to us and not allow us to doubt that these beautiful poems are not human, or the work of man, but divine and the word of God; and that the poets are only the interpreters of the gods by whom they are severally possessed. Was not this the lesson which the God intended to teach when by the mouth of the worst of poets he sang the best of songs? Am I not right, Ion?

Ion. Yes, indeed, Socrates, I feel that you are; for your words touch my soul, and I am persuaded somehow that good poets are the inspired interpreters of the gods.

MENO

Meno. Can you tell me, Socrates, whether virtue is acquired by teaching or by practice; or if neither by teaching nor by practice, then whether it comes to man by nature, or in what other way?

Socrates. I am certain that if you were to ask any Athenian whether virtue was natural or acquired, he would laugh in your face, and say: Stranger, you have far too good an opinion of me; if I were inspired I might answer your question. But now I literally do not know what virtue is, and much less whether it is acquired by teaching or not. And I myself, Meno, living as I do in this region of poverty, am as poor as the rest of the citizens; and I confess with shame that I know literally nothing about virtue. How, if I knew nothing at all of Meno, could I tell if he was fair, or the opposite of fair; rich and noble, or the reverse of rich and noble? Do you think that I could?

Meno. There will be no difficulty, Socrates, in answering that. Take first the virtue of a man: his virtue is to know how to administer the state, in the administration of which he will benefit his friends and damage his enemies, and will take care not to suffer damage himself. A woman's virtue may also be easily described: her virtue is to order her house, and keep what is indoors, and obey her husband. Every age, every condition of life, young or old, male or female, bond or free, has a different virtue: there are virtues numberless, and no lack of definitions of them; for virtue is relative to the actions and ages of each of us in all that we do. And the same may be said of vice, Socrates.

Socrates. How fortunate I am, Meno! When I ask you for one virtue, you present me with a swarm of them, which are in your keeping. Suppose that I carry on the figure of the swarm, and ask of you, What is the nature of the bee? and you answer that there are many kinds of bees, and I reply: But do bees differ as bees, because there are many and different kinds of them; or are they not rather to be distinguished by some other quality, as for example beauty, size, or shape? How would you answer that?

Meno. I should answer that bees do not differ from one another, as bees.

Socrates. And suppose that I went on to say: That is what I want to know, Meno; tell me what is that quality in which they do not differ, but are all alike;—you would be able to answer that?

Meno. I should.

Socrates. And so of the virtues, however many and different they may be, they have all a common nature which makes them virtues; and on this

he who would answer the question, What is virtue? would do well to have his eye fixed.

Meno: Certainly.

Socrates. Then both men and women, if they are to be good men and women, must have the same virtues of temperance and justice?

Meno. Yes, Socrates; I agree to that, for justice is virtue.

Socrates. Would you say "virtue," Meno, or "a virtue?"

Meno. What do you mean?

Socrates. I mean as I might say about anything; that a round, for example, is "a figure" and not simply "figure," and I should say this because there are other figures.

Meno. Quite right; and that is just what I am saying about virtue—that there are other virtues as well as justice.

Socrates. What are they? tell me the names of them, as I would tell you the names of the other figures if you asked me.

Meno. Courage and temperance and wisdom and magnificence are virtues; and there are many others.

Socrates. No wonder; but I will try to arrive a little nearer if I can, for you know that all things have a common notion. Suppose now that some one asked you the question which I asked before: Meno, he would say, what is figure? And if you answered "roundness," he would reply to you, in my way of speaking, by asking whether you would say that roundness is "figure" or "a figure"; and you would answer, "a figure."

Meno. Certainly.

Socrates. And for this reason—that there are other figures?

Socrates. And suppose that he were to pursue the matter in my way, he would say: Ever and anon we are landed in particulars, but this is not what I want; tell me then, since you call them by a common name, and say that they are all figures, even when opposed to one another, what is that common nature which you designate as figure—which comprehends straight as well as round, and is no more one than the other—would you not say that?

Meno. Yes.

Socrates. And in saying that, you do not mean to say that the round is round any more than straight, or the straight any more straight than round?

Meno. Certainly not.

Socrates. You only assert that the round figure is not more a figure than the straight, or the straight than the round?

Meno. That is true.

Socrates. What then is this which is called figure? Try and answer. Suppose that when a person asked you this question either about figure or

color, you were to reply, Man, I do not understand what you want, or know what you are saying; he would look rather astonished and say: Do you not understand that I am looking for the "simile in multis?" And then he might put the question in another form: Meno, he might say, what is that "simile in multis" which you call figure, and which includes not only round and straight figures, but all? Could you not answer that question, Meno? I wish that you would try; the attempt will be good practice with a view to the answer about virtue.

Meno. I would rather that you should answer, Socrates.

Socrates. Well, I will try and explain to you what figure is. What do you say to this answer?—Figure is the only thing that always follows color. I hope that you are satisfied with that, as I am sure I should be content if you would let me have a similar definition of virtue.

Meno. But that, Socrates, is a simple answer.

Socrates. Why simple?

Meno. Because you say that figure is that which always follows color; but if a person says that he does not know what color is, any more than what figure is—what sort of answer would you have given him?

Socrates. And now, as Pindar says, "read my meaning":—color is an effluence of form, commensurate with sight, and sensible.

Meno. That, Socrates, appears to me to be an admirable answer.

Socrates. And now, in your turn, you are to fulfil your promise, and tell me what virtue is in the universal; and do not make a singular into a plural, as the facetious say of those who break a thing, but deliver virtue to me whole and sound and not broken into a number of pieces. I have given you the pattern.

Meno. Well then, Socrates, virtue, as I take it, is the love and attainment of the honorable; that is what the poet says, and I say too—

"Virtue is the desire and power of attaining the honorable."

Socrates. Then, according to your definition, virtue would appear to be the power of attaining good?

Meno. I entirely approve, Socrates, of the manner in which you view this matter.

Socrates. Then now let us see whether this is true from another point of view; for I dare say that you are right. What you say is, that virtue is the power of attaining good?

Meno. Yes.

Socrates. Then justice or temperance or holiness, or some other part of virtue, as would appear, must accompany the acquisition, and without them the mere acquisition of good will not be virtue.

Meno. Why, how can there be virtue without these?

Socrates. Then the acquisition of such goods is no more virtue than

the non-acquisition of them, but whatever is accompanied by justice or honesty is virtue, and whatever is devoid of justice is vice?

Meno. There can be no doubt about that, in my judgment.

Socrates. And were we not saying just now that justice, temperance, and the like, were each of them a part of virtue?

Meno. Yes.

Socrates. And so, Meno, this is the way in which you mock me.

Meno. Why do you say that, Socrates?

Socrates. Why, because I asked you to deliver virtue into my hands whole and unbroken, and I gave you a pattern according to which you were to frame your answer; and you have already forgotten this, and tell me that virtue is the power of attaining good justly, or with justice—thus acknowledging justice to be a part of virtue.

Meno. Yes.

Socrates. Then begin again, and answer me, What, according to you and your friend, is the definition of virtue?

Meno. O Socrates; I used to be told, before I knew you, that you are always puzzling yourself and others; and now you are casting your spells over me, and I am simply getting bewitched and enchanted, and am at my wits' end. And I think that you are very wise in not voyaging and going away from home, for if you did in other places as you do in Athens, you would be cast into prison as a magician.

Socrates. You are a rogue, Meno, and had all but caught me.

Meno. What do you mean, Socrates?

Socrates. I perplex others, not because I am clear, but because I am utterly perplexed myself. And now I know not what virtue is, and you seem to be in the same case, although you did once know before you touched me. However, I have no objection to join with you in the inquiry.

Meno. And how will you inquire, Socrates, into that which you know not? What will you put forth as the subject of inquiry? And if you find what you want, how will you ever know that this is what you did not know?

Socrates. I have heard from certain wise men and women who spoke of things divine that—

Meno. What was that? and who were they?

Socrates. Some of them were priests and priestesses, who have studied how they might be able to give a reason of their profession: there have been poets also, such as the poet Pindar and other inspired men. And what they say is—mark, now, and see whether their words are true—they say that the soul of man is immortal, and at one time has an end, which is termed dying, and at another time is born again, but is never destroyed. The soul, then, as being immortal, and having been born again many times, and having seen all things that there are, whether in this world or in the

world below, has knowledge of them all; and it is no wonder that she should be able to call to remembrance all that she ever knew about virtue, and about everything; for as all nature is akin, and the soul has learned all things, there is no difficulty in her eliciting, or as men say learning, all out of a single recollection, if a man is strenuous and does not faint; for all inquiry and all learning is but recollection.

Meno. I feel, somehow, that I like what you are saying.

Socrates. And I, Meno, like what I am saying. Some things I have said of which I am not altogether confident. But that we shall be better and braver and less helpless if we think that we ought to inquire, than we should have been if we indulged in the idle fancy that there was no knowing and no use in searching after what we know not;—that is a theme upon which I am ready to fight, in word and deed, to the utmost of my power.

Meno. That again, Socrates, appears to me to be well said.

Socrates. Then, as we are agreed that a man should inquire about that which he does not know, shall you and I make an effort to inquire together into the nature of virtue?

Meno. By all means, Socrates. And yet I would rather return to my original question, Whether virtue comes by instruction, or by nature, or is gained in some other way?

Socrates. Had I the command of you as well as of myself, Meno, I would not have inquired whether virtue is given by instruction or not, until we had first ascertained "what virtue is." But as you never think of controlling yourself, but only of controlling him who is your slave, and this is your notion of freedom, I must yield to you, for I can not help. And therefore I have now to inquire into the qualities of that of which I do not at present know the nature. At any rate, will you condescend a little, and allow the question, "Whether virtue is given by instruction, or in any other way," to be argued upon hypothesis? Let the first hypothesis be that virtue is or is not knowledge,—in that case will it be taught or not? or, as we were just now saying, "remembered"? For there is no use in disputing about the name. But is virtue taught or not? or rather, does not every one see that knowledge alone is taught?

Meno. I agree.

Socrates. Then if virtue is knowledge, virtue will be taught?

Meno. Certainly.

Socrates. And the next question is, whether virtue is knowledge or of another species?

Meno. Well; and why are you so slow of heart to believe that knowledge is virtue?

Socrates. I will try and tell you why, Meno. I do not retract the assertion that if virtue is knowledge it may be taught; but I fear that I have

some reason in doubting whether virtue is knowledge: for consider now and say whether virtue, or anything that is taught, must not have teachers and disciples?

Meno. Surely.

Socrates. And again, may not that art of which there are neither teachers nor disciples be assumed to be incapable of being taught?

Meno. True; but do you think that there are no teachers of virtue?

Socrates. I have certainly often inquired whether there were any, and taken great pains to find them, and have never succeeded; and many have assisted me in the search, and they were the persons whom I thought the most likely to know.

Meno. But I can not believe, Socrates, that there are no good men in the state. And if there are, how did they come into existence?

Socrates. I am afraid, Meno, that you and I are not good for much, and that Gorgias has been as poor an educator of you as Prodicus has been of me. Certainly we shall have to look to ourselves, and try to find some one who will help to improve us. This I say, because I observe that in the previous discussion none of us remarked that right and good action is possible to man under other guidance than that of knowledge;—and indeed if this be denied, there is no seeing how there can be any good men at all.

Meno. How do you mean, Socrates?

Socrates. I will explain. If a man knew the way to Larisa, or anywhere else, and went to the place and led others thither, would he not be a right and good guide?

Meno. Certainly.

Socrates. And a person who had a right opinion about the way, but had never been and did not know, might be a good guide also, might he not?

Meno. Certainly.

Socrates. And while he has true opinion about that which the other knows, he will be just as good a guide if he thinks the truth, as if he knows the truth?

Meno. Exactly.

Socrates. Then true opinion is as good a guide to correct action as wisdom; and that was the point which we omitted in our speculation about the nature of virtue, when we said that wisdom only is the guide of right action; whereas there is also right opinion.

Meno. True.

Socrates. Then right opinion is not less useful than knowledge?

Meno. I admit the cogency of that, and therefore, Socrates, allowing this, I wonder that knowledge should be preferred to right opinion—or why they should ever differ.

Socrates. You would not wonder if you had ever observed the images of Daedalus; but perhaps you have not got them in your country?

Meno. Why do you refer to them?

Socrates. Because they require to be fastened in order to keep them, and if they are not fastened they will run away.

Meno. Well, what of that?

Socrates. I mean to say that it is not much use possessing one of them if they are at liberty, for they will walk off like runaway slaves; but when fastened, they are of great value, for they are really beautiful works of art. Now this is an illustration of the nature of true opinions: while they abide with us they are beautiful and fruitful, but they run away out of the human soul, and do not remain long, and therefore they are not of much value until they are fastened by the tie of the cause; and this fastening of them, friend Meno, is recollection, as has been already agreed by us. But when they are bound, in the first place, they have the nature of knowledge; and, in the second place, they are abiding. And this is why knowledge is more honorable and excellent than true opinion, because fastened by a chain.

Meno. Yes indeed, Socrates, that I should conjecture to be the truth. Socrates. Seeing then that men become good and useful to states, not only because they have knowledge, but because they have right opinion, and neither knowledge nor right opinion is given to man by nature or acquired by him—if they are not given by nature, neither are the good by nature good?

Meno. Certainly not.

Socrates. And nature being excluded, the next question was whether virtue is acquired by teaching?

Meno. Yes.

Socrates. But if virtue is not taught, neither is virtue knowledge.

Meno. Clearly not.

Socrates. Then of two good and useful things, one, which is knowledge, has been set aside, and can not be supposed to be our guide in political life.

Meno. I think not.

Socrates. But if not by knowledge, the only alternative which remains is that statesmen must have guided states by right opinion, which is in politics what divination is in religion; for diviners and also prophets say many things truly, but they know not what they say.

Meno. Very true.

Socrates. To sum up our inquiry—the result seems to be, if we are at all right in our view, that virtue is neither natural nor acquired, but an instinct given by God to the virtuous. Nor is the instinct accompanied by

reason, unless there may be supposed to be among statesmen any one who is also the educator of statesmen.

Meno. That is excellent, Socrates.

Socrates. Then, Meno, the conclusion is that virtue comes to the virtuous by the gift of God.

.EUTHYPHRO

Socrates. What is piety, and what is impiety?

Euthyphro. Piety is doing as I am doing; that is to say, prosecuting any one who is guilty of murder, sacrilege, or of any other similar crime—whether he be your father or mother, or some other person, that makes no difference—and not prosecuting them is impiety. And please to consider, Socrates, what a notable proof I will give you of the truth of what I am saying, which I have already given to others:—of the truth, I mean, of the principle that the impious, whoever he may be, ought not to go unpunished. For do not men regard Zeus as the best and most righteous of the gods?—and even they admit that he bound his father (Cronos) because he wickedly devoured his sons, and that he too had punished his own father (Uranus) for a similar reason, in a nameless manner.

Socrates. May not this be the reason, Euthyphro, why I am charged with impiety—that I can not approve of these stories about the gods? and therefore I suppose that people think me wrong. But, as you who are well informed about them approve of them, I can not do better than assent to your superior wisdom. For what else can I say, confessing as I do, that I know nothing of them. I wish you would tell me whether you really believe that they are true?

Euthyphro. Yes, Socrates; and things more wonderful still, of which the world is in ignorance.

Socrates. I dare say; and you shall tell me them at some other time when I have leisure. But just at present I would rather hear from you a more precise answer, which you have not as yet given, my friend, to the question, What is "piety"? In reply, you only say that piety is, Doing as you do, charging your father with murder?

Euthyphro. And that is true, Socrates.

Socrates. Tell me what this is, and then I shall have a standard to which I may look, and by which I may measure the nature of actions, whether yours or any one's else, and say that this action is pious, and that impious?

Euthyphro. Piety, then, is that which is dear to the gods, and impiety is that which is not dear to them.

Socrates. That, my good friend, we shall know better in a little while.

The point which I should first wish to understand is whether the pious or holy is beloved by the gods because it is holy, or holy because it is beloved of the gods. And what do you say of piety, Euthyphro: is not piety, according to your definition, loved by all the gods?

Euthyphro. Yes.

Socrates. Because it is pious or holy, or for some other reason? Euthyphro. No. that is the reason.

Socrates. It is loved because it is holy, not holy because it is loved? Euthyphro. Yes.

Socrates. And that which is in a state to be loved of the gods, and is dear to them, is in a state to be loved of them because it is loved of them? Euthyphro. Certainly.

Socrates. Then that which is loved of God, Euthyphro, is not holy, nor is that which is holy loved of God, as you affirm; but they are two different things.

Euthyphro. How do you mean, Socrates?

Socrates. I mean to say that the holy has been acknowledged by us to be loved of God because it is holy, not to be holy because it is loved.

Euthyphro. Yes.

Socrates. But that which is dear to the gods is dear to them because it is loved by them, not loved by them because it is dear to them.

Euthyphro. True.

Socrates. But, friend Euthyphro, if that which is holy is the same as that which is dear to God, and that which is holy is loved as being holy, then that which is dear to God would have been loved as being dear to God; but if that which is dear to God is dear to him because loved by him, then that which is holy would have been holy because loved by him. But now you see that the reverse is the case, and that they are quite different from one another. And what is impiety?

Euthyphro. I really do not know, Socrates, how to say what I mean. For somehow or other our arguments, on whatever ground we rest them, seem to turn round and walk away.

Socrates. Tell me, then,—Is not that which is pious necessarily just? Euthyphro. Yes.

Socrates. And is, then, all which is just pious? or, is that which is pious all just, but that which is just only in part and not all pious?

Euthyphro. Yes; that, I think, is correct.

Socrates. Then, now, if piety is a part of justice, I suppose that we inquire what part? If you had pursued the inquiry in the previous cases; for instance, if you had asked me what is an even number, and what part of number the even is, I should have had no difficulty in replying, a number which represents a figure having two equal sides. Do you agree?

Euthyphro. Yes.

Socrates. In like manner, I want you to tell me what part of justice is piety or holiness; that I may be able to tell Meletus not to do me injustice, or indict me for impiety; as I am now adequately instructed by you in the nature of piety or holiness, and their opposites.

Euthyphro. I have told you already, Socrates, that to learn all these things accurately will be very tiresome. Let me simply say that piety is learning how to please the gods in word and deed, by prayers and sacrifices. That is piety, which is the salvation of families and states, just as the impious, which is unpleasing to the gods, is their ruin and destruction.

Socrates. I think that you could have answered in much fewer words the chief question which I asked, Euthyphro, if you had chosen. But I see plainly that you are not disposed to instruct me: else why, when we had reached the point, did you turn aside? Had you only answered me I should have learned of you by this time the nature of piety. Now, as the asker of a question is necessarily dependent on the answerer, whither he leads I must follow; and can only ask again, what is the pious, and what is piety? Do you mean that they are a sort of science of praying and sacrificing?

Euthyphro. Yes, I do.

Socrates. And sacrificing is giving to the gods, and prayer is asking of the gods?

Euthyphro. Yes, Socrates.

Socrates. Then piety, Euthyphro, is an art which gods and men have of doing business with one another?

Euthyphro. That is an expression which you may use, if you like.

Socrates. But I have no particular liking for anything but the truth. I wish, however, that you would tell me what benefit accrues to the gods from our gifts. That they are the givers of every good to us is clear; but how we can give any good thing to them in return is far from being equally clear. If they give everything and we give nothing, that must be an affair of business in which we have very greatly the advantage of them.

Euthyphro. And do you imagine, Socrates, that any benefit accrues to the gods from what they receive of us?

Socrates. But if not, Euthyphro, what sort of gifts do we confer upon the gods?

Euthyphro. What should we confer upon them, but tributes of honor; and, as I was just now saying, what is pleasing to them?

Socrates. Piety, then, is pleasing to the gods, but not beneficial or dear to them?

Euthyphro. I should say that nothing could be dearer.

Socrates. Then once more the assertion is repeated that piety is dear to the gods?

Euthyphro. No doubt.

Socrates. Then we must begin again and ask, What is piety? That is

an inquiry which I shall never be weary of pursuing as far as in me lies; and I entreat you not to scorn me, but to apply your mind to the utmost, and tell me the truth.

Euthyphro. Another time, Socrates; for I am in a hurry, and must go now.

APOLOGY

Socrates Is the Speaker

LET US REFLECT and we shall see that there is great reason to hope that death is a good, for one of two things:—either death is a state of nothingness and utter unconsciousness, or, as men say, there is a change and migration of the soul from this world to another. Now if you suppose that there is no consciousness, but a sleep like the sleep of him who is undisturbed even by the sight of dreams, death will be an unspeakable gain. For if a person were to select the night in which his sleep was undisturbed even by dreams, and were to compare with this the other days and nights of his life, and then were to tell us how many days and nights he had passed in the course of his life better and more pleasantly than this one. I think that any man, I will not say a private man, but even the great king will not find many such days or nights, when compared with the others. Now if death is like this, I say that to die is gain; for eternity is then only a single night. But if death is the journey to another place, and there, as men say, all the dead are, what good, O my friends and judges, can be greater than this? If indeed when the pilgrim arrives in the world below. he is delivered from the professors of justice in this world, and finds the true judges who are said to give judgment there, Minos and Rhadamanthus and Aeacus and Triptolemus, and other sons of God who were rightcous in their own life, that pilgrimage will be worth making. What would not a man give if he might converse with Orpheus and Musaeus and Hesiod and Homer? Nay, if this be true, let me die again and again. I, too, shall have a wonderful interest in a place where I can converse with Palamedes, and Ajax the son of Telamon, and other heroes of old, who have suffered death through an unjust judgment; and there will be no small pleasure, as I think, in comparing my own sufferings with theirs. Above all, I shall be able to continue my search into true and false knowledge; as in this world, so also in that; I shall find out who is wise, and who pretends to be wise, and is not. What would not a man give, O judges, to be able to examine the leader of the great Trojan expedition; or Odysseus or Sisyphus, or numberless others, men and women too! What infinite delight would there be in conversing with them and asking them questions! For in that world they do not put a man to death for this; certainly

not. For besides being happier in that world than in this, they will be immortal, if what is said is true.

Wherefore, O judges, be of good cheer about death, and know this of a truth—that no evil can happen to a good man, either in life or after death. He and his are not neglected by the gods; nor has my own approaching end happened by mere chance. But I see clearly that to die and be released was better for me; and therefore the oracle gave no sign. For which reason, also, I am not angry with my accusers or my condemners; they have done me no harm, although neither of them meant to do me any good; and for this I may gently blame them.

CRITO

Socrates. Dear Crito, your zeal is invaluable, if a right one; but if wrong, the greater the zeal the greater the evil; and therefore we ought to consider whether these things shall be done or not. For I am and always have been one of those natures who must be guided by reason, whatever the reason may be which upon reflection appears to me to be the best; and now that this fortune has come upon me, I can not put away the reasons which I have before given: the principles which I have hitherto honored and revered I still honor, and unless we can find other and better principles on the instant, I am certain not to agree with you; no, not even if the power of the multitude could inflict many more imprisonments, confiscations, deaths, frightening us like children with hobgoblin terrors. But what will be the fairest way of considering the question? Shall I return to your old argument about the opinions of men? some of which are to be regarded, and others are not to be regarded. Now were we right in maintaining this before I was condemned? And has the argument which was once good now proved to be talk for the sake of talking;—in fact an amusement only, and altogether vanity? That is what I want to consider with your help, Crito:-whether, under my present circumstances, the argument appears to be in any way different or not; and is to be allowed by me or disallowed. That argument, which, as I believe, is maintained by many who assume to be authorities, was to the effect, as I was saying, that the opinions of some men are to be regarded, and of other men not to be regarded. Now you, Crito, are a disinterested person who are not going to die to-morrow-at least, there is no human probability of this, and you are therefore not liable to be deceived by the circumstances in which you are placed. Tell me then, whether I am right in saying that some opinions, and the opinions of some men only, are to be valued, and other opinions, and the opinions of other men, are not to be valued. I ask you whether I was right in maintaining this?

Crito. Certainly.

Socrates. The good are to be regarded, and not the bad? Crito. Yes.

Socrates. And the opinions of the wise are good, and the opinions of the unwise are evil?

Crito. Certainly.

Socrates. Very good; and is not this true, Crito, of other things which we need not separately enumerate? In the matter of just and unjust, fair and foul, good and evil, which are the subjects of our present consultation, ought we to follow the opinion of the many and to fear them; or the opinion of the one man who has understanding, and whom we ought to fear and reverence more than all the rest of the world: and whom deserting we shall destroy and injure that principle in us which may be assumed to be improved by justice and deteriorated by injustice;—is there not such a principle?

Crito. Certainly there is, Socrates.

Socrates. Then, my friend, we must not regard what the many say of us: but what he, the one man who has understanding of just and unjust, will say, and what the truth will say. And therefore you begin in error when you suggest that we should regard the opinion of the many about just and unjust, good and evil, honorable and dishonorable.

Crito. Yes, that holds.

Socrates. From these premises I proceed to argue the question whether I ought or ought not to try and escape without the consent of the Athenians: and if I am clearly right in escaping, then I will make the attempt; but if not, I will abstain. The other considerations which you mention, of money and loss of character and the duty of educating children, are, as I fear, only the doctrines of the multitude, who would be as ready to call people to life, if they were able, as they are to put them to death—and with as little reason. But now, since the argument has thus far prevailed, the only question which remains to be considered is, whether we shall do rightly either in escaping or in suffering others to aid in our escape and paying them in money and thanks, or whether we shall not do rightly; and if the latter, then death or any other calamity which may ensue on my remaining here must not be allowed to enter into the calculation.

Crito. I think that you are right, Socrates; how then shall we proceed? Socrates. Are we to say that we are never intentionally to do wrong, or that in one way we ought and in another way we ought not to do wrong, or is doing wrong always evil and dishonorable, as I was just now saying, and as has been already acknowledged by us? Are all our former admissions which were made within a few days to be thrown away? And have we, at our age, been earnestly discoursing with one another all our

life long only to discover that we are no better than children? Or are we to rest assured, in spite of the opinion of the many, and in spite of consequences whether better or worse, of the truth of what was then said, that injustice is always an evil and dishonor to him who acts unjustly? Shall we affirm that?

Crito. Yes.

Socrates. Then I will proceed to the next step, which may be put in the form of a question:—Ought a man to do what he admits to be right, or ought he to betray the right?

Crito. He ought to do what he thinks right.

Socrates. Then consider the matter in this way:—Imagine that I am about to play truant, and the laws and the government come and interrogate me: "Tell us, Socrates," they say; "what are you about? are you going by an act of yours to overturn us—the laws and the whole state, as far as in you lies? Do you imagine that a state can subsist and not be overthrown, in which the decisions of law have no power, but are set aside and overthrown by individuals?" What will be our answer, Crito, to these and the like words? Any one, and especially a clever rhetorician, will have a good deal to urge about the evil of setting aside the law which requires a sentence to be carried out; and we might reply, "Yes; but the state has injured us and given an unjust sentence." Suppose I say that?

Crito. Very good, Socrates.

Socrates. "And was that our agreement with you?" the law would say; "or were you to abide by the sentence of the state?" And if I were to express astonishment at their saying this, the law would probably add: "Answer, Socrates, instead of opening your eyes: you are in the habit of asking and answering questions. Tell us what complaint you have to make against us which justifies you in attempting to destroy us and the state? In the first place did we not bring you into existence? Your father married your mother by our aid and begat you. Say whether you have any objection to urge against those of us who regulate marriage?" None, I should reply. "Or against those of us who regulate the system of nurture and education of children in which you were trained? Were not the laws, who have the charge of this, right in commanding your father to train you in music and gymnastic?" Right, I should reply. "Well then, since you were brought into the world and nurtured and educated by us, can you deny in the first place that you are our child and slave, as your fathers were before you? And if this is true you are not on equal terms with us; nor can you think that you have a right to do to us what we are doing to you. Would you have any right to strike or revile or do any other evil to a father or to your master, if you had one, when you have been struck or reviled by him, or received some other evil at his hands?—you would not say this? And because we think right to destroy you, do you think that you have any right to destroy us in return, and your country as far as in you lies? And will you, O professor of true virtue, say that you are justified in this? Has a philosopher like you failed to discover that our country is more to be valued and higher and holier far than mother or father or any ancestor. and more to be regarded in the eyes of the gods and of men of understanding? also to be soothed, and gently and reverently entreated when angry, even more than a father, and if not persuaded, obeyed? And when we are punished by her, whether with imprisonment or stripes, the punishment is to be endured in silence; and if she lead us to wounds or death in battle, thither we follow as is right; neither may any one yield or retreat or leave his rank, but whether in battle or in a court of law, or in any other place, he must do what his city and his country order him; or he must change their view of what is just: and if he may do no violence to his father or mother, much less may he do violence to his country." What answer shall we make to this, Crito? Do the laws speak truly, or do they not?

Crito. I think that they do.

Socrates. Then the laws will say: "Consider, Socrates, if this is true, that in your present attempt you are going to do us wrong, For, after having brought you into the world, and nurtured and educated you, and given you and every other citizen a share in every good that we had to give, we further proclaim and give the right to every Athenian, that if he does not like us when he has come of age and has seen the ways of the city, and made our acquaintance, he may go where he pleases and take his goods with him; and none of us laws will forbid him or interfere with him. Any of you who does not like us and the city, and who wants to go to a colony or to any other city, may go where he likes, and take his goods with him. But he who has experience of the manner in which we order justice and administer the state, and still remains, has entered into an implied contract that he will do as we command him. And he who disobeys us is, as we maintain, thrice wrong; first, because in disobeying us he is disobeying his parents; secondly, because we are the authors of his education; thirdly, because he has made an agreement with us that he will duly obey our commands; and he neither obeys them nor convinces us that our commands are wrong; and we do not rudely impose them, but give him the alternative of obeying or convincing us;—that is what we offer, and he does neither. These are the sort of accusations to which, as we were saying, you, Socrates, will be exposed if you accomplish your intentions; you, above all other Athenians." Suppose I ask, why is this? they will justly retort upon me that I above all other men have acknowledged the agreement. "There is clear proof," they will say, "Socrates, that we and the city were not displeasing to you. Of all Athenians you have been the most constant resident in the city, which, as you never leave, you

may be supposed to love. For you never went out of the city either to see the games, except once when you went to the Isthmus, or to any other place unless when you were on military service; nor did you travel as other men do. Nor had you any curiosity to know other states or their laws: your affections did not go beyond us and our state; we were your special favorites, and you acquiesced in our government of you; and this is the state in which you begat your children, which is a proof of your satisfaction. Moreover, you might, if you had liked, have fixed the penalty at banishment in the course of the trial—the state which refuses to let you go now would have let you go then. But you pretended that you preferred death to exile, and that you were not grieved at death. And now you have forgotten these fine sentiments, and pay no respect to us the laws, of whom you are the destroyer; and are doing what only a miserable slave would do, running away and turning your back upon the compacts and agreements which you made as a citizen. And first of all answer this very question: Are we right in saying that you agreed to be governed according to us in deed, and not in word only? Is that true or not?" How shall we answer that, Crito? Must we not agree?

Crito. There is no help, Socrates.

Socrates. Then will they not say: "You, Socrates, are breaking the covenants and agreements which you made with us at your leisure, not in any haste or under any compulsion or deception, but having had seventy years to think of them, during which time you were at liberty to leave the city, if we were not to your mind, or if our covenants appeared to you to be unfair. You had your choice, and might have gone either to Lacedaemon or Crete, which you often praise for their good government, or to some other Hellenic or foreign state. Whereas you, above all other Athenians, seemed to be so fond of the state, or, in other words, of us her laws that you never stirred out of her; the halt, the blind, the maimed were not more stationary in her than you were. And now you run away and forsake your agreements. Not so, Socrates, if you will take our advice; do not make yourself ridiculous by escaping out of the city.

"For just consider, if you transgress and err in this sort of way, what good will you do either to yourself or to your friends? That your friends will be driven into exile and deprived of citizenship, or will lose their property, is tolerably certain; and you yourself, if you fly to one of the neighboring cities, as, for example, Thebes or Megara, both of which are well-governed cities, will come to them as an enemy, Socrates, and their government will be against you, and all patriotic citizens will cast an evil eye upon you as a subverter of the laws, and you will confirm in the minds of the judges the justice of their own condemnation of you. For he who is a corruptor of the laws is more than likely to be corruptor of the young and foolish portion of mankind. Will you then flee from well-ordered

cities and virtuous men? and is existence worth having on these terms? Or will you go to them without shame, and talk to them, Socrates? And what will you say to them? What you say here about virtue and justice and institutions and laws being the best things among men. Would that be decent of you? Surely not. But if you go away from well-governed states to Crito's friends in Thessaly, where there is a great disorder and license, they will be charmed to have the tale of your escape from prison, set off with ludicrous particulars of the manner in which you were wrapped in a goatskin or some other disguise, and metamorphosed as the fashion of runaways is—that is very likely; but will there be no one to remind you that in your old age you violated the most sacred laws from a miserable desire of a little more life? Perhaps not, if you keep them in a good temper; but if they are out of temper you will hear many degrading things; you will live, but how?—as the flatterer of all men, and the servant of all men: and doing what?—eating and drinking in Thessalv, having gone abroad in order that you may get a dinner. And where will be your fine sentiments about justice and virtue then? Say that you wish to live for the sake of your children, that you may bring them up and educate them will you take them into Thessaly and deprive them of Athenian citizenship? Is that the benefit which you would confer upon them? Or are you under the impression that they will be better cared for and educated here if you are still alive, although absent from them; for that your friends will take care of them? Do you fancy that if you are an inhabitant of Thessaly they will take care of them, and if you are an inhabitant of the other world they will not take care of them? Nay; but if they who call themselves friends are truly friends, they surely will.

"Listen, then, Socrates, to us who have brought you up. Think not of life and children first, and of justice afterwards, but of justice first, that you may be justified before the princes of the world below. For neither will you nor any that belong to you be happier or holier or juster in this life, or happier in another, if you do as Crito bids. Now you depart in innocence, a sufferer and not a doer of evil; a victim, not of the laws, but of men. But if you go forth, returning evil for evil, and injury for injury, breaking the covenants and agreements which you have made with us, and wronging those whom you ought least to wrong, that is to say, your-self, your friends, your country, and us, we shall be angry with you while you live, and our brethren, the laws in the world below, will receive you as an enemy; for they will know that you have done your best to destroy us. Listen, then, to us and not to Crito."

This is the voice which I seem to hear murmuring in my ears, like the sound of the flute in the ears of the mystic; that voice, I say, is humming in my ears, and prevents me from hearing any other. And I know that anything more which you may say will be vain. Yet speak, if you have anything to say.

Crito. I have nothing to say, Socrates.

Socrates. Then let me follow the intimations of the will of God.

PHAEDO

Phaedo Is the Narrator

Why do you say, inquired Cebes, that a man ought not to take his own life, but that the philosopher will be ready to follow the dying?

Socrates replied: And have you, Cebes and Simmias, who are acquainted with Philolaus, never heard him speak of this?

I never understood him, Socrates.

My words, too, are only an echo; but I am very willing to say what I have heard: and indeed, as I am going to another place, I ought to be thinking and talking of the nature of the pilgrimage which I am about to make. What can I do better in the interval between this and the setting of the sun?

Would you not say that he is entirely concerned with the soul and not with the body? He would like, as far as he can, to be quit of the body and turn to the soul.

That is true.

In matters of this sort philosophers, above all other men, may be observed in every sort of way to dissever the soul from the body.

That is quite true.

What again shall we say of the actual acquirement of knowledge?—
is the body, if invited to share in the inquiry, a hinderer or a helper? I
mean to say, have sight and hearing any truth in them? Are they not, as
the poets are always telling us, inaccurate witnesses? and yet, if even they
are inaccurate and indistinct, what is to be said of the other senses?—for
you will allow that they are the best of them?

Certainly, he replied.

Then when does the soul attain truth?—for in attempting to consider anything in company with the body she is obviously deceived.

Yes, that is true.

Then must not existence be revealed to her in thought, if at all? Yes.

And thought is best when the mind is gathered into herself and none of these things trouble her—neither sounds nor sights nor pain nor any pleasure,—when she has as little as possible to do with the body, and has no bodily sense or feeling, but is aspiring after being?

That is true.

And in this the philosopher dishonors the body; his soul runs away from the body and desires to be alone and by herself?

That is true.

Well, but there is another thing, Simmias: Is there or is there not an absolute justice?

Assuredly there is.

And an absolute beauty and absolute good?

Of course.

But did you ever behold any of them with your eyes?

Certainly not.

Or did you ever reach them with any other bodily sense? Has the reality of them ever been perceived by you through the bodily organs? or rather, is not the nearest approach to the knowledge of their several natures made by him who so orders his intellectual vision as to have the most exact conception of the essence of that which he considers?

Certainly.

But if this is true, O my friend, then there is great hope that, going whither I go, I shall there be satisfied with that which has been the chief concern of you and me in our past lives. And now that the hour of departure is appointed to me, this is the hope with which I depart, and not I only, but every man who believes that he has his mind purified.

Cebes answered: I agree, Socrates, in the greater part of what you say. But in what relates to the soul, men are apt to be incredulous; they fear that when she leaves the body her place may be nowhere, and that on the very day of death she may be destroyed and perish—immediately on her release from the body, issuing forth like smoke or air and vanishing away into nothingness. For if she could only hold together and be herself after she was released from the evils of the body, there would be good reason to hope, Socrates, that what you say is true. But much persuasion and many arguments are required in order to prove that when the man is dead the soul yet exists, and has any force or intelligence.

True, Cebes, said Socrates; and shall I suggest that we talk a little of the probabilities of these things?

I am sure, said Cebes, that I should greatly like to know your opinion about them.

I reckon, said Socrates, that no one who heard me now, not even if he were one of my old enemies, the comic poets, could accuse me of idle talking about matters in which I have no concern. Let us then, if you please, proceed with the inquiry.

Whether the souls of men after death are or are not in the world below, is a question which may be argued in this manner:—The ancient doctrine of which I have been speaking affirms that they go from hence into the other world, and return hither, and are born from the dead. Now if this be true, and the living come from the dead, then our souls must be in the other world, for if not, how could they be born again? And this would be conclusive, if there were any real evidence that the living are only born from the dead; but if there is no evidence of this, then other arguments will have to be adduced.

That is very true, replied Cebes.

Then let us consider this question, not in relation to man only, but in relation to animals generally, and to plants, and to everything of which there is generation, and the proof will be easier. Are not all things which have opposites generated out of their opposites? I mean such things as good and evil, just and unjust—and there are innumerable other opposites which are generated out of opposites. And I want to show that this holds universally of all opposites; I mean to say, for example, that anything which becomes greater must become greater after being less.

Quite agreed.

Then, suppose that you analyze life and death to me in the same manner. Is not death opposed to life?

Yes.

And they are generated one from the other?

Yes

What is generated from life?

Death.

And what from death?

I can only say in answer—life.

Then the living, whether things or persons, Cebes, are generated from the dead?

That is clear, he replied.

Then the inference is that our souls are in the world below?

That is true.

And one of the true processes or generations is visible—for surely the act of dying is visible?

Surely, he said.

And may not the other be inferred as the complement of nature, who is not to be supposed to go on one leg only? And if not, a corresponding process of generation in death must also be assigned to her?

Certainly, he replied.

And what is that process?

Revival.

And revival, if there be such a thing, is the birth of the dead into the world of the living?

Quite true.

Then here is a new way in which we arrive at the inference that the

living come from the dead, just as the dead come from the living; and if this is true, then the souls of the dead must be in some place out of which they come again. And this, as I think, has been satisfactorily proved.

Yes, Socrates, he said; all this seems to flow necessarily out of our previous admissions.

But then, O my friends, if the soul is really immortal, what care should be taken of her, not only in respect of the portion of time which is called life, but of eternity! And the danger of neglecting her from this point of view does indeed appear to be awful. If death had only been the end of all, the wicked would have had a good bargain in dying, for they would have been happily quit not only of their body, but of their own evil together with their souls. But now, as the soul plainly appears to be immortal, there is no release or salvation from evil except the attainment of the highest virtue and wisdom. For the soul when on her progress to the world below takes nothing with her but nurture and education; which are indeed said greatly to benefit or greatly to injure the departed, at the very beginning of his pilgrimage in the other world.

For after death, as they say, the genius of each individual, to whom he belonged in life, leads him to a certain place in which the dead are gathered together for judgment, whence they go into the world below, following the guide, who is appointed to conduct them from this world to the other: and when they have there received their due and remained their time, another guide brings them back again after many revolutions of ages. Now this journey to the other world is not, as Aeschylus says in the Telephus, a single and straight path—no guide would be wanted for that, and no one could miss a single path; but there are many partings of the road, and windings, as I must infer from the rites and sacrifices which are offered to the gods below in places where three ways meet on earth. The wise and orderly soul is conscious of her situation, and follows in the path; but the soul which desires the body, and which, as I was relating before, has long been fluttering about the lifeless frame and the world of sight, is after many struggles and many sufferings hardly and with violence carried away by her attendant genius, and when she arrives at the place where the other souls are gathered, if she be impure and have done impure deeds, or been concerned in foul murders or other crimes which are the brothers of these, and the works of brothers in crime—from that soul every one flees and turns away; no one will be her companion, no one her guide, but alone she wanders in extremity of evil until certain times are fulfilled, and when they are fulfilled, she is borne irresistibly to her own fitting habitation; as every pure and just soul which has passed through life in the company and under the guidance of the gods has also her own proper home.

Now the earth has divers wonderful regions, and is indeed in nature

and extent very unlike the notions of geographers, as I believe on the authority of one who shall be nameless.

What do you mean, Socrates? said Simmias. I have myself heard many descriptions of the earth, but I do not know in what you are putting your faith, and I should like to know.

Well, Simmias, replied Socrates, the recital of a tale does not, I think, require the art of Glaucus; and I know not that the art of Glaucus could prove the truth of my tale, which I myself should never be able to prove, and even if I could, I fear, Simmias, that my life would come to an end before the argument was completed. I may describe to you, however, the form and regions of the earth according to my conception of them.

That, said Simmias, will be enough.

Well then, he said, my conviction is, that the earth is a round body in the centre of the heavens, and therefore has no need of air or any similar force as a support, but is kept there and hindered from falling or inclining any way by equability of the surrounding heaven and by her own equipoise. For that which, being in equipoise, is in the centre of that which is equably diffused, will not incline any way in any degree, but will always remain in the same state and not deviate. And this is my first notion.

Which is surely a correct one, said Simmias.

Also I believe that the earth is very vast, and that we who dwell in the region extending from the river Phasis to the Pillars of Heracles along the borders of the sea, are just like ants or frogs about a marsh, and inhabit a small portion only, and that many others dwell in many like places. For I should say that in all parts of the earth there are hollows of various forms and sizes, into which the water and the mist and the air collect; and that the true earth is pure and in the pure heaven, in which also are the stars —that is the heaven which is commonly spoken of as the ether, of which this is but the sediment collecting in the hollows of the earth. But we who live in these hollows are deceived into the notion that we are dwelling above on the surface of the earth; which is just as if a creature who was at the bottom of the sea were to fancy that he was on the surface of the water, and that the sea was the heaven through which he saw the sun and the other stars,—he having never come to the surface by reason of his feebleness and sluggishness, and having never lifted up his head and seen, nor ever heard from one who had seen, this other region which is so much purer and fairer than his own. Now this is exactly our case: for we are dwelling in a hollow of the earth, and fancy that we are on the surface; and the air we call the heaven, and in this we imagine that the stars move. But this is also owing to our feebleness and sluggishness, which prevent our reaching the surface of the air: for if any man could arrive at the exterior limit, or take the wings of a bird and fly upward, like a fish who outs his head out and sees this world, he would see a world beyond; and. if the nature of man could sustain the sight, he would acknowledge that this was the place of the true heaven and the true light and the true stars. For this earth, and the stones, and the entire region which surrounds us, are spoiled and corroded, like the things in the sea which are corroded by the brine; for in the sea too there is hardly any noble or perfect growth, but clefts only, and sand, and an endless slough of mud; and even the shore is not to be compared to the fairer sights of this world. And greater far is the superiority of the other. Now of that upper earth which is under the heaven, I can tell you a charming tale, Simmias, which is well worth hearing.

And we, Socrates, replied Simmias, shall be charmed to listen.

The tale, my friend, he said, is as follows:—In the first place, the earth, when looked at from above, is like one of those balls which have leather coverings in twelve pieces, and is of divers colors, of which the colors which painters use on earth are only a sample. But there the whole earth is made up of them, and they are brighter far and clearer than ours; there is a purple of wonderful lustre, also the radiance of gold, and the white which is in the earth is whiter than any chalk or snow. Of these and other colors the earth is made up, and they are more in number and fairer than the eye of man has ever seen; and the very hollows (of which I was speaking) filled with air and water are seen like light flashing amid the other colors, and have a color of their own, which gives a sort of unity to the variety of earth. And in this fair region everything that grows-trees, and flowers, and fruits—are in a like degree fairer than any here; and there are hills, and stones in them in a like degree smoother, and more transparent, and fairer in color than our highly valued emeralds and sardonyxes and jaspers, and other gems, which are but minute fragments of them: for there all the stones are like our precious stones, and fairer still. The reason of this is, that they are pure, and not, like our precious stones, infected or corroded by the corrupt briny elements which coagulate among us, and which breed foulness and disease both in earth and stones, as well as in animals and plants. They are the jewels of the upper earth, which also shines with gold and silver and the like, and they are visible to sight and large and abundant and found in every region of the earth, and blessed is he who sees them. And upon the earth are animals and men, some in a middle region, others dwelling about the air as we dwell about the sea: others in islands which the air flows round, near the continent: and in a word, the air is used by them as the water and the sea are by us, and the ether is to them what the air is to us. Moreover, the temperament of their season is such that they have no disease, and live much longer than we do, and have sight and hearing and smell, and all the other senses, in far greater perfection, in the same degree that air is purer than water or the ether than air. Also they have temples and sacred places in which the gods

really dwell, and they hear their voices and receive their answers, and are conscious of them and hold converse with them, and they see the sun, moon, and stars as they really are, and their other blessedness is of a piece with this.

Such is the nature of the whole earth, and of the things which are around the earth; and there are divers regions in the hollows on the face of the globe everywhere, some of them deeper and also wider than that which we inhabit, others deeper and with a narrower opening than ours, and some are shallower and wider; all have numerous perforations, and passages broad and narrow in the interior of the earth, connecting them with one another; and there flows into and out of them, as into basins, a vast tide of water, and huge subterranean streams of perennial rivers, and springs hot and cold, and a great fire, and great rivers of fire, and streams of liquid mud, thin or thick (like the rivers of mud in Sicily, and the lava streams which follow them), and the regions about which they happen to flow are filled up with them. And there is a sort of swing in the interior of the earth which moves all this up and down. Now the swing is on this wise:—There is a chasm which is the vastest of them all, and pierces right through the whole earth; this is that which Homer describes in the words:-

"Far off, where is the inmost depth beneath the earth";

and which he in other places, and many other poets, have called Tartarus. And the swing is caused by the streams flowing into and out of this chasm, and they each have the nature of the soil through which they flow. And the reason why the streams are always flowing in and out, is that the watery element has no bed or bottom, and is surging and swinging up and down, and the surrounding wind and air do the same; they follow the water up and down, hither and thither, over the earth—just as in respiring the air is always in process of inhalation and exhalation;—and the wind swinging with the water in and out produces fearful and irresistible blasts: when the waters retire with a rush into the lower parts of the earth, as they are called, they flow through the earth into those regions, and fill them up as with the alternate motion of a pump, and then when they leave those regions and rush back hither, they again fill the hollows here. and when these are filled, flow through subterranean channels and find their way to their several places, forming seas, and lakes, and rivers, and springs. Thence they again enter the earth, some of them making a long circuit into many lands, others going to few places and those not distant: and again fall into Tartarus, some at a point a good deal lower than that at which they rose, and others not much lower, but all in some degree lower than the point of issue. And some burst forth again on the opposite side, and some on the same side, and some wind round the earth with one

or many folds like the coils of a serpent, and descend as far as they can, but always return and fall into the lake. The rivers on either side can descend only to the centre and no further, for to the rivers on both sides the opposite side is a precipice.

Now these rivers are many, and mighty, and diverse, and there are four principal ones, of which the greatest and outermost is that called Oceanus, which flows round the earth in a circle; and in the opposite direction flows Acheron, which passes under the earth through desert places, into the Acherusian lake: this is the lake to the shores of which the souls of the many go when they are dead, and after waiting an appointed time, which is to some a longer and to some a shorter time, they are sent back again to be born as animals. The third river rises between the two, and near the place of rising pours into a vast region of fire, and forms a lake larger than the Mediterranean Sea, boiling with water and mud; and proceeding muddy and turbid, and winding about the earth, comes, among other places, to the extremities of the Acherusian lake, but mingles not with the waters of the lake, and after making many coils about the earth plunges into Tartarus at a deeper level. This is that Pyriphlegethon, as the stream is called, which throws up jets of fire in all sorts of places. The fourth river goes out on the opposite side, and falls first of all into a wild and savage region, which is all of a dark blue color, like lapis lazuli; and this is that river which is called the Stygian river, and falls into and forms the Lake Styx, and after falling into the lake and receiving strange powers in the waters, passes under the earth, winding round in the opposite direction to Pyriphlegethon and meeting in the Acherusian lake from the opposite side. And the water of this river too mingles with no other, but flows round in a circle and falls into Tartarus over against Pyriphlegethon; and the name of this river, as the poets say, is Cocytus.

Such is the nature of the other world; and when the dead arrive at the place to which the genius of each severally conveys them, first of all, they have sentence passed upon them, as they have lived well and piously or not. And those who appear to have lived neither well nor ill, go to the river Acheron, and mount such conveyances as they can get, and are carried in them to the lake, and there they dwell and are purified of their evil deeds, and suffer the penalty of the wrongs which they have done to others, and are absolved, and receive the rewards of their good deeds according to their deserts. But those who appear to be incurable by reason of the greatness of their crimes—who have committed many and terrible deeds of sacrilege, murders foul and violent, or the like—such are hurled into Tartarus which is their suitable destiny, and they never come out. Those again who have committed crimes, which, although great, are not unpardonable—who in a moment of anger, for example, have done violence to a father or a mother, and have repented for the remainder of their

lives, or, who have taken the life of another under the like extenuating circumstances—these are plunged into Tartarus, the pains of which they are compelled to undergo for a year, but at the end of the year the wave casts them forth-mere homicides by way of Cocytus, parricides and matricides by Pyriphlegethon—and they are borne to the Acherusian lake, and there they lift up their voices and call upon the victims whom they have slain or wronged, to have pity on them, and to receive them, and to let them come out of the river into the lake. And if they prevail, then they come forth and cease from their troubles; but if not, they are carried back again into Tartarus and from thence into the rivers unceasingly, until they obtain mercy from those whom they have wronged: for that is the sentence inflicted upon them by their judges. Those also who are remarkable for having led holy lives are released from this earthly prison, and go to their pure home which is above, and dwell in the purer earth; and those who have duly purified themselves with philosophy, live henceforth altogether without the body, in mansions fairer far than these, which may not be described, and of which the time would fail me to tell.

Wherefore, Simmias, seeing all these things, what ought not we to do in order to obtain virtue and wisdom in this life? Fair is the prize, and the hope great!

THE SYMPOSIUM

Apollodorus Is the Narrator

Socrates took his place on the couch; and when the meal was ended, and the libations offered, and after a hymn had been sung to the god, and there had been the usual ceremonies,—as they were about to commence drinking, Pausanias reminded them that they had had a bout yesterday, from which he and most of them were still suffering, and they ought to be allowed to recover, and not go on drinking to-day. He would therefore ask, How the drinking could be made easiest?

I entirely agree, said Aristophanes, that we should, by all means, get off the drinking, having been myself one of those who were yesterday drowned in drink.

I think that you are right, said Eryximachus, the son of Acumenus; but I should like to hear one other person speak. What are the inclinations of our host?

I am not able to drink, said Agathon.

All agreed that drinking was not to be the order of the day. Then, said Eryximachus, as you are all agreed that drinking is to be voluntary, and that there is to be no compulsion, I move, in the next place, that the

flute-girl, who has just made her appearance, be told to go away; she may play to herself, or, if she has a mind, to the women who are within. But on this day let us have conversation instead; and, if you will allow me, I will tell you what sort of conversation. This proposal having been accepted, Eryximachus proceeded as follows:—

I will begin, he said, after the manner of Melanippe in Euripides,

"Not mine the word"

which I am about to speak, but that of Phaedrus. For he is in the habit of complaining that, whereas other gods have poems and hymns made in their honor by the poets, who are so many, the great and glorious god Love has not a single panegyrist or encomiast. Now I want to offer Phaedrus a contribution to his feast; nor do I see how the present company can, at this moment, do anything better than honor the god Love. And if you agree to this, there will be no lack of conversation; for I mean to propose that each of us in turn shall make a discourse in honor of Love. Let us have the best which he can make; and Phaedrus, who is sitting first on the left hand, and is the father of the thought, shall begin.

Phaedrus began by affirming that Love is a mighty god, and wonderful among gods and men, but especially wonderful in his birth. For that he is the eldest of the gods is an honor to him; and a proof of this is, that of his parents there is no memorial; neither poet nor prose-writer has ever affirmed that he had any. Thus numerous are the witnesses which acknowledge Love to be the eldest of the gods. And not only is he the eldest, he is also the source of the greatest benefits to us. For I know not any greater blessing to a young man beginning life than a virtuous lover, or to the lover than a beloved youth. For the principle which ought to be the guide of men who would nobly live-that principle, I say, neither kindred, nor honor, nor wealth, nor any other motive is able to implant as surely as love. Of what am I speaking? Of the sense of honor and dishonor, without which neither states nor individuals ever do any good or great work. And I say that a lover who is detected in doing any dishonorable act, or submitting through cowardice when any dishonor is done to him by another, will be more pained at being detected by his beloved than at being seen by his father, or his companions, or any one else. And the beloved has the same feeling about his love, when he again is seen on any disgraceful occasion.

Love will make men dare to die for their beloved; and women as well as men. Of this, Alcestis, the daughter of Pelias, is a monument to all Hellas; for she was willing to lay down her life on behalf of her husband, when no one else would, although he had a father and mother; but the tenderness of her love so far exceeded theirs, that they seemed to be as strangers to their own son, having no concern with him; and so noble did

this action of hers appear, not only to men but also to the gods, that among the many who have done virtuously she was one of the very few to whom the gods have granted the privilege of returning to earth, in admiration of her virtue; such exceeding honor is paid by them to the devotion and virtue of love. These are my reasons for affirming that Love is the eldest and noblest and mightiest of the gods, and the chiefest author and giver of happiness and virtue, in life and after death.

This, or something like this, was the speech of Phaedrus; and some other speeches followed which Aristodemus did not remember; the next which he repeated was that of Pausanias, who observed that the proposal of Phaedrus was too indiscriminate, and that Love ought not to be praised in this unqualified manner. If there were only one Love, then what he said would be well enough; but since there are more Loves than one, he should have begun by determining which of them was to be the theme of our praises. I will amend this defect, he said; and first of all I will tell you which Love is worthy of praise, and then try to hymn the praiseworthy one in a manner worthy of the god. For we all know that Love is inseparable from Aphrodite, and if there were only one Aphrodite there would be only one Love; but as there are two goddesses there must be two Loves. For am I not right in asserting that there are two goddesses? The elder one, having no mother, who is called the heavenly Aphroditeshe is the daughter of Uranus; the younger, who is the daughter of Zeus and Dione, whom we call common; and the other Love who is her fellowworker may and must also have the name of common, as the other is called heavenly. But the Love who is the son of the common Aphrodite is essentially common, and has no discrimination, being such as the meaner sort of men feel, and is apt to be of women as well as of youths, and is of the body rather than of the soul—the most foolish beings are the objects of this love which desires only to gain an end, but never thinks of accomplishing the end nobly, and therefore does good and evil quite indiscriminately. The goddess who is his mother is far younger, and she was born of the union of the male and female, and partakes of both sexes. But the son of the heavenly Aphrodite is sprung from a mother in whose birth the female has no part, but she is from the male only; this is that love which is of youths only, and the goddess being older has nothing of wantonness. Those who are inspired by this love turn to the male, and delight in him who is the more valiant and intelligent nature; any one may recognize the pure enthusiasts in the very character of their attachments. For they love not boys, but intelligent beings whose reason is beginning to be developed, much about the time at which their beards begin to grow. And in choosing them as their companions, they mean to be faithful to them, and to pass their whole life with them, and be with them, and not to take them in their inexperience, and deceive them, and play the fool with them.

or run away from one to another of them. Consider, too, how great is the encouragement which all the world gives to the lover; neither is he supposed to be doing anything dishonorable; but if he succeeds he is praised, and if he fail he is blamed.

Such is the entire liberty which gods and men allow the lover, and which in our part of the world the custom confirms. And this is one side of the question, which may make a man fairly think that in this city to love and to be loved is held to be a very honorable thing. But when there is a new regime, and parents forbid their sons to talk with their lovers. and place them under a tutor's care, and their companions and equals are personal in their remarks when they see anything of this sort going on, and their elders refuse to silence them and do not reprove their words: any one who reflects on this will, on the contrary, think that we hold these practices to be disgraceful. But the truth, as I imagine, and as I said at first, is, that whether such practices are honorable or whether they are dishonorable is not a simple question; they are honorable to him who follows them honorably, dishonorable to him who follows them dishonorably. There is dishonor in yielding to the evil, or in an evil manner; but there is honor in yielding to the good, or in an honorable manner. The custom of our country would have them both proven well and truly, and would have us yield to the one sort of love and avoid the other; testing them in contests and trials, which will show to which of the two classes the lover and the beloved respectively belong. And this is the reason why, in the first place, a hasty attachment is held to be dishonorable, because time is the true test of this as of most other things; and then again there is a dishonor in being overcome by the love of money, wealth, or of political power, whether a man suffers and is frightened into surrender at the loss of them, or is unable to rise above the advantages of them. For none of these things are of a permanent or lasting nature; not to mention that no generous friendship ever sprung from them. There remains, then, only one way of honorable attachment which custom allows in the beloved, and this is the way of virtue; any service which the lover did was not to be accounted flattery or dishonor, and the beloved has also one way of voluntary service which is not dishonorable, and this is virtuous service.

When Pausanias came to a pause, Aristodemus said that the turn of Aristophanes was next, but that either he had eaten too much, or from some other cause he had the hiccough, and was obliged to change with Eryximachus the physician, who was reclining on the couch below him. Eryximachus, he said, you ought either to stop my hiccough, or to speak in my turn until I am better.

I will do both, said Eryximachus: I will speak in your turn, and do you speak in mine; and while I am speaking let me recommend you to hold your breath, and if this fails, then to gargle with a little water; and if the hiccough still continues, tickle your nose with something and sneeze; and if you sneeze once or twice, even the most violent hiccough is sure to go. In the meantime I will take your turn, and you shall take mine. I will do as you prescribe, said Aristophanes, and now get on.

Eryximachus spoke as follows: Seeing that Pausanias made a fair beginning, and but a lame ending, I will endeavor to supply his deficiency. I think that he has rightly distinguished two kinds of love. But my art instructs me that this double love is to be found in all animals and plants. and I may say in all that is; and is not merely an affection of the soul of man towards the fair, or towards anything; that, I say, is a view of the subject which I seem to have gathered from my own art of medicine, which shows me how great and wonderful and universal is this deity, whose empire is over all that is, divine as well as human. And from medicine I will begin that I may do honor to my art. For there are in the human body two loves, which are confessedly different and unlike, and being unlike, have loves and desires which are unlike; and the desire of the healthy is one, and the desire of the diseased is another; and, as Pausanias says, the good are to be accepted, and the bad are not to be accepted; and so too in the body the good and healthy elements are to be indulged, and the bad elements and the elements of desire are not to be indulged, but discouraged. And this is what the physician has to do, and in this the art of medicine consists: for medicine may be regarded generally as the knowledge of the loves and desires of the body, and how to fill or empty them; and the good physician is he who is able to separate fair love from foul, or to convert one into the other; and if he is a skilful practitioner, he knows how to eradicate and how to implant love, whichever is required, and he can reconcile the most hostile elements in the constitution, and make them friends. Now the most hostile are the most opposite, such as hot and cold, moist and dry, bitter and sweet, and the like. And my ancestors Asclepius, knowing how to implant friendship and accord in these elements, was the creator of our art, as our friends the poets tell us and I believe them; and not only medicine in every branch, but the arts of gymnastic and husbandry are under his dominion. Any one who pays the least attention will also perceive that in music there is the same reconciliation of opposites; and I suppose that this must have been the meaning of Heracleitus, although his words are not accurate; for he says that one is united by disunion, like the harmony of the bow and the lyre. Now there is an absurdity in saying that harmony is disagreement or is composed of elements which are still in a state of disagreement. But perhaps what he really meant to say was that harmony is composed of differing notes of higher or lower pitch which disagreed once, but are now reconciled by the art of music; for if the higher and lower notes still disagree, there could be no harm, as is indeed evident. For harmony is a symphony, and

symphony is an agreement; but an agreement of disagreements while they disagree can not exist; there is no harmony of discord and disagreement. This may be illustrated by rhythm, which is composed of elements short and long, once differing and now in accord; which accordance, as in the former instance, medicine, so in this, music implants, making love and unison to grow up among them: and thus music, too, is concerned with the principles of love in their application to harmony and rhythm. Again, in the abstract principles of harmony and rhythm there is no difficulty in discerning them, for as yet love has no double nature. But when you want to use them in actual life, either in the composition of music or in the correct performance of airs or metres composed already, which latter is called education, then the difficulty begins, and the good artist is needed. Then the old tale has to be repeated of fair and heavenly love the love of Urania the fair and heavenly muse—and of the duty of accepting the temperate, and the intemperate only that they may become temperate, and of preserving their love; and again, of the vulgar Polyhymnia who must be used with circumspection that the pleasure may not generate licentiousness; just as in my own art great skill is shown in gratifying the taste of the epicure without inflicting upon him the attendant evil of disease. The conclusion is that in music, in medicine, in all other things human as well as divine, both loves ought to be noted as far as may be. for they are both present.

The course of the season is also full of both principles; and when, as I was saying, the elements of hot and cold, moist and dry, attain the harmonious love of one another and blend in temperance and harmony, they bring to men, animals, and vegetables health and wealth, and do them no harm; whereas the wantonness and overbearingness of the other love affecting the seasons is a great injurer and destroyer, and is the source of pestilence, and brings many different sorts of diseases on animals and plants; for hoar-frost and hail and blight spring from the excesses and disorders of these elements of love, the knowledge of which in relation to the revolutions of the heavenly bodies and the seasons of the year is termed astronomy. Such is the great and mighty, or rather universal, force of all love. And that love, especially, which is concerned with the good, and which is perfected in company with temperance and justice, whether among gods or men, has the greatest power, and is the source of all our happiness and harmony and friendship with the gods which are above us, and with one another. I dare say that I have omitted several things which might be said in praise of Love, but this was not intentional, and you, Aristophanes, may now supply the omission or take some other line of commendation; as I perceive that you are cured of the hiccough.

Aristophanes professed to open another vein of discourse; he had a mind to praise Love in another way, not like that either of Pausanias

or Eryximachus. Mankind, he said, judging by their neglect of him, have never, as I think, at all understood the power of Love. For if they had understood him they would surely have built noble temples and altars, and offered solemn sacrifices in his honor; but this is not done, and certainly ought to be done: for of all the gods he is the best friend of men, the helper and the healer of the ills which are the great obstruction to the happiness of the race. I shall rehearse to you his power, and you may repeat what I say to the rest of the world. And first let me treat of the nature and state of man; for the original human nature was not like the present, but different. In the first place, the sexes were originally three in number, not two as they are now; there was man, woman, and the union of the two, having a name corresponding to this double nature; this once had a real existence, but is now lost, and the name only is preserved as a term of reproach. In the second place, the primeval man was round and had four hands and four feet, back and sides forming a circle, one head with two faces, looking opposite ways, set on a round neck and precisely alike; also four ears, two privy members, and the remainder to correspond.

Terrible was their might and strength, and the thoughts of their hearts were great, and they made an attack upon the gods; and of them is told the tale of Otus and Ephialtes who, as Homer says, dared to scale heaven, and would have laid hands upon the gods. Doubt reigned in the councils of Zeus and of the gods. Should they kill them and annihilate the race with thunderbolts, as they had done the giants, then there would be an end of the sacrifice and worship which men offered to them; but, on the other hand, the gods could not suffer their insolence to be unrestrained. At last, after a good deal of reflection, Zeus discovered a way. He said: "I have a notion which will humble their pride and mend their manners; they shall continue to exist, but I will cut them in two and then they will be diminished in strength and increased in numbers; this will have the advantage of making them more profitable to us. They shall walk upright on two legs, and if they continue insolent and won't be quiet, I will split them again and they shall hop about on a single leg." He spoke and cut them in two, like a sorb-apple which is halved for pickling, or as you might divide an egg with a hair: and as he cut them one after another, he bade Apollo give the face and the half of the neck a turn in order that the man might contemplate the section of himself: this would teach him a lesson of humility. He was also to heal their wounds and compose their forms. Apollo twisted the face and pulled the skin all round over that which in our language is called the belly, like the purses which draw in, and he made one mouth at the centre, which he fastened in a knot (this is called the navel); he also moulded the breast and took out most of the wrinkles, much as

a shoemaker might smooth out leather upon a last; he left a few, however, in the region of the belly and navel, as a memorial of the primeval change. After the division the two parts of man, each desiring his other half, came together, and threw their arms about one another, eager to grow into one, and would have perished from hunger without ever making an effort, because they did not like to do anything apart; and when one of the halves died and the other survived, the survivor sought another mate, whether the section of an entire man or of an entire woman. which had usurped the name of man and woman, and clung to that. And this was being the destruction of them, when Zeus in pity invented a new plan: he turned the parts of generation round in front, for this was not always their position, and they sowed the seed no longer as hitherto like grasshoppers in the ground, but in one another; and after the transposition the male generated in the female in order that by the mutual embraces of man and woman they might breed, and the race might continue; or if man came to man they might be satisfied, and rest and go their ways to the business of life: so ancient is the desire of one another which is implanted in us, reuniting our original nature, making one of two, and healing the state of man. Each of us when separated is but the indenture of a man, having one side only like a flat fish, and he is always looking for his other half. Men who are a section of that double nature which was once called Androgynous are lascivious; adulterers are generally of this breed, and also adulterous and lascivious women: the women who are a section of the woman don't care for men, but have female attachments; the female companions are of this sort. But the men who are a section of the male follow the male, and while they are young, being a piece of the man, they hang about him and embrace him, and they are themselves the best of boys and youths, because they have the most manly nature. Some indeed assert that they are shameless, but this is not true; for they do not act thus from any want of shame, but because they are valiant and manly, and have a manly countenance, and they embrace that which is like them. And these when they grow up are our statesmen, and these only, which is a great proof of the truth of what I am saying. And when they reach manhood they are lovers of youth, and are not naturally inclined to marry or beget children, which they do, if at all, only in obedience to the law, but they are satisfied if they may be allowed to live unwedded; and such a nature is prone to love and ready to return love, always embracing that which is akin to him. And when one of them finds his other half, whether he be a lover of youth or a lover of another sort, the pair are lost in an amazement of love and friendship and intimacy, and one will not be out of the other's sight, as I may say, even for a moment: these are they who pass their lives with one another; yet they could not explain what they desire of one another.

For the intense yearning which each of them has towards the other does not appear to be the desire of intercourse, but of something else which the soul desires and can not tell, and of which she has only a dark and doubtful presentiment. And the reason is that human nature was originally one and we were a whole, and the desire and pursuit of the whole is called love. There was a time, I say, when the two were one, but now because of this wickedness of men God has dispersed us, as the Arcadians were dispersed into villages by the Lacedaemonians. And if we are not obedient to the gods there is a danger that we shall be split up again and go about in basso-relievo, like the figures having only half a nose which are sculptured on columns, and that we shall be like tallies. Wherefore let us exhort all men to piety, that we may avoid the evil and obtain the good, of which Love is the lord and leader; and let no one oppose him—he is the enemy of the gods who opposes him. For if we are friends of God and reconciled to him we shall find our own true loves, which rarely happens in this world. This, Eryximachus, is my discourse of love, which, although different from yours, I must beg you to leave unassailed by the shafts of your ridicule, in order that each may have his turn; each, or rather either, for Agathon and Socrates are the only ones left.

Indeed, I am not going to attack you, said Eryximachus, for I thought your speech charming, and did I not know that Agathon and Socrates are masters in the art of love, I should be really afraid that they would have nothing to say, after all the world of things which have been said already. But, for all that, I am not without hopes.

Socrates said: You did your part well, Eryximachus; but if you were as I am now, or rather as I shall be when Agathon has spoken, you would, indeed, be in a great strait.

You want to cast a spell over me, Socrates, said Agathon, in the hope that I may be disconcerted, thinking of the anticipation which the theatre has of my fine speech.

I should be strangely forgetful, Agathon, replied Socrates, of the courage and magnanimity which you showed when your own compositions were about to be exhibited, coming upon the stage with the actors and facing the whole theatre altogether undismayed, if I thought that your nerves could be fluttered at a small party of friends.

Here Phaedrus interrupted them, saying: Don't answer him, my dear Agathon; for if he can only get a partner with whom he can talk, especially a good-looking one, he will no longer care about the completion of our plan. Now I love to hear him talk; but just at present I must not forget the encomium on Love which I ought to receive from him and every one. When you and he have paid tribute to the god, then you may talk.

Very good, Phaedrus, said Agathon; I see no reason why I should

not proceed with my speech, as I shall have other opportunities of conversing with Socrates. Let me say first how I ought to speak, and then speak.

The previous speakers, instead of praising the god Love, or unfolding his nature, appear to have congratulated mankind on the benefits which he confers upon them. But I would rather praise the god first, and then speak of his gifts; this is always the right way of praising everything. May I express unblamed then, that of all the blessed gods he is the blessedest and the best? And also the fairest, which I prove in this wav: for, in the first place, Phaedrus, he is the youngest, and of his youth he is himself the witness, fleeing out of the way of age, which is swift enough surely, swifter than most of us like: yet he can not be overtaken by him; he is not a bird of that feather; youth and love live and move together—like to like, as the proverb says. There are many things which Phaedrus said about Love in which I agree with him; but I can not agree that he is older than Japetus and Kronos-that is not the truth; as I maintain, he is the youngest of the gods, and youthful ever. The ancient things of which Hesiod and Parmenides speak, if they were done at all, were done of necessity and not of love; had love been in those days, there would have been no chaining or mutilation of the gods, or other violence, but peace and sweetness, as there is now in heaven, since the rule of Love began. Love is young and also tender.

But I must now speak of his virtue: his greatest glory is that he can neither do nor suffer wrong from any god or any man; for he suffers not by force if he suffers, for force comes not near him, neither does he act by force. For all serve him of their own free will, and where there is love as well as obedience, there, as the laws which are the lords of the city say, is justice. And not only is he just but exceedingly temperate, for Temperance is the acknowledged ruler of the pleasures and desires, and no pleasure ever masters Love; he is their master and they are his servants; and if he conquers them he must be temperate indeed. As to courage, even the God of War is no match for him; he is the captive and Love is the lord, for love, the love of Aphrodite, masters him, as the tale runs; and the master is stronger than the servant. And if he conquers the bravest of all he must be himself the bravest. Of his courage and justice and temperance I have spoken; but I have yet to speak of his wisdom, and I must try to do my best, according to the measure of my ability. For in the first place he is a poet (and here, like Eryximachus, I magnify my art), and he is also the source of poesy in others, which he could not be if he were not himself a poet. And at the touch of him every one becomes a poet, even though he had no music in him before; this also is a proof that Love is a good poet and accomplished in all the musical arts; for no one can give to another that which he has not himself, or teach that of which he has no knowledge. Who will deny that the

creation of the animals is his doing? Are they not all the works of his wisdom, born and begotten of him? And as to the artists, do we not know that he only of them whom love inspires has the light of fame?—he whom love touches not walks in darkness.

Therefore, Phaedrus, I say of love that he is the fairest and best in himself, and the cause of what is fairest and best in all other things. And I have a mind to say of him in verse that he is the god who

"Gives peace on earth and calms the stormy deep, Who stills the waves and bids the sufferer sleep."

He makes men to be of one mind at a banquet such as this, fulfilling them with affection and emptying them of disaffection. In sacrifices, banquets, dances, he is our lord—supplying kindness and banishing unkindness, giving friendship and forgiving enmity, the joy of the good, the wonder of the wise, the amazement of the gods; desired by those who have no part in him, and precious to those who have the better part in him; parent of delicacy, luxury, desire, fondness, softness, grace; careful of the good, uncareful of the evil. In every word, work, wish, fear—pilot, helper, defender, savior; glory of gods and men, leader best and brightest: in whose footsteps let every man follow, chanting a hymn and joining in that fair strain with which love charms the souls of gods and men. Such is the discourse, Phaedrus, half playful, yet having a certain measure of seriousness, which, according to my ability, I dedicate to the god.

When Agathon had done speaking, Aristodemus said that there was a general cheer; the fair youth was thought to have spoken in a manner worthy of himself, and of the god. And Socrates, looking at Eryximachus, said: Tell me, son of Acumenus, was I not a prophet? Did I not anticipate that Agathon would make a wonderful oration, and that I should be in a strait?

I think, said Eryximachus, that you were right in the first anticipation, but not in the second.

Socrates then proceeded as follows:—In the magnificent discourse which you have uttered, I think that you were right, my dear Agathon, in saying that you would begin with the nature of love and then afterwards speak of his works—that is a way of beginning which I very much approve. And as you have spoken thus eloquently of the nature of love, will you answer me a further question?—Is love the love of something or of nothing? And here I must explain myself: I do not want you to say that love is the love of a father or the love of a mother—that would be ridiculous; but to answer as you would, if I asked is a father a father of something? to which you would find no difficulty in replying, of a son or daughter: and that would be right.

Very true, said Agathon.

Then now, said Socrates, let us recapitulate the argument. First, is not love of something, and of something too which is wanting to a man?

Yes, he replied.

Remember further what you said in your speech, or if you do not remember I will remind you: you said that the love of the beautiful disposes the empire of the gods, for that of deformed things there is no love—did you not say something like that?

Yes, said Agathon.

Yes, my friend, and the remark is a just one. And if this is true, love is the love of beauty and not of deformity?

He assented.

And the admission has been already made that love is of that which a man wants and has not?

True, he said.

Then love wants and has not beauty?

Certainly, he replied.

And would you call that beautiful which wants and does not possess beauty?

Certainly not.

Then would you still say that love is beautiful?

Agathon replied: I fear that I did not understand what I was saying. Nay, Agathon, replied Socrates; but I should like to ask you one more question:—Is not the good also the beautiful?

Yes.

Then in wanting the beautiful, love wants also the good?

I can not refute you, Socrates, said Agathon. And let us suppose that what you say is true.

Say rather, dear Agathon, that you can not refute the truth; for Socrates is easily refuted.

And now I will take my leave of you, and rehearse the tale of love which I heard once upon a time from Diotima of Mantineia, who was a wise woman in this and many other branches of knowledge. She was the same who deferred the plague of Athens ten years by a sacrifice, and was my instructress in the art of love. In the attempt which I am about to make I shall pursue Agathon's method, and begin with his admissions, which are nearly if not quite the same which I made to the wise woman when she questioned me: this will be the easiest way, and I shall take both parts myself as well as I can. For, like Agathon, she spoke first of the being and nature of love, and then of his works. And I said to her in nearly the same words which he used to me, that love was a mighty god, and likewise fair; and she proved to me as I proved to him that, in my way of speaking about him, love was neither fair nor good. "What do you mean, Diotima." I said, "is love then evil and foul?"

"Hush," she cried; "is that to be deemed foul which is not fair?" "Certainly," I said. "And is that which is not wise, ignorant? do you not see that there is a mean between wisdom and ignorance?" "And what is this?" I said. "Right opinion," she replied; "which, as you know, being incapable of giving a reason, is not knowledge (for how could knowledge be devoid of reason? nor again, ignorance, for neither can ignorance attain the truth), but is clearly something which is a mean between ignorance and wisdom." "Quite true," I replied. "Do not then insist," she said, "that what is not fair is of necessity foul, or what is not good evil; or infer that because love is not fair and good he is therefore foul and evil; for he is in a mean between them." "Well," I said, "love is surely admitted by all to be a great god." "By those who know or by those who don't know?" "By all." "And how, Socrates," she said with a smile, "can love be acknowledged to be a great god by those who say that he is not a god at all?" "And who are they?" I said. "You and I are two of them," she replied. "How can that be?" I said. "That is very intelligible," she replied; "as you yourself would acknowledge that the gods are happy and fair—of course you would—would you dare to say that any god was not?" "Certainly not," I replied. "And you mean by the happy, those who are the possessors of things good or fair?" "Yes." "And you admitted that love, because he was in want, desires those good and fair things of which he is in want?" "Yes, I admitted that." "But how can he be a god who has no share in the good or the fair?" "That is not to be supposed." "Then you see that you also deny the deity of love."

"What then is love?" I asked. "Is he mortal?" "No." "What then?" "As in the former instance, he is neither mortal nor immortal, but in a mean between them." "What is he then, Diotima?" "He is a great spirit, and like all that is spiritual he is intermediate between the divine and the mortal." "And what is the nature of this spiritual power?" I said. "This is the power," she said, "which interprets and conveys to the gods the prayers and sacrifices of men, and to men the commands and rewards of the gods; and this power spans the chasm which divides them, and in this all is bound together, and through this the arts of the prophet and the priest, their sacrifices and mysteries and charms, and all prophecy and incantation, find their way. For God mingles not with man; and through this power all the intercourse and speech of God with man, whether awake or asleep, is carried on. The wisdom which understands this is spiritual; all other wisdom, such as that of arts or handicrafts, is mean and vulgar. Now these spirits or intermediate powers are many and divine, and one of them is love." "And who," I said, "was his father, and who his mother?" "The tale," she said, "will take time; nevertheless I will tell you. On the birthday of Aphrodite there was a feast of the gods, at which the god Poros or Plenty, who is the son of Metis or Discretion, was one of the guests. When the feast was over, Penia or Poverty, as the manner was, came about the doors to beg. Now Plenty, who was the worse for nectar (there was no wine in those days), came into the garden of Zeus and fell into a heavy sleep; and Poverty, considering her own straitened circumstances, plotted to have him for a husband. and accordingly she lay down at his side and conceived Love, who partly because he is naturally a lover of the beautiful, and because Aphrodite is herself beautiful, and also because he was born on Aphrodite's birthday is her follower and attendant. And as his parentage is, so also are his fortunes. In the first place he is always poor, and anything but tender and fair, as the many imagine him; and he is hard-featured and squalid, and has no shoes, nor a house to dwell in; on the bare earth exposed he lies under the open heaven, in the streets, or at the doors of houses, taking his rest; and like his mother he is always in distress. Like his father too, whom he also partly resembles, he is always plotting against the fair and good; he is bold, enterprising, strong, a hunter of men, always at some intrigue or other, keen in the pursuit of wisdom, and never wanting resources; a philosopher at all times, terrible as an enchanter, sorcerer, sophist; for as he is neither mortal nor immortal, he is alive and flourishing at one moment when he is in plenty, and dead at another moment, and again alive by reason of his father's nature. But that which is always flowing in is always flowing out, and so he is never in want and never in wealth, and he is also in a mean between ignorance and knowledge. The truth of the matter is just this: No god is a philosopher or seeker after wisdom, for he is wise already; nor does any one else who is wise seek after wisdom. Neither do the ignorant seek after wisdom. For herein is the evil of ignorance, that he who is neither good nor wise is nevertheless satisfied; he feels no want, and has therefore no desire."

"But who then, Diotima," I said, "are the lovers of wisdom, if they are neither the wise nor the foolish?" "A child may answer that question," she replied; "they are those who, like love, are in a mean between the two. For wisdom is a most beautiful thing, and love is of the beautiful; and therefore love is also a philosopher or lover of wisdom, and being a lover of wisdom is in a mean between the wise and the ignorant. And this again is a quality which Love inherits from his parents; for his father is wealthy and wise, and his mother poor and foolish. Such, my dear Socrates, is the nature of the spirit Love. The error in your conception of him was very natural, and as I imagine from what you say, has arisen out of a confusion of love and the beloved—this made you think that love was all beautiful. For the beloved is the truly beautiful, delicate, and perfect and blessed; but the principle of love is of another nature, and is such as I have described."

I said: "O thou stranger woman, thou sayest well, and now, assuming

love to be such as you say, what is the use of him?" "That, Socrates," she replied, "I will proceed to unfold: of his nature and birth I have already spoken; and you acknowledge that love is of the beautiful. But some one will say: Of the beautiful in what, Socrates and Diotima—or rather let me put the question more clearly, and ask: When a man loves the beautiful, why does he love?" I answered her, "That the beautiful may be his." "Still," she said, "the answer suggests a further question, which is this: What is given by the possession of beauty?" "That," I replied, "is a question to which I have no answer ready." "Then," she said, "let me put the word 'good' in the place of the beautiful, and repeat the question: What does he who loves the good desire?" "The possession of the good," I said. "And what does he gain who possesses the good?" "Happiness," I replied; "there is no difficulty in answering that."

"Yes," she said, "the happy are made happy by the acquisition of good things. Nor is there any need to ask why a man desires happiness; the answer is already final." "That is true," I said. "And is this wish and this desire common to all? and do all men always desire their own good, or only some men?-what think you?" "All men," I replied; "the desire is common to all." "But all men, Socrates," she rejoined, "are not said to love, but only some of them; and you say that all men are always loving the same things." "I myself wonder," I said, "why that is." "There is nothing to wonder at," she replied; "the reason is that one part of love is separated off and receives the name of the whole, but the other parts have other names." "Give an example," I said. She answered me as follows: "There is poetry, which, as you know, is complex and manifold. And all creation or passage of non-being into being is poetry or making, and the processes of all art are creative; and the masters of arts are all poets." "Very true." "Still," she said, "you know that they are not called poets, but have other names; the generic term 'poetry' is confined to that specific art which is separated off from the rest of poetry, and is concerned with music and metre; and this is what is called poetry, and they who possess this kind of poetry are called poets." "Very true," I said. "And the same holds of love. For you may say generally that all desire of good and happiness is due to the great and subtle power of love; but those who, having their affections set upon him, are yet diverted into the paths of money-making or gymnastic philosophy, are not called lovers—the name of the genus is reserved for those whose devotion takes one form only—they alone are said to love, or to be lovers." "In that," I said, "I am of opinion that you are right." "Yes," she said, "and you hear people say that lovers are seeking for the half of themselves; but I say that they are seeking neither for the half, nor for the whole, unless the half or the whole be also a good.

And they will cut off their own hands and feet and cast them away, if they are evil; for they love them not because they are their own, but because they are good, and dislike them not because they are another's, but because they are evil. There is nothing which men love but the good. Do you think that there is?" "Indeed," I answered, "I should say not." "Then," she said, "the conclusion of the whole matter is, that men love the good." "Yes," I said. "To which may be added that they love the possession of the good?" "Yes, that may be added." "And not only the possession, but the everlasting possession of the good?" "That may be added too." "Then, love," she said, "may be described generally as the love of the everlasting possession of the good?" "That is most true," I said.

"Then if this be the nature of love, can you tell me further," she said, "what is the manner of the pursuit? what are they doing who show all this eagerness and heat which is called love? Answer me that." "Nav. Diotima," I said, "if I had known I should not have wondered at your wisdom, or have come to you to learn." "Well," she said, "I will teach you;—love is only birth in beauty, whether of body or soul." "The oracle requires an explanation," I said; "I don't understand you." "I will make my meaning clearer," she replied. "I mean to say, that all men are bringing to the birth in their bodies and in their souls. There is a certain age at which human nature is desirous of procreation; and this procreation must be in beauty and not in deformity: and this is the mystery of man and woman, which is a divine thing, for conception and generation are a principle of immortality in the mortal creature. And in the inharmonical they can never be. But the deformed is always inharmonical with the divine, and the beautiful harmonious. Beauty, then, is the destiny or goddess of parturition who presides at birth, and therefore when approaching beauty the conceiving power is propitious, and diffuse, and benign, and begets and bears fruit: on the appearance of foulness she frowns and contracts in pain, and is averted and morose, and shrinks up, and not without a pang refrains from conception. And this is the reason why, when the hour of conception arrives, and the teeming nature is full, there is such a flutter and ecstasy about beauty whose approach is the alleviation of pain. For love, Socrates, is not, as you imagine, the love of the beautiful only." "What then?" "The love of generation and birth in beauty." "Yes," I said. "Yes, indeed," she replied. "But why of birth?" I said. "Because to the mortal, birth is a sort of eternity and immortality," she replied; "and as has been already admitted, all men will necessarily desire immortality together with good, if love is of the everlasting possession of the good."

And this she taught me at various times when she spoke of love. And on another occasion she said to me, "What is the reason, Socrates, of this love, and the attendant desire? See you not how all animals, birds

as well as beasts, in their desire of procreation, are in agony when they take the infection of love;—this begins with the desire of union, to which is added the care of offspring, on behalf of whom the weakest are ready to battle against the strongest even to the uttermost, and to die for them. and will let themselves be tormented with hunger or suffer anything in order to maintain their offspring. Man may be supposed to do this from reason; but why should animals have these passionate feelings? Can you tell me why?" Again I replied, that I did not know. She said to me: "And do you expect ever to become a master in the art of love, if you do not know this?" "But that," I said, "Diotima, is the reason why I come to you, because, as I have told you already, I am aware that I want a teacher; and I wish that you would explain to me this and the other mysteries of love." "Marvel not at this," she said, "if you believe that love is of the immortal, as we have already admitted; for here again, and on the same principle too, the mortal nature is seeking as far as is possible to be everlasting and immortal: and this is only to be attained by generation, because the new is always left in the place of the old. For even in the same individual there is succession and not absolute unity: a man is called the same; but yet in the short interval which elapses between youth and age, and in which every animal is said to have life and identity, he is undergoing a perpetual process of loss and reparation—hair, flesh, bones, blood, and the whole body are always changing. And this is true not only of the body, but also of the soul, whose habits, tempers, opinions, desires, pleasures, pains, fears, never remain the same in any one of us, but are always coming and going. And what is yet more surprising is, that this is also true of knowledge; and not only does knowledge in general come and go, so that in this respect we are never the same; but particular knowledge also experiences a like change. For what is implied in the word 'recollection,' but the departure of knowledge, which is ever being forgotten and is renewed and preserved by recollection, appearing to be the same although in reality new, according to that law of succession by which all mortal things are preserved, not by absolute sameness of existence, but by substitution, the old worn-out mortality leaving another new and similar one behind-unlike the immortal in this, which is always the same and not another? And in this way, Socrates, the mortal body, or mortal anything, partakes of immortality; but the immortal in another way. Marvel not then at the love which all men have of their offspring; for that universal love and interest is for the sake of immortality."

When I heard this, I was astonished, and said: "Is this really true, O thou wise Diotima?" And she answered with all the authority of a Sophist: "Of that, Socrates, you may be assured;—think only of the ambition of men, and you will marvel at their senselessness, unless you

consider how they are stirred by the love of an immortality of fame. They are ready to run risks greater far than they would have run for their children, and to spend money and undergo any amount of toil, and even to die for the sake of leaving behind them a name which shall be eternal. Do you imagine that Alcestis would have died on behalf of Admetus, or Achilles after Patroclus, or your own Codrus in order to preserve the kingdom for his sons, if they had not imagined that the memory of their virtues, which is still retained among us, would be immortal? Nay," she said, "for I am persuaded that all men do all things for the sake of the glorious fame of immortal virtue, and the better they are the more they desire this; for they are ravished with the desire of the immortal.

"Men whose bodies only are creative, betake themselves to women and beget children—this is the character of their love; their offspring. as they hope, will preserve their memory and give them the blessedness and immortality which they desire in the future. But creative soulsfor there are men who are more creative in their souls than in their bodies -conceive that which is proper for the soul to conceive or retain, And what are these conceptions?—wisdom and virtue in general. And such creators are all poets and other artists who may be said to have invention. But the greatest and fairest sort of wisdom by far is that which is concerned with the ordering of states and families, and which is called temperance and justice. And he who in youth has the seed of these implanted in him and is himself inspired, when he comes to maturity desires to beget and generate. And he wanders about seeking beauty that he may beget offspring-for in deformity he will beget nothing-and embraces the beautiful rather than the deformed; and when he finds a fair and noble and well-nurtured soul, and there is union of the two in one person, he gladly embraces him, and to such a one he is full of fair speech about virtue and the nature and pursuits of a good man; and he tries to educate him; and at the touch and presence of the beautiful he brings forth the beautiful which he conceived long before, and the beautiful is ever present with him and in his memory even when absent, and in company they tend that which he brings forth, and they are bound together by a far nearer tie and have a closer friendship than those who beget mortal children, for the children who are their common offspring are fairer and more immortal. Who, when he thinks of Homer and Hesiod and other great poets, would not rather have their children than any ordinary human ones? Who would not emulate them in the creation of children such as theirs, which have preserved their memory and given them everlasting glory? Or who would not have such children as Lycurgus left behind to be the saviors, not only of Lacedaemon, but of Hellas, as one may say? There is Solon, too, who is the revered father of Athenian laws; and many others there are in many other places, both among

Hellenes and barbarians. All of them have done many noble works, and have been the parents of virtue of every kind, and many temples have been raised in honor of their children, which were never raised in honor of the mortal children of any one.

"These are the lesser mysteries of love, into which even you, Socrates, may enter; to the greater and more hidden ones which are the crown of these, and to which, if you pursue them in a right spirit, they will lead, I know not whether you will be able to attain. But I will do my utmost to inform you, and do you follow if you can. For he who would proceed rightly in this matter should begin in youth to turn to beautiful forms; and first, if his instructor guide him rightly, he should learn to love one such form only—out of that he should create fair thoughts; and soon he would himself perceive that the beauty of one form is truly related to the beauty of another; and then if beauty in general is his pursuit, how foolish would be not to recognize that the beauty in every form is one and the same! And when he perceives this he will abate his violent love of the one, which he will despise and deem a small thing, and will become a lover of all beautiful forms; this will lead him on to consider that the beauty of the mind is more honorable than the beauty of the outward form. So that if a virtuous soul have but a little comeliness, he will be content to love and tend him, and will search out and bring to the birth thoughts which may improve the young, until his beloved is compelled to contemplate and see the beauty of institutions and laws. and understand that all is of one kindred, and that personal beauty is only a trifle; and after laws and institutions he will lead him on to the sciences, that he may see their beauty, being not like a servant in love with the beauty of one youth or man or institution, himself a slave mean and calculating, but looking at the abundance of beauty and drawing towards the sea of beauty, and creating and beholding many fair and noble thoughts and notions in boundless love of wisdom; until at length he grows and waxes strong, and at last the vision is revealed to him of a single science, which is the science of beauty everywhere. To this I will proceed; please to give me your very best attention.

"For he who has been instructed thus far in the things of love, and who has learned to see the beautiful in due order and succession, when he comes toward the end will suddenly perceive a nature of wondrous beauty—and this, Socrates, is that final cause of all our former toils, which in the first place is everlasting—not growing and decaying, or waxing and waning; in the next place not fair in one point of view and foul in another, or at one time or in one relation or at one place fair, at another time or in another relation or at another place foul, as if fair to some and foul to others, or in the likeness of a face or hands or any other part of the bodily frame, or in any form of speech or knowledge,

nor existing in any other being; as for example, an animal, whether in earth or heaven, but beauty only, absolute, separate, simple, and everlasting, which without diminution and without increase, or any change, is imparted to the ever-growing and perishing beauties of all other things. He who under the influence of true love rising upward from these begins to see that beauty, is not far from the end. And the true order of going or being led by another to the things of love, is to use the beauties of earth as steps along which he mounts upwards for the sake of that other beauty. going from one to two, and from two to all fair forms, and from fair forms to fair actions, and from fair actions to fair notions, until from fair notions he arrives at the notion of absolute beauty, and at last knows what the essence of beauty is. This, my dear Socrates," said the stranger of Mantineia. "is that life above all others which man should live, in the contemplation of beauty absolute; a beauty which if you once beheld, you would see not to be after the measure of gold, and garments, and fair boys and vouths, which when you now behold you are in fond amazement, and you and many a one are content to live seeing only and conversing with them without meat or drink, if that were possible—you only want to be with them and to look at them. But what if man had eves to see the true beauty-the divine beauty, I mean, pure and clear and unalloyed, not clogged with the pollutions of mortality, and all the colors and vanities of human life—thither looking, and holding converse with the true beauty divine and simple, and bringing into being and educating true creations of virtue and not idols only? Do you not see that in that communion only, beholding beauty with the eye of the mind, he will be enabled to bring forth, not images of beauty, but realities; for he has hold not of an image but of a reality, and bringing forth and educating true virtue to become the friend of God and be immortal, if mortal man may, Would that be an ignoble life?"

Such, Phaedrus—and I speak not only to you, but to all men—were the words of Diotima; and I am persuaded of their truth. And being persuaded of them, I try to persuade others, that in the attainment of this end human nature will not easily find a better helper than love. And therefore, also, I say that every man ought to honor him as I myself honor him, and walk in his ways, and exhort others to do the same, even as I praise the power and spirit of love according to the measure of my ability now and ever.

The words which I have spoken, you, Phaedrus, may call an encomium of love, or anything else which you please.

PHAEDRUS

Phaedrus. I always wonder at you, Socrates; for when you are in the country, you really are like a stranger who is being led about by a guide. Do you ever cross the border? I rather think that you never venture even outside the gates.

Socrates. Very true, my good friend; and I hope that you will excuse me when you hear the reason, which is, that I am a lover of knowledge, and the men who dwell in the city are my teachers, and not the trees, or the country. Though I do, indeed, believe that you have found a spell with which to draw me out of the city into the country, as hungry cows are led by shaking before them a bait of leaves or fruit. For only hold up the bait of discourse, and you may lead me all round Attica, and over the wide world. And now having arrived, I intend to lie down, and do you choose any posture in which you can read best. Begin.

Phaedrus. Listen. "You know my views of our common interest, and I do not think that I ought to fail in the object of my suit, because I am not your lover: for the kindnesses of lovers are afterwards regretted by them when their passion ceases, but non-lovers have no time of repentance, because they are free and not subject to necessity, and they confer their benefits as far as they are able, in the way which is most conducive to their own interest. Then again, lovers remember how they have neglected their interests, for the sake of their loves; they consider the benefits which they have conferred on them; and when to these they add the troubles which they have endured, they think that they have long ago paid all that is due to them. But the non-lover has no such tormenting recollections; he has never neglected his affairs or quarrelled with his relations; he has no troubles to reckon up, or excuses to allege; for all has gone smoothly with him. What remains, then, but that he should freely do what will gratify the beloved? But you will say that the lover is more to be esteemed, because his love is thought to be greater; for he is willing to say and do what is hateful to other men, in order to please his beloved: well, that, if true, is only a proof that he will prefer any future love to his present, and will injure his old love at the pleasure of the new. And how can a man reasonably sacrifice himself to one who is possessed with a malady which no experienced person would attempt to cure, for the patient himself admits that he is not in his right mind, and acknowledges that he is wrong in his mind, but is unable, as he says, to control himself. How, if he came to his right mind, could he imagine that the desires were good which he conceived when in his wrong mind? Then again, there are many more non-lovers than lovers; and, therefore, you will have a larger

choice, and are far more likely to find among them a compatible friend. And if you fear common opinion, and would avoid publicity and reproach. the lover, who is always thinking that other men are as emulous of him as he is of them, will be sure to boast of his successes, and make a show of them openly in the pride of his heart;—he wants others to know that his labor has not been lost; but the non-lover is more his own master, and is desirous of solid good, and not of the vainglory of men. Again, the lover may be generally seen and known following the beloved (this is his regular occupation), and when they are observed to exchange two words they are supposed to meet about some affair of love, either past or future; but when non-lovers meet, no one asks the reason why, because people know that talking is natural, whether friendship or mere pleasure is the motive. And, again, if you fear the fickleness of friendship, consider that in any other case a quarrel might be a mutual calamity; but now, when you have given up what is most precious to you, you will be the great loser, and therefore, you will have reason in being more afraid of the lover, for his vexations are many, and he is always fancying that everything is against him. And for this reason he debars his beloved from society; he will not have you intimate with the wealthy, lest they should exceed him in wealth, or with men of education, lest they should be his superiors in knowledge; and he is equally afraid of the power of any other good. He would persuade you to have nothing to do with them, in order that he may have you all to himself, and if, out of regard to your own interest, you have more sense than to comply with this desire, a quarrel will ensue. But those who are non-lovers, and whose success in love is the reward of their superiority, will not be jealous of the companions of their beloved, but will rather hate those who refuse to be his companions, thinking that their refusal is a mark of contempt, and that he would be benefited by having companions; more love than hatred may be expected to come of that. Many lovers also have loved the person of a youth before they knew his character, or were acquainted with his domestic relations; so that when their passion has passed away, there is no knowing whether they will continue to be his friends: whereas, in the case of non-lovers who were always friends, the friendship is not lessened by sensual delights; but the recollection of these remains with them, and is an earnest of good things to come. Further, I say that you are likely to be improved by me, whereas the lover will spoil you. For they praise your words and actions in a bad way; partly, they are afraid of offending you, and partly, their judgment is weakened by their passion: for lovers are singular beings when disappointed in love—they deem that painful which is not painful to others, and when successful they can not help praising that which ought not to give them pleasure; so that the beloved is a far more appropriate object of pity than of envy. But if you listen to me, in the first place, I, in my intercourse with you, shall not

regard present enjoyment, but future advantage, being not conquered by love, but conquering myself; nor for small causes taking violent offences. but even when the cause is great, slowly laying up little wrath-unintentional offences I shall forgive, and intentional ones I shall try to prevent; and these are the marks of a friendship which will last. But if you think that only a lover can be a firm friend, you ought to consider that, if this were true, we should set small value on sons, or fathers, or mothers; nor should we ever have loyal friends, for our love of them arises not from passion, but from other associations. Further, if we ought to confer favors on those who are the most eager suitors, we ought to confer them not on the most virtuous, but on the most needy; for they are the persons who will be most relieved, and will therefore be the most grateful; and, in general, when you make a feast, invite not your friend, but the beggar and the empty soul, for they will love you, and attend you, and come about your doors, and will be the best pleased, and the most grateful, and will invoke blessings on your head. But, perhaps, you will say that you ought not to give to the most importunate, but to those who are best able to reward you; nor to the lover only, but to those who are worthy of love; nor to those who will enjoy the charm of your youth, but to those who will share their goods with you in age; nor to those who, having succeeded, will glory in their success to others, but to those who will be modest and hold their peace; nor to those who care about you for a moment only, but to those who will continue your friends for life; nor to those who, when their passion is over, will pick a quarrel with you, but rather to those who, when the bloom of youth is over, will show their own virtue. Remember what I have said; and consider this also, that friends admonish the lover under the idea that his way of life is bad, but no one of his kindred ever yet censured the non-lover, or thought that he was illadvised about his own interests.

"Perhaps you will ask me whether I propose that you should indulge every non-lover. To which I reply that not even the lover would advise you to indulge all lovers, for the favor is less in the just estimation of the receiver and more difficult to hide from the world. Now love ought to be for the advantage of both parties and for the injury of neither.

"I believe that I have said enough; but if there is anything more which you desire or which needs to be supplied, ask and I will answer."

Now, Socrates, what do you think? Is not the discourse excellent, especially the language?

Socrates. Yes indeed, admirable; the effect on me was ravishing. And this I owe to you, Phaedrus, for I observed you while reading to be in an ecstasy, and thinking that you are more experienced in these matters than I am, I followed your example, and, like you, became inspired with a divine frenzy.

Phaedrus. Only go on and you may do as you please.

Socrates. Come, O ye Muses, melodious as ye are called, whether you have received this name from the character of your strains, or because the Melians are a musical race, help, O help me in the tale which my good friend desires me to rehearse, for the good of his friend whom he always deemed wise and will now deem wiser than ever.

Once upon a time there was a fair boy, or, more properly speaking, a youth; he was very fair and had a great many lovers; and there was one special cunning one, who had persuaded the youth that he did not love him, but he really loved him all the same; and one day as he was paying his addresses to him, he used this very argument—that he ought to accept the non-lover rather than the lover; and his words were as follows:—

"All good counsel begins in the same way; a man should know what he is advising about, or his counsel will come to nought. But people imagine that they know about the nature of things, when they don't know about them, and, not agreeing at the beginning, they end, as might be expected, in contradicting one another and themselves. Now you and I must not be guilty of the error which we condemn in others; but as our question is whether the lover or non-lover is to be preferred, let us first of all agree in defining the nature and power of love, and then, keeping our eyes upon this and to this appealing, let us further inquire whether love brings advantage or disadvantage.

"Every one sees that love is a desire, and we know also that nonlovers desire the beautiful and good. Now in what way is the lover to be distinguished from the non-lover? Let us note that in every one of us there are two guiding and ruling principles which lead us whither they will; one is the natural desire of pleasure, the other is an acquired opinion which is in search of the best; and these two are sometimes in harmony and then again at war, and sometimes the one, sometimes the other conquers. When opinion conquers, and by the help of reason leads us to the best, the conquering principle is called temperance; but when desire, which is devoid of reason, rules in us and drags us to pleasure, that power of misrule is called excess. Now excess has many names, and many members, and many forms, and any of these forms when marked gives a name to the bearer of the name, neither honorable nor desirable. The desire of eating, which gets the better of the higher reason and the other desires, is called gluttony, and he who is possessed by this is called a glutton; the tyrannical desire of drink, which inclines the possessor of the desire to drink, has a name which is only too obvious; and the same may be said of the whole family of desires and their names, whichever of them happens to be dominant. And now I think that you will perceive the drift of my discourse; but as every spoken word is in a manner plainer than the unspoken. I had better say further that the irrational desire which overcomes

the tendency of opinion towards right, and is led away to the enjoyment of beauty, and especially of personal beauty, by the desires which are her kindred—that desire, I say, the conqueror and leader of the rest, and waxing strong from having this very power, is called the power of love."

And now, dear Phaedrus, I shall pause for an instant to ask whether you do not think me, as I appear to myself, inspired?

Phaedrus. Yes, Socrates, you seem to have a very unusual flow of words. Socrates. Listen to me, then, in silence; for surely the place is holy; so that you must not wonder, if, as I proceed, I appear to be in a divine fury, for already I am getting into dithyrambics.

Phaedrus. That is quite true.

Socrates. And that I attribute to you. But hear what follows, and perhaps the fit may be averted; all is in their hands above. And now I will go on talking to my youth. Listen:—

Thus, my friend, we have declared and determined the nature of love. Keeping this in view, let us now inquire what advantage or disadvantage is likely to ensue from the lover or the non-lover to him who accepts their advances.

He who is the victim of his passions and the slave of pleasure will of course desire to make his beloved as agreeable to himself as possible. Now to him who is not in his right senses that is agreeable which is not opposed to him, but that which is equal or superior is hateful to him, and therefore the lover will not brook any superiority or equality on the part of his beloved; he is always employed in reducing him to inferiority. And the ignorant is the inferior of the wise, the coward of the brave, the slow of speech of the speaker, the dull of the clever. These are the sort of natural and inherent defects in the mind of the beloved which enhance the delight of the lover, and there are acquired defects which he must produce in him, or he will be deprived of his fleeting joy. And therefore he can not help being jealous, and will debar him from the advantages of society which would make a man of him, and especially from that society which would have given him wisdom. That is to say, he will be compelled to banish from him divine philosophy, in his excessive fear lest he should come to be despised in his eyes; and there is no greater injury which he can inflict on him than this. Moreover, he will contrive that he shall be wholly ignorant, and in everything dependent on himself; he is to be the delight of his lover's heart, and a curse to himself. Verily, a lover is a profitable guardian and associate for him in all that relates to his mind.

Let us next see how his master, whose law of life is pleasure and not good, will keep and train the body of his servant. Will he not choose a beloved who is delicate rather than sturdy and strong? One brought up in shady bowers and not in the bright sun, not practised in manly exercises or dried by perspiration, but knowing only a soft and luxurious diet, in-

stead of the hues of health having only the colors of paint and ornament, and the rest of a piece?—such a life as any one can imagine and which I need not detail at length. But I may sum up all that I have to say in a word, and pass on. Such a person in war, or in any of the great exigencies in life, will be the anxiety of his friends and also of his lover, and certainly not the terror of his enemies; which nobody can deny.

And now let us tell what advantage or disadvantage the beloved will receive from the guardianship and society of his lover in the matter of his possessions; that is the next point to consider. All men will see, and the lover above all men, that his own first wish is to deprive his beloved of his dearest and best and most sacred possessions, father, mother, kindred, friends, all who he thinks may be hinderers or reprovers of their sweet converse; he will even cast a jealous eye upon his gold and silver or other property, because these make him a less easy and manageable prey, and hence he is of necessity displeased at the possession of them and rejoices at their loss; and he would like him to be wifeless, childless, homeless, as well; and the longer the better, for the longer he is all this, the longer he will enjoy him.

There are some sort of animals, such as flatterers, which are dangerous and mischievous enough, and yet nature has mingled a temporary pleasure and grace in their composition. You may say that a courtesan is hurtful, and disapprove of such creatures and their practices, and yet for the time they are very pleasant. But the lover is not only mischievous to his love, he is also extremely unpleasant to live with. Equals, as the proverb says, delight in equals; equality of years inclines them to the same pleasures, and similarity begets friendship, and yet you may have more than enough even of this, and compulsion is always said to be grievous. Now the lover is not only unlike his beloved, but he forces himself upon him. For he is old and his love is young, and neither day nor night will he leave him if he can help; and necessity and the sting of desire drive him on, and allure him with the pleasure which he receives from seeing, hearing, touching, perceiving him. And therefore he is delighted to fasten upon him and to minister to him. But what pleasure or consolation can the beloved be receiving all this time? Must he not feel the extremity of disgust when he looks at an old withered face and the remainder to match, which even in a description is not agreeable, and quite detestable when you are forced into daily contact with them; moreover he is jealously watched and guarded against everything and everybody, and has to hear misplaced and exaggerated praises of himself, and censures as inappropriate, which are quite intolerable when the man is sober, and, besides being intolerable, are published all over the world in all their shamelessness and wearisomeness when he is drunk.

And not only while his love continues is he mischievous and un-

pleasant, but when his love ceases he becomes a perfidious enemy of him on whom he showered his oaths and prayers and promises, and yet could hardly prevail upon him to tolerate the tedium of his company even from motives of interest. The time of payment arrives, and now he is the servant of another master; instead of love and infatuation, wisdom and temperance are his bosom's lords; the man has changed, but the beloved is not aware of this; he asks for a return and recalls to his recollection former acts and words, for he fancies that he is talking to the same person, and the other, being ashamed and not having the courage to tell him that he has changed, and not knowing how to make good his promises, has now grown virtuous and temperate; he does not want to do as he did or to be as he was before. Therefore he runs away and can but end a defaulter; quick as the spinning of a teetotum, he changes pursuit into flight, and the other is compelled to follow him with passion and imprecation, not knowing that he ought never from the first to have accepted a demented lover instead of a sensible non-lover; and that in making such a choice he was yielding to a faithless, morose, envious, disagreeable being, hurtful to his estate, hurtful to his bodily constitution, and still more hurtful to the cultivation of his mind, which is and ever will be the most honorable possession both of gods and men. Consider this, fair youth, and know that in the friendship of the lover there is no real kindness; he has an appetite and wants to feed upon you.

"As wolves love lambs so lovers love their loves."

But, as I said before, I am speaking in verse, and therefore I had better make an end; that is enough.

Phaedrus. I thought that you were only half-way and were going to make a similar speech about all the advantages of accepting the non-lover. Why don't you go on?

Socrates. Know then, fair youth, that the former discourse was that of a finely-scented gentleman, who is all myrrh and fragrance, named Phaedrus, the son of Vain Man. And this is the recantation of Stesichorus the pious, who comes from the town of Desire, and is to the following effect: That was a lie in which I said that the beloved ought to accept the non-lover and reject the lover, because the one is sane, and the other mad. For that might have been truly said if madness were simply an evil; but there is also a madness which is the special gift of heaven, and the source of the chiefest blessings among men. For prophecy is a madness, and the prophetess at Delphi and the priestesses of Dodona, when out of their senses, have conferred great benefits on Hellas, both in public and private life, but when in their senses few or none. And I might also tell you how the Sibyl and other persons, who have had the gift of prophecy, have told

the future of many a one and guided them aright; but that is obvious, and would be tedious.

There will be more reason in appealing to the ancient inventors of names, who, if they had thought madness a disgrace or dishonor, would never have called prophecy, which is the noblest of arts, by the very same name as madness, thus inseparably connecting them; but they must have thought that there was an inspired madness which was no disgrace. And this is confirmed by the name which they gave to the rational investigation of futurity, whether made by the help of birds or other signs; this as supplying from the reasoning faculty insight and information to human thought, but the word has been lately altered and made sonorous by the modern introduction of the letter Omega, and in proportion as prophecy is higher and more perfect than divination both in name and reality, in the same proportion as the ancients testify, is madness superior to a sane mind, for the one is only of human, but the other of divine origin, Again, where plagues and mightiest woes have bred in a race, owing to some ancient wrath, there madness, lifting up her voice and flying to prayers and rites, has come to the rescue of those who are in need; and he who has part in this gift, and is truly possessed and duly out of his mind, is by the use of purifications and mysteries made whole and delivered from evil, future as well as present, and has a release from the calamity which afflicts him. There is also a third kind of madness, which is a possession of the Muses; this enters into a delicate and virgin soul, and there inspiring frenzy, awakens lyric and all other numbers; with these adorning the myriad actions of ancient heroes for the instruction of posterity. But he who, not being inspired and having no touch of madness in his soul, comes to the door and thinks that he will get into the temple by the help of art—he, I say, and his poetry are not admitted; the sane man is nowhere at all when he enters into rivalry with the madman.

I might tell of many other noble deeds which have sprung from inspired madness. And therefore, let no one frighten or flutter us by saying that temperate love is preferable to mad love, but let him further show, if he would carry off the palm, that love is not sent by the gods for any good to lover or beloved. And we, on our part, will prove in answer to him that the madness of love is the greatest of heaven's blessings, and the proof shall be one which the wise will receive, and the witling disbelieve. And, first of all, let us inquire what is the truth about the affections and actions of the soul, divine as well as human. And thus we begin our proof:

The soul is immortal, for that is immortal which is ever in motion; but that which moves and is moved by another, in ceasing to move ceases also to live. Therefore, only that which is self-moving, never failing of self, never ceases to move, and is the fountain and beginning of motion

to all that moves besides. Now, the beginning is unbegotten, for that which is begotten has a beginning; but the beginning has no beginning, for if a beginning were begotten of something, that would have no beginning. But that which is unbegotten must also be indestructible; for if beginning were destroyed, there could be no beginning out of anything, nor anything out of a beginning; and all things must have a beginning. And therefore the self-moving is the beginning of motion; and this can neither be destroyed nor begotten, for in that case the whole heavens and all generation would collapse and stand still, and never again have motion or birth. But if the self-moving is immortal, he who affirms that self-motion is the very idea and essence of the soul will not be put to confusion. For the body which is moved from without is soulless; but that which is moved from within has a soul, and this is involved in the nature of the soul. But if the soul be truly affirmed to be the self-moving, then must she also be without beginning, and immortal. Enough of the soul's immortality.

Her form is a theme of divine and large discourse; human language may, however, speak of this briefly, and in a figure. Let our figure be of a composite nature—a pair of winged horses and a charioteer. Now the winged horses and the charioteer of the gods are all of them noble, and of noble breed, while ours are mixed; and we have a charioteer who drives them in a pair, and one of them is noble and of noble origin, and the other is ignoble and of ignoble origin; and, as might be expected, there is a great deal of trouble in managing them. I will endeavor to explain to you in what way the mortal differs from the immortal creature. The soul or animate being has the care of the inanimate, and traverses the whole heaven in divers forms appearing;—when perfect and fully winged she soars upward, and is the ruler of the universe; while the imperfect soul loses her feathers, and drooping in her flight at last settles on the solid ground—there, finding a home, she receives an earthly frame which appears to be self-moved, but is really moved by her power; and this composition of soul and body is called a living and mortal creature. For no such union can be reasonably believed, or at all proved to be other than mortal; although fancy may imagine a god whom, not having seen nor surely known, we invent-such a one, an immortal creature having a body, and having also a soul which have been united in all time. Let that, however, be as God wills, and be spoken of acceptably to him. But the reason why the soul loses her feathers should be explained, and is as follows:

The wing is intended to soar aloft and carry that which gravitates downwards into the upper region, which is the dwelling of the gods; and this is that element of the body which is most akin to the divine. Now the divine is beauty, wisdom, goodness, and the like; and by these the wing of the soul is nourished, and grows apace; but when fed upon evil and foulness, and the like, wastes and falls away. Zeus, the mighty lord holding

the reins of a winged chariot, leads the way in heaven, ordering all and caring for all; and there follows him the heavenly array of gods and demigods, divided into eleven bands; for only Hestia is left at home in the house of heaven; but the rest of the twelve greater deities march in their appointed order. And they see in the interior of heaven many blessed sights; and there are ways to and fro, along which the happy gods are passing, each one fulfilling his own work; and any one may follow who pleases, for jealousy has no place in the heavenly choir. This is within the heaven. But when they go to feast and festival, then they move right up the steep ascent, and mount the top of the dome of heaven. Now the chariots of the gods, self-balanced, upward glide in obedience to the rein; but the others have a difficulty, for the steed who has evil in him, if he has not been properly trained by the charioteer, gravitates and inclines and sinks towards the earth:—and this is the hour of agony and extremest conflict of the soul. For the immortal souls, when they are at the end of their course, go out and stand upon the back of heaven, and the revolution of the spheres carries them round, and they behold the world beyond. Now of the heaven which is above the heavens, no earthly poet has sung or ever will sing in a worthy manner. But I must tell, for I am bound to speak truly when speaking of the truth. The colorless and formless and intangible essence is visible to the mind, which is the only lord of the soul. Circling around this in the region above the heavens is the place of true knowledge. And as the divine intelligence, and that of every other soul which is rightly nourished, is fed upon mind and pure knowledge, such an intelligent soul is glad at once more beholding being; and feeding on the sight of truth is replenished, until the revolution of the worlds brings her round again to the same place. During the revolution she beholds justice, temperance, and knowledge absolute, not in the form of generation or of relation, which men call existence, but knowledge absolute in existence absolute; and beholding other existences in like manner, and feeding upon them, she passes down into the interior of the heavens and returns home, and there the charioteer, putting up his horses at the stall, gives them ambrosia to eat and nectar to drink.

This is the life of the gods; but of other souls, that which follows God best and is likest to him lifts the head of the charioteer into the outer world, and is carried round in the revolution, troubled indeed by the steeds, and beholding true being, but hardly; another rises and falls, and sees, and again fails to see by reason of the unruliness of the steeds. The rest of the souls are also longing after the upper world and they all follow, but not being strong enough they sink into the gulf, as they are carried round, plunging, treading on one another, striving to be first; and there is confusion and the extremity of effort, and many of them are lamed or have their wings broken through the ill-driving of the charioteers; and all of

them after a fruitless toil go away without being initiated into the mysteries of being, and are nursed with the food of opinion. The reason of their great desire to behold the plain of truth is that the food which is suited to the highest part of the soul comes out of that meadow; and the wing on which the soul soars is nourished with this. And there is a law of the goddess Retribution, that the soul which attains any vision of truth in company with the god is preserved from harm until the next period, and he who always attains is always unharmed. But when she is unable to follow, and fails to behold the vision of truth, and through some ill-hap sinks beneath the double load of forgetfulness and vice, and her feathers fall from her and she drops to earth, then the law ordains that this soul shall in the first generation pass, not into that of any other animal, but only of man; and the soul which has seen most of truth shall come to the birth as a philosopher, or artist, or musician, or lover; that which has seen truth in the second degree shall be a righteous king or warrior or lord; the soul which is of the third class shall be a politician, or economist, or trader; the fourth shall be a lover of gymnastic toils, or a physician; the fifth a prophet or hierophant; to the sixth a poet or imitator will be appropriate; to the seventh the life of an artisan or husbandman; to the eighth that of a sophist or demagogue; to the ninth that of a tyrant;—all these are states of probation, in which he who lives righteously improves, and he who lives unrighteously deteriorates his lot.

Ten thousand years must elapse before the soul can return to the place from whence she came, for she can not grow her wings in less; only the soul of a philosopher, guileless and true, or the soul of a lover, who is not without philosophy, may acquire wings in the third recurring period of a thousand years: and if they choose this life three times in succession, then they have their wings given them, and go away at the end of three thousand years. But the others receive judgment when they have completed their first life, and after the judgment they go, some of them to the houses of correction which are under the earth, and are punished; others to some place in heaven whither they are lightly borne by justice, and there they live in a manner worthy of the life which they led here when in the form of men. And at the end of the first thousand years the good souls and also the evil souls both come to cast lots and choose their second life, and they may take any that they like. And then the soul of the man may pass into the life of a beast, or from the beast again into the man. But the soul of him who has never seen the truth will not pass into the human form, for man ought to have intelligence, as they say, "secundum speciem," proceeding from many particulars of sense to one conception of reason; and this is the recollection of those things which our soul once saw when in company with God-when looking down from above on that which we now call being and upwards towards the true being. And therefore the mind of the philosopher alone has wings; and this is just, for he is always, according to the measure of his abilities, clinging in recollection to those things in which God abides, and in beholding which He is what he is. And he who employs aright these memories is ever being initiated into perfect mysteries and alone becomes truly perfect. But, as he forgets earthly interests and is rapt in the divine, the vulgar deem him mad, and rebuke him; they do not see that he is inspired.

Thus far I have been speaking of the fourth and last kind of madness. which is imputed to him who, when he sees the beauty of earth, is transported with the recollection of the true beauty; he would like to fly away, but he can not; he is like a bird fluttering and looking upward and careless of the world below; and he is therefore esteemed mad. And I have shown that this is of all inspirations the noblest and best, and comes of the best, and that he who has part or lot in this madness is called a lover of the beautiful. For as has been already said, every soul of man has in the way of nature beheld true being; this was the condition of her passing into the form of man. But all men do not easily recall the things of the other world; they may have seen them for a short time only, or they may have been unfortunate when they fell to earth, and may have lost the memory of the holy things which they saw there through some evil and corrupting association. Few there are who retain the remembrance of them sufficiently; and they, when they behold any image of that other world, are rapt in amazement; but they are ignorant of what this means, because they have no clear perceptions. For there is no light in the earthly copies of justice or temperance or any of the higher qualities which are precious to souls: they are seen but through a glass dimly; and there are few who, going to the images, behold in them the realities, and they only with difficulty. They might have seen beauty shining in brightness, when, with the happy band following in the train of Zeus, as we philosophers did, or with other gods as others did, they saw a vision and were initiated into most blessed mysteries, which we celebrated in our state of innocence; and having no feeling of evils as yet to come; beholding apparitions innocent and simple and calm and happy as in a mystery; shining in pure light, pure ourselves and not vet enshrined in that living tomb which we carry about, now that we are imprisoned in the body, as in an oyster-shell. Let me linger thus long over the memory of scenes which have passed away.

But of beauty, I repeat again that we saw her there shining in company with the celestial forms; and coming to earth we find her here too, shining in clearness through the clearest aperture of sense. For sight is the keenest of our bodily senses; though not by that is wisdom seen, for her loveliness would have been transporting if there had been a visible image of her, and this is true of the loveliness of the other ideas as well. But beauty only has this portion, that she is at once the loveliest and also the

most apparent. Now he who has not been lately initiated, or who has become corrupted, is not easily carried out of this world to the sight of absolute beauty in the other; he looks only at that which has the name of beauty in this world, and instead of being awed at the sight of her, like a brutish beast he rushes on to enjoy and beget; he takes wantonness to his bosom, and is not afraid or ashamed of pursuing pleasure in violation of nature. But he whose initiation is recent, and who has been the spectator of many glories in the other world, is amazed when he sees any one having a godlike face or form, which is the expression or imitation of divine beauty; and at first a shudder runs through him, and some "misgiving" of a former world steals over him: then, looking upon the face of his beloved as of a god, he reverences him, and if he were not afraid of being thought a downright madman, he would sacrifice to his beloved as to the image of a god; then as he gazes on him there is a sort of reaction, and the shudder naturally passes into an unusual heat and perspiration; for, as he receives the effluence of beauty through the eyes, the wing moistens and he warms. And as he warms, the parts out of which the wing grew, and which had been hitherto closed and rigid and had prevented the wing from shooting forth are melted, and as nourishment streams upon him, the lower end of the wing begins to swell and grow from the root upwards, extending under the whole soul—for once the whole was winged. Now during this process the whole soul is in a state of effervescence and irritation, like the state of irritation and pain in the gums at the time of cutting teeth; in like manner the soul when beginning to grow wings has inflammation and pains and ticklings, and when looking at the beauty of youth she receives the sensible warm traction of particles which flow towards her, therefore called attraction, and is refreshed and warmed by them, and then she ceases from her pain with joy. But when she is separated and her moisture fails, then the orifices of the passages out of which the wing shoots dry up and close, and intercept the germ of the wing; which, being shut up within in company with desire, pricks the aperture which is nearest, until at length the entire soul is pierced and maddened and pained, and at the recollection of beauty is again delighted. And from both of them together the soul is oppressed at the strangeness of her condition, and is in a great strait and excitement, and in her madness can neither sleep by night nor abide in her place by day. And wherever she thinks that she will behold the beautiful one, thither in her desire she runs. And when she has seen him, and drunk rivers of desire, her constraint is loosened, and she is refreshed, and has no more pangs and pains; and this is the sweetest of all pleasures at the time, and is the reason why the soul of the lover never forsakes his beautiful one, whom he esteems above all; he has forgotten his mother and brethren and companions, and he thinks nothing of the neglect and loss of his property; and as to the

rules and proprieties of life, on which he formerly prided himself, he now despises them, and is ready to sleep and serve, wherever he is allowed, as near as he can to his beautiful one who is not only the object of his worship, but the only physician who can heal him in his extreme agony. And this state, my dear imaginary youth, is by men called love, and among the gods has a name which you, in your simplicity, may be inclined to mock; there are two lines in honor of love in the Homeric Apocrypha in which the name occurs. One of them is rather outrageous, and is not quite metrical; they are as follows:—

"Mortals call him Eros (love), But the immortals call him Pteros (fluttering dove), Because fluttering of wings is a necessity to him."

You may believe this or not as you like. At any rate the loves of lovers and their causes are such as I have described.

Now the lover who is the attendant of Zeus is better able to bear the winged god, and can endure a heavier burden; but the attendants and companions of Ares, when under the influence of love, if they fancy that they have been at all wronged, are ready to kill and put an end to themselves and their beloved. And in like manner he who follows in the train of any other god honors him, and imitates him as far as he is able while the impression lasts; and this is his way of life and the manner of his behavior to his beloved and to every other in the first period of his earthly existence. Every one chooses the object of his affections according to his character, and this he makes his god, and fashions and adorns as a sort of image which he is to fall down and worship. The followers of Zeus desire that their beloved should have a soul like him; and, therefore, they seek some philosophical and imperial nature, and when they have found him and loved him, they do all they can to create such a nature in him, and if they have no experience hitherto, they learn of any one who can teach them, and themselves follow in the same way. And they have the less difficulty in finding the nature of their own god in themselves, because they have been compelled to gaze intensely on him; their recollection clings to him, and they become possessed by him, and receive his character and ways, as far as man can participate in God. These they attribute to the beloved, and they love him all the more, and if they draw inspiration from Zeus, like the Bacchic Nymphs, they pour this out upon him in order to make him as like their god as possible. But those who are the followers of Hera seek a royal love, and when they have found him they do the same with him; and in like manner the followers of Apollo, and of every other god walking in the ways of their god, seek a love who is to be like their god, and when they have found him, they themselves imitate their god, and persuade their love to do the same, and bring him into harmony with

the form and ways of the god as far as they can; for they have no feelings of envy or mean enmity towards their beloved, but they do their utmost to create in him the greatest likeness of themselves and the god whom they honor. And the desire of the lover, if effected, and the initiation of which I speak into the mysteries of true love, is thus fair and blissful to the beloved when he is chosen by the lover who is driven mad by love. Now the beloved or chosen one is taken captive in the following manner:—

As I said at the beginning of this tale, I divided each soul into three parts, two of them having the forms of horses and the third that of a charioteer; and one of the horses was good and the other bad, but I have not yet explained the virtue and vice of either, and to that I will now proceed. The well-conditioned horse is erect and well-formed; he has a lofty neck and an aquiline nose, and his color is white, and he has dark eves and is a lover of honor and modesty and temperance, and the follower of true glory; he needs not the touch of the whip, but is guided by word and admonition only. Whereas the other is a large misshapen animal, put together anyhow; he has a strong short neck; he is flat-faced and of a dark color, grey-eyed and bloodshot, the mate of insolence and pride, shag-eared, deaf, hardly vielding to blow or spur. Now when the charioteer beholds the vision of love, and has his whole soul warmed with sense, and is full of tickling and desire, the obedient steed, then as always under the government of shame, refrains himself from leaping on the beloved; but the other, instead of heeding the blows of the whip, prances away and gives all manner of trouble to his companion and to the charioteer, and urges them on toward the beloved and reminds them of the joys of love. They at first indignantly oppose him and will not be urged on to do terrible and unlawful deeds; but at last, when there is no end of evil, they vield and suffer themselves to be led on to do as he bids them. And now they are at the spot and behold the flashing beauty of the beloved. But when the charioteer sees that, his memory is carried to the true beauty, and he beholds her in company with Modesty set in her holy place. And when he sees her he is afraid and falls back in adoration, and in falling is compelled to pull back the reins, which he does with such force as to bring both the steeds on their haunches, the one willing and unresisting, the unruly one very unwilling; and when they have gone back a little, the one is overflowing with shame and wonder, and pours forth rivers of perspiration over the entire soul; the other, when the pain is over which the bridle and the fall had given him, having with difficulty taken breath, is full of wrath and reproaches, which he heaps upon the charioteer and his fellow-steed, as though from want of courage and manhood they had been false to their agreement and guilty of desertion. And, when they again decline, he forces them on, and will scarce yield to their request that he would wait until another time. Returning at the appointed hour, they make as if they had forgotten, and he reminds them, fighting and neighing and dragging them, until at length he, on the same thoughts intent, forces them to draw near. And when they are near he stoops his head and puts up his tail, and takes the bit in his mouth and pulls shamelessly. Then the charioteer is worse off than ever; he drops at the very start, and with still greater violence draws the bit out of the teeth of the wild steed and covers his abusive tongue and jaws with blood, and forces his legs and haunches to the ground and punishes him sorely. And when this has happened several times and the villain has ceased from his wanton way, he is tamed and humbled, and follows the will of the charioteer, and when he sees the beautiful one he is ready to die of fear. And from that time forward the soul of the lover follows the beloved in modesty and holy fear.

And so the beloved who, like a god, has received every true and loval service from his lover, not in pretence but in reality, being also himself of a nature friendly to his admirer, if in former days he has blushed to own his passion and turned away his lover, because his youthful companions or others slanderously told him that he would be disgraced, now as years advance, at the appointed age and time is led to receive him into communion. For fate which has ordained that there shall be no friendship among the evil has also ordained that there shall ever be friendship among the good. And when he has received him into communion and intimacy, then the beloved is amazed at the good will of the lover; he recognizes that the inspired friend is worth all other friendship or kinships, which have nothing of friendship in them in comparison. And as he continues to feel this and approaches and embraces him, in gymnastic exercises and at other times of meeting, then does the fountain of that stream, which Zeus when he was in love with Ganymede called desire, overflow upon the lover, and some enters into his soul, and some when he is filled flows out again, and as a breeze or an echo leaps from the smooth rocks and rebounds to them again, so does the stream of beauty, passing the eyes which are the natural doors and windows of the soul, return again to the beautiful one; there arriving and fluttering the passages of the wings, and watering them and inclining them to grow, and filling the soul of the beloved also with love. And thus he loves, but he knows not what; he does not understand and can not explain his own state; he appears to have caught the infection of another's eye; the lover is his mirror in whom he is beholding himself, but he is not aware of this. When he is with the lover, both cease from their pain, but when he is away then he longs as he is longed for, and has love's image, love for love (Anteros) lodging in his breast, which he calls and deems not love but friendship only, and his desire is as the desire of the other, but weaker; he wants to see him, touch him, kiss, embrace him, and not long afterwards his desire is accomplished. Now, when they meet, the wanton steed of the lover has a word

to say to the charioteer; he would like to have a little pleasure as a return for many pains, but the wanton steed of the beloved says not a word, for he is bursting with passion which he understands not, but he throws his arms round the lover and embraces him as his dearest friend; and, when they are side by side, he is not in a state in which he can refuse the lover anything, if he ask him, while his fellow-steed and the charjoteer oppose him with shame and reason. After this their happiness depends upon their self-control; if the better elements of the mind which lead to order and philosophy prevail, then they pass their life in this world in happiness and harmony—masters of themselves and orderly—enslaving the vicious and emancipating the virtuous elements; and when the end comes, being light and ready to fly away, they conquer in one of the three heavenly or truly Olympian victories; nor can human discipline or divine inspiration confer any greater blessing on man than this. If, on the other hand, they leave philosophy and lead the lower life of ambition, then, probably in the dark or in some other careless hour, the two wanton animals take the two souls when off their guard and bring them together, and they accomplish that desire of their hearts which to the many is bliss; and this having once enjoyed they continue to enjoy, yet rarely because they have not the approval of the whole soul. They too are dear, but not so dear to one another as the others, either at the time of their love or afterwards. They consider that they have given and taken from each other the most sacred pledges, and they may not break them and fall into enmity. At last they pass out of the body, unwinged, but eager to soar, and thus obtain no mean reward of love and madness. For those who have once begun the heavenward pilgrimage may not go down again to darkness and the journey beneath the earth, but they live in light always; happy companions in their pilgrimage, and when the time comes at which they receive their wings they have the same plumage because of their love.

Thus great are the heavenly blessings which the friendship of a lover will confer on you, my youth. Whereas the attachment of the non-lover which is just a vulgar compound of temperance and niggardly earthly ways and motives, will breed meanness—praised by the vulgar as virtue in your inmost soul; will send you bowling round the earth during a period of nine thousand years, and leave you a fool in the world below.

And thus, dear Eros, I have made and paid my recantation, as well as I could and as fairly as I could; the poetical figures I was compelled to use, because Phaedrus would have them. And now forgive the past and accept the present, and be gracious and merciful to me, and do not deprive me of sight or take from me the art of love, but grant that I may be yet more esteemed in the eyes of the fair. And if Phaedrus or I myself said anything objectionable in our first speeches, blame Lysias, who is the father of the brat, and let us have no more of his progeny; bid him study philosophy,

like his brother Polemarchus; and then his lover Phaedrus will no longer halt between two, but dedicate himself wholly to love and philosophical discourses.

GORGIAS

O MY FRIEND! I want you to see that the noble and the good may possibly be something different from saving and being saved, and that he who is truly a man ought not to care about living a certain time:—he knows, as women say, that none can escape the day of destiny, and therefore he is not fond of life; he leaves all that with God, and considers in what way he can best spend his appointed term;—whether by assimilating himself to that constitution under which he lives, as you at this moment have to consider, how you may become as like as possible to the Athenian people, if you intended to be dear to them, and to have power in the state; whereas I want you to think and see whether this is for the interest of either of us;—I would not have us risk that which is dearest on the acquisition of this power, like the Thessalian enchantresses, who, as they say, bring down the moon from heaven at the risk of their own perdition.

EUTHYDEMUS

Crito. I have often told you, Socrates, that I am in a constant difficulty about my two sons. What am I to do with them? There is no hurry about the younger one, who is only a child; but the other, Critobulus, is getting on, and needs some one who will improve him. I can not help thinking, when I hear you talk, that there is a sort of madness in many of our anxieties about our children:—in the first place, about marrying a wife of good family to be the mother of them, and then about heaping up money for them—and yet taking no care about their education. But then again, when I contemplate any of those who pretend to educate others, I am amazed. They all seem to me to be such outrageous beings, if I am to confess the truth: so that I do not know how I can advise the youth to study philosophy.

Socrates. Dear Crito, do you not know that in every profession the inferior sort are numerous and good for nothing, and the good are few and beyond all price: for example, are not gymnastic and rhetoric and moneymaking and the art of the general, noble arts?

Crito. Certainly they are, in my judgment.

Socrates. Well, and do you not see that in each of these arts the many are ridiculous performers?

Crito. Yes, indeed, that is very true.

Socrates. And will you on this account shun all these pursuits yourself and refuse to allow them to your son?

Crito. That would not be reasonable, Socrates.

Socrates. Do you then be reasonable, Crito, and do not mind whether the teachers of philosophy are good or bad, but think only of philosophy herself. Try and examine her well and truly, and if she be evil seek to turn away all men from her, and not your sons only; but if she be what I believe that she is, then follow her and serve her, you and your house, as the saying is, and be of good cheer.

PARMENIDES

SOCRATES SAID: What do you mean, Zeno? Is your argument that the existence of many necessarily involves like and unlike, and that this is impossible, for neither can the like be unlike, nor the unlike like; is that your position? Just that, said Zeno. And if the unlike can not be like, or the like unlike, then neither can the many exist, for that would involve an impossibility. Is the design of your argument throughout to disprove the existence of the many? and is each of your treatises intended to furnish a separate proof of this, there being as many proofs in all as you have composed arguments, of the non-existence of the many? Is that your meaning, or have I misunderstood you?

No, said Zeno; you have quite understood the general drift of the treatise.

I see, Parmenides, said Socrates, that Zeno is your second self in his writings too; he puts what you say in another way, and half deceives us into believing that he is saying what is new. For you, in your compositions, say that the all is one, and of this you adduce excellent proofs; and he, on the other hand, says that the many is naught, and gives many great and convincing evidences of this. To deceive the world, as you have done, by saying the same thing in different ways, one of you affirming and the other denying the many, is a strain of art beyond the reach of most of us.

Yes, Socrates, said Zeno. But although you are as keen as a Spartan hound in pursuing the track, you do not quite apprehend the true motive of the performance, which is not really such an artificial piece of work as you imagine; there was no intention of concealment effecting any grand result—that was a mere accident. For the truth is, that these writings of mine were meant to protect the arguments of Parmenides against those who ridicule him, and urge the many ridiculous and contradictory results which were supposed to follow from the assertion of the one. My answer is addressed to the partisans of the many, and intended to show that greater

or more ridiculous consequences follow from their hypothesis of the existence of the many if carried out, than from the hypothesis of the existence of the one. A love of controversy led me to write the book in the days of my youth, and some one stole the writings, and I had therefore no choice about the publication of them; the motive, however, of writing, was not the ambition of an old man, but the pugnacity of a young one. This you do not seem to see, Socrates; though in other respects, as I was saying, your notion is a very just one.

That I understand, said Socrates, and quite accept your account. But tell me, Zeno, do you not further think that there is an idea of likeness in the abstract, and another idea of unlikeness, which is the opposite of likeness, and that in these two, you and I and all other things to which we apply the term many, participate; and that the things which participate in likeness are in that degree and manner like; and that those which participate in unlikeness are in that degree unlike, or both like and unlike in the degree in which they participate in both? And all things may partake of both opposites, and be like and unlike to themselves, by reason of this participation. Even in that there is nothing wonderful. But if a person could prove the absolute like to become unlike, or the absolute unlike to become like, that, in my opinion, would be a real wonder; not, however, if the things which partake of the ideas experience likeness and unlikeness-there is nothing extraordinary in this. Nor, again, if a person were to show that all is one by partaking of one, and that the same is many by partaking of many, would that be very wonderful? But if he were to show me that the absolute many was one, or the absolute one many, I should be truly amazed. And I should say the same of other things. I should be surprised to hear that the genera and species had opposite qualities in themselves; but if a person wanted to prove of me that I was many and also one, there would be no marvel in that. When he wanted to show that I was many he would say that I have a right and a left side, and a front and a back, and an upper and a lower half, for I can not deny that I partake of multitude; when, on the other hand, he wants to prove that I am one, he will say, that we who are here assembled are seven, and that I am one and partake of the one, and in saying both he speaks truly. Or if a person shows that the same wood and stones and the like, being many are also one, we admit that he shows the existence of the one and many, but he does not show that the many are one or the one many; he is uttering not a wonder but a truism. If, however, as I was suggesting just now, we were to make an abstraction, I mean of like, unlike, one, many, rest, motion, and similar ideas, and then to show that these in their abstract form admit of admixture and separation, I should greatly wonder at that. This part of the argument appears to be treated by you, Zeno, in a very spirited manner; nevertheless, as I was saying, I should be far more amazed if any one found in the ideas themselves which are conceptions, the same puzzle and entanglement which you have shown to exist in visible objects.

Socrates, he said, I admire the bent of your mind towards philosophy; tell me now, was this your own distinction between abstract ideas and the things which partake of them? and do you think that there is an idea of likeness apart from the likeness which we possess, or of the one and many, or of the other notions of which Zeno has been speaking?

I think that there are such abstract ideas, said Socrates.

Parmenides proceeded. And would you also make abstract ideas of the just and the beautiful and the good, and of all that class of notions?

Yes, he said, I should.

And would you make an abstract idea of man distinct from us and from all other human creatures, or of fire and water?

I am often undecided, Parmenides, as to whether I ought to include them or not.

And would you feel equally undecided, Socrates, about things the mention of which may provoke a smile?—I mean such things as hair, mud, dirt, or anything else that is foul and base; would you suppose that each of these has an idea distinct from the phenomena with which we come into contact, or not?

Certainly not, said Socrates; visible things like these are such as they appear to us, and I am afraid that there would be an absurdity in assuming any idea of them, although I sometimes get disturbed, and begin to think that there is nothing without an idea; but then again, when I have taken up this position, I run away, because I am afraid that I may fall into a bottomless pit of nonsense, and perish; and I return to the ideas of which I was just now speaking, and busy myself with them.

Yes, Socrates, said Parmenides; that is because you are still young; the time will come when philosophy will have a firmer grasp of you, if I am not mistaken, and then you will not despise even the meanest things; at your age, you are too much disposed to look to the opinions of men. But I should like to know whether you mean that there are certain forms or ideas of which all other things partake, and from which they are named; that similars, for example, become similar, because they partake of similarity; and great things become great, because they partake of greatness; and that just and beautiful things become just and beautiful, because they partake of justice and beauty?

Yes, certainly, said Socrates, that is my meaning.

And does not each individual partake either of the whole of the idea or of a part of the idea? Is any third way possible?

Impossible, he said.

Then do you think that the whole idea is one, and yet being one, exists in each one of many?

Why not, Parmenides? said Socrates.

Because one and the same existing as a whole in many separate individuals, will thus be in a state of separation from itself.

Nay, replied the other; the idea may be like the day which is one and the same in many places, and yet continuous with itself; in this way each idea may be one and the same in all.

I like your way, Socrates, of dividing one into many; and if I were to spread out a sail and cover a number of men, that, as I suppose, in your way of speaking, would be one and a whole in or on many—that will be the sort of thing which you mean?

I am not sure.

And would you say that the whole sail is over each man, or a part only?

A part only.

Then, Socrates, the ideas themselves will be divisible, and the individuals will have a part only and not the whole existing in them?

That seems to be true.

Then would you like to say, Socrates, that the one idea is really divisible and yet remains one?

Certainly not, he said.

Suppose that you divide greatness, and that of many great things each one is great by having a portion of greatness less than absolute greatness—is that conceivable?

No.

Or will each equal part, by taking some portion of equality less than absolute equality, be equal to some other?

Impossible.

Or suppose one of us to have a portion of smallness; this is but a part of the small, and therefore the small is greater; and while the absolute small is greater, that to which the part of the small is added, will be smaller and not greater than before.

That is impossible, he said.

Then in what way, Socrates, will all things participate in the ideas, if they are unable to participate in them either as parts or wholes?

Indeed, he said, that is a question which is not easily determined.

Well, said Parmenides, and what do you say of another question?

What is that?

I imagine that the way in which you are led to assume the existence of ideas is as follows:—You see a number of great objects, and there seems to you to be one and the same idea of greatness pervading them all; and hence you conceive of a single greatness.

That is true, said Socrates.

And if you go on and allow your mind in like manner to contemplate the idea of greatness and these other greatnesses, and to compare them, will not another idea of greatness arise, which will appear to be the source of them all?

That is true.

Then another abstraction of greatness will appear over and above absolute greatness, and the individuals which partake of it; and then another, which will be the source of that, and then others, and so on; and there will be no longer a single idea of each kind, but an infinite number of them.

But may not the ideas, asked Socrates, be cognitions only, and have no proper existence except in our minds, Parmenides? For in that case there may be single ideas, which do not involve the consequences which were just now mentioned.

And can there be individual cognitions which are cognitions of nothing?

That is impossible, he said.

The cognition must be of something?

Yes.

Of something that is or is not?

Of something that is.

Must it not be of the unity, or single nature, which the cognition recognizes as attaching to all?

Yes.

And will not this unity, which is always the same in all, be the idea? From that, again, there is no escape.

Then, said Parmenides, if you say that other things participate in the ideas, must you not say that everything is made up of thoughts or cognitions, and that all things think; or will you say that being thoughts they are without thought?

But that, said Socrates, is irrational. The more probable view, Parmenides, of these ideas is, that they are patterns fixed in nature, and that other things are like them, and resemblances of them; and that what is meant by the participation of other things in the ideas, is really assimilation to them.

But if, said he, the individual is like the idea, must not the idea also be like the individual, in as far as the individual is a resemblance of the idea? That which is like, can not be conceived of as other than the like of like.

Impossible.

And when two things are alike, must they not partake of the same idea?

They must.

And will not that of which the two partake, and which makes them alike, be the absolute idea [of likeness]?

Certainly.

Then the idea can not be like the individual, or the individual like the idea; for if they are alike, some further idea of likeness will always arise, and if that be like anything else, another and another; and new ideas will never cease being created, if the idea resembles that which partakes of it?

Ouite true.

The theory, then, that other things participate in the ideas by resemblance, has to be given up, and some other mode of participation devised?

That is true.

Do you see then, Socrates, how great is the difficulty of affirming self-existent ideas?

Yes, indeed.

THEAETETUS

1. Socrates, a Midwife and the Son of a Midwife

Socrates. Such are the midwives, whose work is a very important one, but not so important as mine; for women do not bring into the world at one time real children, and at another time idols which are with difficulty distinguished from them; if they did, then the discernment of the true and false birth would be the crowning achievement of the art of midwifery—you would think that?

Theaetetus. Yes, I certainly should.

Socrates. Well, my art of midwifery is in most respects like theirs; but the difference lies in this—that I attend men and not women, and I practise on their souls when they are in labor, and not on their bodies; and the triumph of my art is in examining whether the thought which the mind of the young man is bringing to the birth is a false idol or a noble and true creation. And like the midwives, I am barren, and the reproach which is often made against me, that I ask questions of others and have not the wit to answer them myself, is very just; the reason is, that the god compels me to be a midwife, but forbids me to bring forth. And therefore I am not myself wise, nor have I anything which is the invention or offspring of my own soul, but the way is this:—Some of those who converse with me, at first appear to be absolutely dull, yet afterwards, as our acquaintance ripens, if the god is gracious to them, they all of them make astonishing progress; and this not only in their own opinion but in that of others. There is clear proof that they have never learned anything

of me, but they have acquired and discovered many noble things of themselves, although the god and I help to deliver them.

And the proof is, that many of them in their ignorance, attributing all to themselves and despising me, either of their own accord or at the instigation of others, have gone away sooner than they ought; and the result has been that they have produced abortions by reason of their evil communications, or have lost the children of which I delivered them by an ill bringing up, deeming lies and shadows of more value than the truth; and they have at last ended by seeing themselves, as others see them, to be great fools. Aristides, the son of Lysimachus, is one of this sort, and there are many others. The truants often return to me and beg that I would converse with them again—they are ready to go down on their knees—and then, if my familiar allows, which is not always the case, I receive them, and they begin to grow again. Dire are the pangs which my art is able to arouse and to allay in those who have intercourse with me, just like the pangs of women in childbirth; night and day they are full of perplexity and travail which is even worse than that of the women. So much for them. And there are others, Theaetetus, who come to me apparently having nothing in them; and as I know that they have no need of my art, I coax them into another union, and by the grace of God I can generally tell who is likely to do them good. Many of them I have given away to Prodicus, and some to other inspired sages.

I tell you this long story, friend Theaetetus, because I suspect, as indeed you seem to think yourself, that you are in labor—great with some conception. Come then to me, who am a midwife and the son of a midwife, and try to answer the question which I will ask you. And if I abstract and expose your first-born, because I discover upon inspection that the conception which you have formed is a vain shadow, do not quarrel with me on that account, as the manner of women is when their first children are taken from them. For I have actually known some who were ready to bite me when I deprived them of a darling folly; they did not perceive that I acted from good will, not knowing that no god is the enemy of man (that was not within the range of their ideas); neither am I their enemy in all this, but religion will never allow me to admit falsehood, or to stifle the truth. Once more, then, Theaetetus, I repeat my old question, "What is knowledge?" and do not say that you can not tell; but quit yourself like a man, and by the help of God you will be able to tell.

2. The Lawyer and the Philosopher

Socrates. Here is a new question offering, Theodorus, which is likely to be still longer than the last.

Theodorus. Well, Socrates, we have plenty of leisure.

Socrates. That is true, and your remark recalls to my mind an observation which I have often made, that those who have passed their days in the pursuit of philosophy are ridiculously at fault when they have to appear and plead in court. How natural is this!

Theodorus. What do you mean?

Socrates. I mean to say, that those who from their youth upwards have been knocking about in the courts and such like places, compared with those who have received a philosophical education, are slaves, and the others are freemen.

Theodorus. In what is the difference seen?

Socrates. In the leisure of which you were speaking, and which a freeman can always command; he has his talk out in peace, and, like ourselves. wanders at will from one subject to another, and from a second to a third, if his fancy prefers a new one, caring not whether his words are many or few; his only aim is to attain the truth. But the lawyer is always in a hurry; there is the water of the clepsydra driving him on, and not allowing him to expatiate at will; and there is his adversary standing over him, enforcing his rights; the affidavit, which in their phraseology is termed the brief, is recited; and from this he must not deviate. He is a servant, and is disputing about a fellow-servant before his master, who is seated, and has the cause in his hands; the trial is never about some indifferent matter, but always concerns himself; and often he has to run for his life. The consequence has been, that he has become keen and shrewd; he has learned how to flatter his master in word and indulge him in deed; but his soul is small and unrighteous. His slavish condition has deprived him of growth and uprightness and independence; dangers and fears, which were too much for his truth and honesty, came upon him in early years, when the tenderness of youth was unequal to them, and he has been driven into crooked ways; from the first he has practised deception and retaliation, and has become stunted and warped. And so he has passed out of youth into manhood, having no soundness in him; and is now, as he thinks, a master in wisdom. Such is the lawyer, Theodorus. Will you have the companion picture of the philosopher, who is of our brotherhood; or shall we return to the argument? Do not let us abuse the freedom of digression which we claim.

Theodorus. Nay, Socrates, let us finish what we were about; for you truly said that we belong to a brotherhood which is free, and are not the servants of the argument; but the argument is our servant, and must wait our leisure. Where is the judge or spectator who has a right to censure or control us, as he might the poets?

Socrates. Then, as this is your wish, I will describe the leaders; for there is no use in talking about the inferior sort. In the first place, the lords

of philosophy have never, from their youth upwards, known their way to the agora, or the dicastery, or the council, or any other political assembly; they neither see nor hear the laws or votes of the state written or spoken; the eagerness of political societies in the attainment of offices—clubs, and banquets, and revels, and singing-maidens, do not enter even into their dreams. Whether any event has turned out well or ill in the city, what disgrace may have descended to any one from his ancestors, male or female, are matters of which the philosopher no more knows than he can tell, as they say, how many pints are contained in the ocean. Neither is he conscious of his ignorance. For he does not hold aloof in order that he may gain a reputation; but the truth is, that the outer form of him only is in the city; his mind, disdaining the littlenesses and nothingnesses of human things, is "flying all abroad," as Pindar says, measuring with line and rule the things which are under and on the earth and above the heaven, interrogating the whole nature of each and all, but not condescending to anything which is within reach.

Theodorus. What do you mean, Socrates?

Socrates. I will illustrate my meaning, Theodorus, by the jest which the clever, witty Thracian handmaid made about Thales, when he fell into a well as he was looking up at the stars. She said, that he was so eager to know what was going on in heaven, that he could not see what was before his feet. This is a jest which is equally applicable to all philosophers. For the philosopher is wholly unacquainted with his next door neighbor; he is ignorant, not only of what he is doing, but whether he is or is not a human creature; he is searching into the essence of man, and is unwearied in discovering what belongs to such a nature to do or suffer different from any other;—I think that you understand me, Theodorus?

Theodorus. I do, and what you say is true.

Socrates. And thus, my friend, on every occasion, private as well as public, as I said at first, when he appears in a law-court, or in any place in which he has to speak of things which are at his feet and before his eyes, he is the jest, not only of Thracian handmaids but of the general herd, tumbling into wells and every sort of disaster through his inexperience. He looks such an awkward creature, and conveys the impression that he is stupid. When he is reviled, he has nothing personal to say in answer to the civilities of his adversaries, for he knows no scandals of any one, and they do not interest him; and therefore he is laughed at for his sheepishness; and when others are being praised and glorified, he can not help laughing very sincerely in the simplicity of his heart; and this again makes him look like a fool. When he hears a tyrant or king eulogized, he fancies that he is listening to the praises of some keeper of cattle—a swine-herd, or shepherd, or cowherd, who is being praised for the quantity of

milk which he squeezes from them; and he remarks that the creature whom they tend, and out of whom they squeeze the wealth, is of a less tractable and more insidious nature. Then, again, he observes that the great man is of necessity as ill-mannered and uneducated as any shepherd —for he has no leisure, and he is surrounded by a wall, which is his mountain-pen. Hearing of enormous landed proprietors of ten thousand acres and more, our philosopher deems this to be a trifle, because he has been accustomed to think of the whole earth; and when they sing the praises of family, and say that some one is a gentleman because he has had seven generations of wealthy ancestors, he thinks that their sentiments only betray the dulness and narrowness of vision of those who utter them, and who are not educated enough to look at the whole, nor to consider that every man has had thousands and thousands of progenitors, and among them have been rich and poor, kings and slaves, Hellenes and barbarians, many times over. And when some one boasts of a catalogue of twenty-five ancestors, and goes back to Heracles, the son of Amphitryon, he can not understand his poverty of ideas. Why is he unable to calculate that Amphitryon had a twenty-fifth ancestor, who might have been anybody, and was such as fortune made him, and he had a fiftieth, and so on? He is amused at the notion that he can not do a sum, and thinks that a little arithmetic would have got rid of his senseless vanity. Now, in all these cases our philosopher is derided by the vulgar, partly because he is above them, and also because he is ignorant of what is before him, and always at a loss.

Theodorus. That is very true, Socrates.

Socrates. But, O my friend, when he draws the other into upper air, and gets him out of his pleas and rejoinders into the contemplation of justice and injustice in their own nature and in their difference from one another and from all other things; or from the commonplaces about the happiness of kings to the consideration of government, and of human happiness and misery in general—what they are, and how a man should seek after the one and avoid the other-when that narrow, keen, little legal mind is called to account about all this, he gives the philosopher his revenge; for dizzied by the height at which he is hanging, and from which he looks into space, which is a strange experience to him, he being dismayed, and lost, and stammering out broken words, is laughed at, not by Thracian handmaidens or any other uneducated persons, for they have no eye for the situation, but by every man who has not been brought up as a slave. Such are the two characters, Theodorus: the one of the philosopher or gentleman, who may be excused for appearing simple and useless when he has to perform some menial office, such as packing up a bag, or flavoring a sauce or fawning speech; the other, of the man who is able to do

every kind of service smartly and neatly, but knows not how to wear his cloak like a gentleman; still less does he acquire the music of speech, or hymn the true life which is lived by immortals or men blessed of heaven.

Theodorus. If you could only persuade everybody, Socrates, as you do me, of the truth of your words, there would be more peace and fewer evils among men.

Socrates. Evils, Theodorus, can never perish; for there must always remain something which is antagonist to good. Of necessity, they hover around this mortal sphere and the earthly nature, having no place among the gods in heaven. Wherefore, also, we ought to fly away thither, and to fly thither is to become like God, as far as this is possible; and to become like him, is to become holy and just and wise. But, O my friend, you can not easily convince mankind that they should pursue virtue or avoid vice. not for the reasons which the many give, in order, forsooth, that a man may seem to be good;—this is what they are always repeating, and this, in my judgment, is an old wives' fable. Let them hear the truth: In God is no unrighteousness at all—he is altogether righteous; and there is nothing more like him than he of us, who is the most righteous. And the true wisdom of men, and their nothingness and cowardice, are nearly concerned with this. For to know this is true wisdom and manhood, and the ignorance of this is too plainly folly and vice. All other kinds of wisdom or cunning, which seem only, such as the wisdom of politicians, or the wisdom of the arts, are coarse and vulgar. The unrighteous man, or the saver and doer of unholy things, had far better not yield to the illusion that his roguery is cleverness; for men glory in their shame—they fancy that they hear others saying of them, "these are not mere good-for-nothing persons, burdens of the earth, but such as men should be who mean to dwell safely in a state." Let us tell them that they are all the more truly what they do not know that they are; for they do not know the penalty of injustice, which above all things they ought to know-not stripes and death, as they suppose, which evildoers often escape, but a penalty which can not be escaped.

Theodorus. What is that?

Socrates. There are two patterns set before them in nature: the one, blessed and divine, the other godless and wretched; and they do not see, in their utter folly and infatuation, that they are growing like the one and unlike the other, by reason of their evil deeds; and the penalty is, that they lead a life answering to the pattern which they resemble. And if we tell them, that unless they depart from their cunning, the place of innocence will not receive them after death; and that here on earth, they will live ever in the likeness of their own evil selves, and with evil friends—when they hear this they in their superior cunning will seem to be listening to fools.

Theodorus. Very true, Socrates.

Socrates. Too true, my friend, as I well know; there is, however, one peculiarity in their case: when they begin to reason in private about their dislike of philosophy, if they have the courage to hear the argument out, and do not run away, they grow at last strangely discontented with themselves; their rhetoric fades away, and they seem to be no better than children. These, however, are digressions from which we must now desist, or they will overflow, and drown our original argument; to which, if you please, we will now return.

Theodorus. For my part, Socrates, I would rather have the digressions, for at my age I find them easier to follow; but if you wish, let us go back to the argument.

PHILEBUS

Protarchus. Considering, Socrates, how many we are, and that all of us are young men, is there not a danger that we and Philebus may conspire and attack you, if you speak evil of us? Yet we understand; and if there is any better way or manner of quietly escaping out of all this turmoil and perplexity, and arriving at the truth, we hope that you will guide us into that way, and we will do our best to follow, for the inquiry in which we are engaged, Socrates, is not a small one.

Socrates. Not a small one, my boys, as Philebus calls you, and there neither is nor ever will be a better than my own favorite way, which has nevertheless already often deserted me in the hour of need.

Protarchus. Tell us what that is.

Socrates. One which may be easily explained, but is by no means easy of application, and is the parent of all the discoveries of the art.

Protarchus. Say only what.

Socrates. A gift of heaven, which, as I conceive, the gods tossed into the world by the hands of some Prometheus, together with a blaze of fire; and the ancients, who were our betters and nearer the gods than we are, handed down the tradition, that all things which are supposed to exist draw their existence from the one and many, and have the finite and infinite in them as a part of their nature: seeing, then, that such is the order of the world, we too ought in all our investigations to assume that there is one idea of everything; this unity we shall be sure to find, and having found, we may next proceed to look for two, if there be two, or, if not, then for three or some other number, subdividing each of these units, until at last the original one is seen, not only as one and many and infinite, but also in some definite number; the infinite must not be suffered to approach the many until the entire number of the species intermediate

between unity and infinity has been found out,—then, and not till then, we may rest from division, and all the remaining individuals may be allowed to pass into infinity.

This, as I was saying, is the way of considering and learning and teaching one another, which the gods have handed down to us. But the wise men of our time are either too quick or too slow in conceiving plurality in unity. Having no method, they make their one and many anyhow, and from unity pass at once to infinity, without thinking of the intermediate steps. And this, I repeat, is what makes the difference between the mere art of disputation and true dialectic.

TIMAEUS

THERE is a corresponding inquiry concerning the modes in which the mind and the body are to be treated, and by what means they are preserved, on which I may and ought to enter; for it is more our duty to speak of the good than of the evil. Everything that is good is fair, and the fair is not without measure, and the animal who is fair may be supposed to have measure. Now we perceive lesser symmetries and comprehend them, but about the highest and greatest we have no understanding; for with a view to health and disease, and virtue and vice, there is no symmetry or want of symmetry greater than that of the soul to the body; and this we do not perceive, or ever reflect that when a weaker or lesser frame is the vehicle of a great and mighty soul, or conversely, when they are united in the opposite way, then the whole animal is not fair, for it is defective in the most important of all symmetries; but the fair mind in the fair body will be the fairest and loveliest of all sights to him who has the seeing eye. Just as a body which has a leg too long, or some other disproportion, is an unpleasant sight, and also, when undergoing toil, has many sufferings, and makes violent efforts, and often stumbles through awkwardness, and is the cause of infinite evil to its own self-in like manner we should conceive of the double nature which we call the living being; and when in this compound there is an impassioned soul more powerful than the body, that soul, I say, convulses and disorders the whole inner nature of man; and when too eager in the pursuit of knowledge, causes wasting; or again, when teaching or disputing in private or in public, and strifes and controversies arise, inflames and dissolves the composite frame of man and introduces rheums; and the nature of this is not understood by most professors of medicine, who ascribe the phenomenon to the opposite of the real cause. And once more, when a body large and too much for the soul is united to a small and weak intelligence, seeing that there are two desires natural to man,—one of food for the sake of the body, and

one of wisdom for the sake of the diviner part of us—then, I say, the motions of the stronger principle, getting the better and increasing their own power, but making the soul dull, and stupid, and forgetful, engender ignorance, which is the greatest of diseases.

There is one protection against both:—that we should not move the body without the soul or the soul without the body, and thus they will aid one another, and be healthy and well balanced. And therefore the mathematician or any one else who devotes himself to some intellectual pursuit must allow his body to have motion also, and practise gymnastic; and he who would train the limbs of the body, should impart to them the motions of the soul, and should practise music and all philosophy, if he would be called truly fair and truly good.

And in like manner should the parts be treated, and the principle of the whole similarly applied to them; for as the body is heated and also cooled within by the elements which enter in, and is again dried up and moistened by external things, and experiences these and the like affections from both kinds of motions, the result is that the body if given up to motion when in a state of quiescence is overmastered and destroyed; but if any one, in imitation of that which we call the foster-mother and nurse of the universe, will not allow the body to be at rest, but is always producing motions and shakings, which constantly react upon the natural motions both within and without, and by shaking moderately the affections and parts which wander about the body, brings them into order and affinity with one another according to the theory of the universe which we were maintaining, he will not allow enemy placed by the side of enemy to create wars and disorders in the body, but he will place friend by the side of friend, producing health.

Now of all motions that is the best which is produced in a thing by itself, for it is most akin to the motion of the intelligent and the motion of the universe; but that motion which is caused by others is not so good, and worst of all is that which moves the parts of the body, when prostrate and at rest, in parts only and by external means; wherefore also that is the best of the purifications and adjustments of the body which is effected by gymnastic; next is that which is effected by carrying the body, as in sailing or any other mode of conveyance which is not fatiguing; the third sort of motion may be of use in a case of extreme necessity, but in any other will be adopted by no man of sense: I mean the purgative treatment of physicians; for diseases which are not attended by great dangers should not be irritated by purgatives, for every form of disease is in a manner akin to the living being-for the combination out of which they were formed has an appointed term of life and of existence. And the whole race and every animal has his appointed natural time, apart from violent casualties: for the triangles are originally framed with power to live for a

certain time, beyond which no man can prolong his life. And this holds also of the nature of diseases, for if any one regardless of their appointed time would destroy nature by purgatives, he only increases and multiplies them. Wherefore we ought always to manage them by regimen, as far as a man can spare the time, and not provoke a disagreeable enemy by medical treatment.

Let this much be said of the general nature of man, and of the body which is a part of him, and of the manner in which a man may govern himself and be governed best, and live most according to reason: and we must begin by providing that the governing principle shall be the fairest and best possible for the purpose of government. But to discuss such a subject accurately would be a sufficiently long business of itself. As a mere supplement or sequel of what has preceded, it may be summed up as follows. As I have often said, that there are three kinds of soul located within us, each of them having their own proper motions—so I must now say in the fewest words possible, that the one part, if remaining inactive and ceasing from the natural motion, must necessarily become very weak, but when trained and exercised then very strong. Wherefore we should take care that the three parts of the soul are exercised in proportion to one another.

Concerning the highest part of the human soul, we should consider that God gave this as a genius to each one, which was to dwell at the extremity of the body, and to raise us like plants, not of an earthly but of a heavenly growth, from earth to our kindred which is in heaven. And this is most true; for the divine power suspended the head and root of us from that place where the generation of the soul first began, and thus made erect the whole body. He, therefore, who is always occupied with the cravings of desire and ambition, and is eagerly striving after them, must have all his opinions mortal, and, as far as man can be, must be all of him mortal, because he has cherished his mortal part. But he who has been earnest in the love of knowledge and true wisdom, and has been trained to think that these are the immortal and divine things of a man, if he attain truth, must of necessity, as far as human nature is capable of attaining immortality, be all immortal, as he is ever serving the divine power; and having the genius residing in him in the most perfect order, he must be pre-eminently happy.

Now there is only one way in which one being can serve another, and this is by giving him his proper nourishment and motion. And the motions which are akin to the divine principle within us are the thoughts and revolutions of the universe. These each man should follow, and correct those corrupted courses of the head which are concerned with generation, and by learning the harmonies and revolutions of the whole, should assimilate the perceiver to the thing perceived, according to his

original nature, and by thus assimilating them, attain that final perfection of life, which the gods set before mankind as best, both for the present and the future.

CRITIAS

THERE WERE many special laws which the several kings had inscribed about the temples, but the most important was the following:—That they were not to take up arms against one another, and they were all to come to the rescue if any one in any city attempted to overthrow the royal house; like their ancestors, they were to deliberate in common about war and other matters, giving the supremacy to the family of Atlas. And the king was not to have the power of life and death over any of his kinsmen unless he had the assent of the majority of the ten kings.

Such was the vast power which the god settled in the lost island of Atlantis; and this he afterwards directed against our land on the following pretext, as traditions tell: For many generations, as fong as the divine nature lasted in them, they were obedient to the laws, and well-affectioned towards the gods, who were their kinsmen; for they possessed true and in every way great spirits, practising gentleness and wisdom in the various chances of life, and in their intercourse with one another. They despised everything but virtue, not caring for their present state of life, and thinking lightly of the possession of gold and other property, which seemed only a burden to them; neither were they intoxicated by luxury; nor did wealth deprive them of their self-control; but they were sober, and saw clearly that all these goods are increased by virtuous friendship with one another, and that by excessive zeal for them, and honor of them, the good of them is lost and friendship perishes with them. By such reflections and by the continuance in them of a divine nature, all that which we have described waxed and increased in them; but when this divine portion began to fade away in them, and became diluted too often and with too much of the mortal admixture, and the human nature got the upper hand, then they, being unable to bear their fortune, became unseemly, and to him who had an eye to see, they began to appear base, and had lost the fairest of their precious gifts; but to those who had no eye to see the true happiness, they still appeared glorious and blessed at the very time when they were filled with unrighteous avarice and power. Zeus, the god of gods, who rules with law, and is able to see into such things, perceiving that an honorable race was in a most wretched state, and wanting to inflict punishment on them, that they might be chastened and improve, collected all the gods into his most holy habitation, which being placed in the centre of the world, sees all things that partake of generation.

NICOMACHEAN ETHICS

by ARISTOTLE

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ARISTOTLE

384-322 в.с.

ARISTOTLE, like Plato, was endowed with an intellect of incredible versatility. He made substantial contributions to almost every field of human thought, including politics, drama, poetry, physics, medicine, psychology, history, logic, astronomy, ethics, natural history, mathematics, rhetoric, biology, and the fine arts. In at least one of these fields—logic—his genius has never been surpassed.

The son of Nicomachus, court physician to Amyntas II, king of Macedon, Aristotle was born at Stagira, a small village on the Strymonic Gulf. His mother, Phaestis, was a descendant of one of the "Pilgrim Fathers" who migrated from Chalcis to establish the Greek colony at Stagira. This lineage gave Aristotle a position of great prestige both at court and in the community at large.

Nicomachus instructed his son in the art of healing and created in him an interest in medicine and biology. This interest grew into a love for the sciences in general. Later on, his experimentation in science led him to speculation in philosophy. From a dissecter of the human body he developed into a dissecter of the anatomy of the world.

When he was eighteen years old, he left his native Stagira for Athens, the center of Greek cultural and political life. Here he became acquainted with Plato and enrolled himself as a student in the Academy. He remained with the "Master" for about twenty years, quarreling with him and idolizing him and absorbing his philosophy and gradually building up a philosophy of his own.

Upon the death of Plato, Aristotle left Athens and spent several years traveling. In the course of his travels he met an old friend and classmate, Hermias, who was now king of a large territory in Asia Minor. The king gave Aristotle his daughter, Pythias, in marriage, together with a generous dowry. The philosopher could now build his theoretical castles in the air upon a practical foundation of gold.

In 343 Aristotle accepted an invitation from King Philip of Macedon to teach "sweetness and wisdom" to the savage young Prince Alexander, then a boy of thirteen. The relationship between the brilliant philosopher and the turbulent Alexander was more enlightening to the teacher than it was to the pupil. After three years of patient instruction, Aristotle learned that a young man intent upon aggression will never listen to reason. When King Philip died, Alexander plunged into his conquests and Aristotle returned to Athens.

Here he established his celebrated school at the Lyceum, a gymnasium near the temple of Apollo Lyceus. He delivered his lectures to his students informally—conversing with them as they strolled among the trees and flowers of the garden. This practice is believed to have given the name peripatetic to the followers of Aristotle's school. In addition to his teaching, Aristotle wrote on almost every subject, and collected a library that was one of the wonders of the world.

But neither his philosophy nor his library availed to save him from the danger of a violent death. At first it was Alexander who threatened to kill him. He had already killed another philosopher, Callisthenes, the nephew of Aristotle.

This danger to Aristotle's life was removed when Alexander died after a drunken debauch. But now a similar danger threatened Aristotle from another source. The Athenians, having been conquered by Alexander, accused his former teacher of being a spy. Mindful of the fate of Socrates, whom the Athenians had put to death, Aristotle decided to leave the city before it was too late.

He retired to Chalcis, the seat of his ancient ancestors, where he died in 322.

Aristotle's philosophy is, in this volume, represented by his Nicomachean Ethics—so named in honor of his son, Nicomachus the Younger. The book on Ethics, though complete in itself, is the first half of a longer treatise on "the philosophy of human affairs." The second half of this longer treatise is the Politics, a condensation of which is included in the volume of this series dealing with the subject of Government.

The question which Aristotle poses in the Ethics is: What is the highest good? His answer to the question is that the highest good is the life of reason. It is the purpose of man's conduct, maintains Aristotle, to establish upon the basis of reason a life of happiness for all mankind. And how is this happiness to be attained? Through the practice of the golden mean—that is, the middle course between the two extremes of ignoble conduct. The happy man, the virtuous man, is he who preserves this golden mean. He is the man who steers midway between the two shoals that threaten on either side to wreck human happiness. In every act, in every thought, in every emotion, a man may be overdoing his duty, or underdoing it, or doing it just right. For example, when a man shares his goods with other people, he may be extravagant. and thus overdo it, or stingy, and thus underdo it, or liberal. and so do it just right. In the regulation of his appetites, a man may be gluttonous, or abstemious, or moderate. In every case, the rational course of life is the middle course of life. and the rational man is the man who does nothing too much or too little, but who does everything in moderation. The virtuous man will be neither supernormal nor subnormal, but justly and reasonably normal. He will act "at the right times, with reference to the right objects, toward the right people, with the right motive and in the right way. . . . He will not expose himself needlessly to danger but will be ready in great crises to give his life if necessary. He will take joy in doing favors to other men, but he will feel shame in having favors done to him by other men. For it is a mark of superiority to confer a kindness, but of inferiority to receive it. . . . The virtuous man, the superior man, will be altruistic because he will be wise. . . . He will not speak evil of others, even of his enemies, unless it be to themselves. . . . He will never feel malice, and he will always forget injuries. . . . In short. he will be a good friend to others because he will be his own best friend."

This is the ideal man as pictured in the *Ethics* of Aristotle. His life of unselfish moderation is in reality a life of *enlightened* selfishness. For man is not an *individual* self, but a *social* self. Every good deed is a profitable investment. It is bound, sooner or later, to be returned with interest. The golden mean produces a trust fund of spiritual capital that will ultimately make for the enrichment of all mankind.

NICOMACHEAN ETHICS

Book One

EVERY ART, and every science reduced to a teachable form, and in like manner every action and moral choice, aims, it is thought, at some good: for which reason a common and by no means a bad description of the Chief Good is, "that which all things aim at."

Now there plainly is a difference in the Ends proposed: for in some cases they are acts of working, and in others certain works or tangible results beyond and beside the acts of working: and where there are certain Ends beyond and beside the actions, the works are in their nature better than the acts of working. Again, since actions and arts and sciences are many, the Ends likewise come to be many.

And whatever of such actions, arts, or sciences range under some one faculty, in all such, the Ends of the master-arts are more choiceworthy than those ranging under them, because it is with a view to the former that the latter are pursued.

Since then of all things which may be done there is some one End which we desire for its own sake, and with a view to which we desire everything else; and since we do not choose in all instances with a further End in view, this plainly must be the Chief Good, i.e., the best thing of all.

And now, resuming the statement with which we commenced, since all knowledge and moral choice grasps at good of some kind or another, what is the highest of all the goods which are the objects of action?

So far as name goes, there is a pretty general agreement: for HAPPINESS both the multitude and the refined few call it, and "living well" and "doing well" they conceive to be the same with "being happy;" but about the Nature of this Happiness, men dispute, and the multitude do not in their account of it agree with the wise.

Now of the Chief Good (i.e., of Happiness) men seem to form their notions from the different modes of life, as we might naturally expect: the many and most low conceive it to be pleasure, and hence they are content with the life of sensual enjoyment. For there are three lines of life which stand out prominently to view: that just mentioned, and the life in society, and, thirdly, the life of contemplation.

In the next place, since good is predicated in as many ways as there are modes of existence, it manifestly cannot be something common and universal and one in all: else it would not have been predicated in all the categories, but in one only.

And now let us revert to the Good of which we are in search: what can it be? for manifestly it is different in different actions and arts: for it is different in the healing art and in the art military, and similarly in the rest. What then is the Chief Good in each? Is it not "that for the sake of which the other things are done"? and this in the healing art is health, and in the art military victory, and in that of house-building a house, and in any other thing something else; in short, in every action and moral choice the End, because in all cases men do everything else with a view to this. So that if there is some one End of all things which are and may be done, this must be the Good proposed by doing, or if more than one, then these.

Now since the ends are plainly many, and of these we choose some with a view to others, it is clear that all are not final: but the Chief Good is manifestly something final; and so, if there is some one only which is final, this must be the object of our search: but if several, then the most final of them will be it.

Now that which is an object of pursuit in itself we call more final than that which is so with a view to something else; that again which is never an object of choice with a view to something else than those which are so both in themselves and with a view to this ulterior object: and so by the term "absolutely final" we denote that which is an object of choice always in itself, and never with a view to any other.

And of this nature Happiness is mostly thought to be, for this we choose always for its own sake, and never with a view to anything further: whereas honour, pleasure, intellect, in fact every excellence we choose for their own sakes, it is true, but we choose them also with a view to happiness, conceiving that through their instrumentality we shall be happy: but no man chooses happiness with a view to them, nor in fact with a view to any other thing whatsoever.

So then Happiness is manifestly something final and self-sufficient, being the end of all things which are and may be done.

But, it may be, to call Happiness the Chief Good is a mere truism, and what is wanted is some clearer account of its real nature. Now this object may be easily attained, when we have discovered what is the work of man; for as in the case of flute-player, statuary, or artisan of any kind, or, more generally, all who have any work or course of action, their Chief Good and Excellence is thought to reside in their work, so it would seem to be with man, if there is any work belonging to him.

Now there is a common division of goods into three classes; one

being called external, the other two those of the soul and body respectively, and those belonging to the soul we call most properly and specially good. Well, in our definition we assume that the actions and workings of the soul constitute Happiness, and these of course belong to the soul. And so our account is a good one, at least according to this opinion, which is of ancient date, and accepted by those who profess philosophy. Rightly too are certain actions and workings said to be the end, for thus it is brought into the number of the goods of the soul instead of the external. Agreeing also with our definition is the common notion that the happy man lives well and does well, for it has been stated by us to be pretty much a kind of living well and doing well.

But further, the points required in Happiness are found in combination in our account of it.

For some think it is virtue, others practical wisdom, others a kind of scientific philosophy; others that it is these, or else some one of them, in combination with pleasure, or at least not independently of it; while others again take in external prosperity.

Still it is quite plain that it does require the addition of external goods, as we have said: because without appliances it is impossible, or at all events not easy, to do noble actions: for friends, money, and political influence are in a manner instruments whereby many things are done. He is not at all capable of Happiness who is very ugly, or is ill-born, or solitary and childless; and still less perhaps supposing him to have very bad children or friends, or to have lost good ones by death. As we have said already, the addition of prosperity of this kind does seem necessary to complete the idea of Happiness; hence some rank good fortune, and others virtue, with Happiness.

And hence too a question is raised, whether it is a thing that can be learned, or acquired by habituation or discipline of some other kind, or whether it comes in the way of divine dispensation, or even in the way of chance.

Now to be sure, if anything else is a gift of the gods to men, it is probable that Happiness is a gift of theirs too, and specially because of all human goods it is the highest. But this, it may be, is a question belonging more properly to an investigation different from ours: and it is quite clear that on the supposition of its not being sent from the gods direct, but coming to us by reason of virtue and learning of a certain kind, or discipline, it is yet one of the most godlike things; because the prize and End of virtue is manifestly somewhat most excellent, nay divine and blessed.

It will also on this supposition be widely participated, for it may through learning and diligence of a certain kind exist in all who have not been maimed for virtue. And if it is better we should be happy thus than as a result of chance, this is in itself an argument that the case is so; because those things which are in the way of nature, and in like manner of art, and of every cause, and specially the best cause, are by nature in the best way possible: to leave then to chance what is greatest and most noble would be very much out of harmony with all these facts.

Having determined these points, let us examine, with respect to Happiness, whether it belongs to the class of things praiseworthy or things precious; for to that of faculties it evidently does not.

Now it is plain that everything which is a subject of praise is praised for being of a certain kind and bearing a certain relation to something else: for instance, the just, and the valiant, and generally the good man, and virtue itself, we praise because of the actions and the results: and the strong man, and the quick runner, and so forth, we praise for being of a certain nature and bearing a certain relation to something good and excellent. Now if it is to such objects that praise belongs, it is evident that what is applicable to the best objects is not praise, but something higher and better: which is plain matter of fact, for not only do we call the gods blessed and happy, but of men also we pronounce those blessed who most nearly resemble the gods. And in like manner in respect of goods; no man thinks of praising Happiness as he does the principle of justice, but calls it blessed, as being somewhat more godlike and more excellent.

Moreover, since Happiness is a kind of working of the soul in the way of perfect Excellence, we must inquire concerning Excellence: for so probably shall we have a clearer view concerning Happiness; and again, he who is really a statesman is generally thought to have spent most pains on this, for he wishes to make the citizens good and obedient to the laws.

Well, we are to inquire concerning Excellence, i.e., Human Excellence of course, because it was the Chief Good of Man and the Happiness of Man that we were inquiring of just now.

By Human Excellence we mean not that of man's body but that of his soul; for we call Happiness a working of the Soul.

Now the Excellence of this manifestly is not peculiar to the human species but common to others: for this part and this faculty is thought to work most in time of sleep, and the good and bad man are least distinguishable while asleep; whence it is a common saying that during one half of life there is no difference between the happy and the wretched; and this accords with our anticipations, for sleep is an inactivity of the soul, in so far as it is denominated good or bad, except that in some wise some of its movements find their way through the veil and so the good come to have better dreams than ordinary men. But enough of this: we must forego any further mention of the nutritive part, since it is not naturally capable of the Excellence which is peculiarly human.

And there seems to be another Irrational Nature of the Soul, which yet in a way partakes of Reason. For in the man who controls his appetites, and in him who resolves to do so and fails, we praise the Reason or Rational part of the Soul, because it exhorts aright and to the best course: but clearly there is in them, beside the Reason, some other natural principle which fights with and strains against the Reason.

But of Reason this too does evidently partake, as we have said: for instance, in the man of self-control it obeys Reason: and perhaps in the man of perfected self-mastery, or the brave man, it is yet more obedient; in them it agrees entirely with the Reason.

So then the Irrational is plainly twofold: the one part, the merely vegetative, has no share of Reason, but that of desire, or appetition generally, does partake of it in a sense, in so far as it is obedient to it and capable of submitting to its rule.

Now that the Irrational is in some way persuaded by the Reason, admonition, and every act of rebuke and exhortation indicate. If then we are to say that this also has Reason, then the Rational, as well as the Irrational, will be twofold, the one supremely and in itself, the other paying it a kind of filial regard.

The Excellence of Man then is divided in accordance with this difference: we make two classes, calling the one Intellectual, and the other Moral; pure science, intelligence, and practical wisdom—Intellectual: liberality, and perfected self-mastery—Moral: in speaking of a man's Moral character, we do not say he is a scientific or intelligent but a meek man, or one of perfected self-mastery: and we praise the man of science in right of his mental state; and of these such as are praiseworthy we call Excellences.

Book Two

Well: human Excellence is of two kinds, intellectual and Moral: now the Intellectual springs originally, and is increased subsequently, from teaching, and needs therefore experience and time; whereas the Moral comes from custom, and so the Greek term denoting it is but a slight deflection from the term denoting custom in that language.

From this fact it is plain that not one of the Moral Virtues comes to be in us merely by nature: because of such things as exist by nature, none can be changed by custom: a stone, for instance, by nature gravitating downwards, could never by custom be brought to ascend, not even if one were to try and accustom it by throwing it up ten thousand times; nor could fire again be brought to descend, nor in fact could anything whose nature is in one way be brought by custom to be in another. The

Virtues then come to be in us neither by nature, nor in despite of nature, but we are furnished by nature with a capacity for receiving them, and are perfected in them through custom.

Again, in whatever cases we get things by nature, we get the faculties first and perform the acts of working afterwards; an illustration of which is afforded by the case of our bodily senses, for it was not from having often seen or heard that we got these senses, but just the reverse: we had them and so exercised them, but did not have them because we had exercised them.

Again, every Virtue is either produced or destroyed from and by the very same circumstances. So too then is it with the Virtues: for by acting in the various relations in which we are thrown with our fellow men, we come to be, some just, some unjust: and by acting in dangerous positions and being habituated to feel fear or confidence, we come to be, some brave, others cowards.

Similarly is it also with respect to the occasions of lust and anger: for some men come to be perfected in self-mastery and mild, others destitute of all self-control and passionate; the one class by behaving in one way under them, the other by behaving in another. Or, in one word, the habits are produced from the acts of working like to them: and so what we have to do is to give a certain character to these particular acts, because the habits formed correspond to the differences of these.

So then, whether we are accustomed this way or that straight from childhood, makes not a small but an important difference, or rather I would say it makes all the difference.

Now, that we are to act in accordance with Right Reason is a general maxim, and may for the present be taken for granted: we will speak of it hereafter, and say both what Right Reason is, and what are its relations to the other virtues.

But let this point be first thoroughly understood between us, that all which can be said on moral action must be said in outline, as it were, and not exactly: for as we remarked at the commencement, such reasoning only must be required as the nature of the subject-matter admits of, and matters of moral action and expediency have no fixedness any more than matters of health. And if the subject in its general maxims is such, still less in its application to particular cases is exactness attainable: because these fall not under any art or system of rules, but it must be left in each instance to the individual agents to look to the exigencies of the particular case, as it is in the art of healing, or that of navigating a ship. Still, though the present subject is confessedly such, we must try and do what we can for it.

First then this must be noted, that it is the nature of such things to be spoiled by defect and excess; as we see in the case of health and

strength, for excessive training impairs the strength as well as deficient: meat and drink, in like manner, in too great or too small quantities, impair the health: while in due proportion they cause, increase, and preserve it.

Thus it is therefore with the habits of perfected Self-Mastery and Courage and the rest of the Virtues: for the man who flies from and fears all things, and never stands up against anything, comes to be a coward; and he who fears nothing, but goes at everything, comes to be rash. In like manner too, he that tastes of every pleasure and abstains from none comes to lose all self-control; while he who avoids all, as do the dull and clownish, comes as it were to lose his faculties of perception: that is to say, the habits of perfected Self-Mastery and Courage are spoiled by the excess and defect, but by the mean state are preserved.

And for a test of the formation of the habits we must take the pleasure or pain which succeeds the acts; for he is perfected in Self-Mastery who not only abstains from the bodily pleasures but is glad to do so; whereas he who abstains but is sorry to do it has not Self-Mastery: he again is brave who stands up against danger, either with positive pleasure or at least without any pain; whereas he who does it with pain is not brave.

For Moral Virtue has for its object-matter pleasures and pains, because by reason of pleasure we do what is bad, and by reason of pain decline doing what is right. Again: since Virtues have to do with actions and feelings, and on every feeling and every action pleasure and pain follow, here again is another proof that Virtue has for its object-matter pleasure and pain. Virtue then is assumed to be that habit which is such, in relation to pleasures and pains, as to effect the best results, and Vice the contrary.

The following considerations may also serve to set this in a clear light. There are principally three things moving us to choice and three to avoidance, the honourable, the expedient, the pleasant; and their three contraries, the dishonourable, the hurtful, and the painful: now the good man is apt to go right, and the bad man wrong, with respect to all these of course, but most specially with respect to pleasure: because not only is this common to him with all animals but also it is a concomitant of all those things which move to choice, since both the honourable and the expedient give an impression of pleasure.

Let us then be understood to have stated that Virtue has for its object-matter pleasures and pains, and that it is either increased or marred by the same circumstances by which it is originally generated, and that it exerts itself on the same circumstances out of which it was generated.

Next, we must examine what Virtue is. Well, since the things which come to be in the mind are, in all, of three kinds, Feelings, Capacities, States, Virtue of course must belong to one of the three classes.

Now Feelings neither the virtues nor vices are, because in right of the Feelings we are not denominated either good or bad, but in right of the virtues and vices we are.

Again, in right of the Feelings we are neither praised nor blamed. And for these same reasons they are not Capacities, for we are not called good or bad merely because we are able to feel, nor are we praised or blamed.

Since then the virtues are neither Feelings nor Capacities, it remains that they must be States.

Now what the genus of Virtue is has been said; but we must not merely speak of it thus, that it is a state, but say also what kind of a state it is.

Virtue then is "a state apt to exercise deliberate choice, being in the relative mean, determined by reason, and as the man of practical wisdom would determine." It is a middle state between two faulty ones, in the way of excess on one side and of defect on the other: and it is so moreover, because the faulty states on one side fall short of, and those on the other exceed, what is right, both in the case of the feelings and the actions; but Virtue finds, and when found adopts, the mean.

And so, viewing it in respect of its essence and definition, Virtue is a mean state; but in reference to the chief good and to excellence it is the highest state possible.

Now that Moral Virtue is a mean state, and how it is so, and that it lies between two faulty states, one in the way of excess and another in the way of defect, and that it is so because it has an aptitude to aim at the mean both in feelings and actions, all this has been set forth fully and sufficiently.

And so it is hard to be good: for surely hard it is in each instance to find the mean, just as to find the mean point or centre of a circle is not what any man can do, but only he who knows how: just so to be angry, to give money, and be expensive, is what any man can do, and easy: but to do these to the right person, in due proportion, at the right time, with a right object, and in the right manner, this is not as before what any man can do, nor is it easy; and for this cause goodness is rare, and praiseworthy, and noble.

Book Three

Now since Virtue is concerned with the regulation of feelings and actions, and praise and blame arise upon such as are voluntary, while for the involuntary allowance is made, and sometimes compassion is excited, it

is perhaps a necessary task for those who are investigating the nature of Virtue to draw out the distinction between what is voluntary and what involuntary; and it is certainly useful for legislators, with respect to the assigning of honours and punishments.

Involuntary actions then are thought to be of two kinds, being done either on compulsion, or by reason of ignorance.

An action is, properly speaking, compulsory, when the origination is external to the agent, being such that in it the agent contributes nothing; as if a wind were to convey you anywhere, or men having power over your person.

But when actions are done, either from fear of greater evils, or from some honourable motive, as, for instance, if you were ordered to commit some base act by a despot who had your parents or children in his power, and they were to be saved upon your compliance or die upon your refusal, in such cases there is room for a question whether the actions are voluntary or involuntary.

The truth is, such actions are of a mixed kind, but are most like voluntary actions; for they are choiceworthy at the time when they are being done, and the end or object of the action must be taken with reference to the actual occasion. Further, we must denominate an action voluntary or involuntary at the time of doing it: now in the given case the man acts voluntarily, because the originating of the motion of his limbs in such actions rests with himself; and where the origination is in himself it rests with himself to do or not to do.

Such actions then are voluntary, though in the abstract perhaps in-voluntary because no one would choose any of such things in and by itself.

What kind of actions then are to be called compulsory? may we say, simply and abstractedly whenever the cause is external and the agent contributes nothing; and that where the acts are in themselves such as one would not wish but choiceworthy at the present time and in preference to such and such things, and where the origination rests with the agent, the actions are in themselves involuntary but at the given time and in preference to such and such things voluntary; and they are more like voluntary than involuntary, because the actions consist of little details, and these are voluntary.

So then that seems to be compulsory "whose origination is from without, the party compelled contributing nothing."

Now every action of which ignorance is the cause is not involuntary, but that only is involuntary which is attended with pain and remorse; for clearly the man who has done anything by reason of ignorance, but is not annoyed at his own action, cannot be said to have done it with his will because he did not know he was doing it, nor again against his will because he is not sorry for it.

Now since all involuntary action is either upon compulsion or by reason of ignorance, Voluntary Action would seem to be "that whose origination is in the agent, he being aware of the particular details in which the action consists."

Having thus drawn out the distinction between voluntary and involuntary action our next step is to examine into the nature of Moral Choice, because this seems most intimately connected with Virtue and to be a more decisive test of moral character than a man's acts are.

Now Moral Choice is plainly voluntary, but the two are not coextensive, voluntary being the more comprehensive term; for first, children and all other animals share in voluntary action but not in Moral Choice; and next, sudden actions we call voluntary but do not ascribe them to Moral Choice.

May we not say, then, it is "that voluntary which has passed through a stage of previous deliberation"? because Moral Choice is attended with reasoning and intellectual process. The etymology of its Greek name seems to give a hint of it, being when analysed "chosen in preference to somewhat else."

Wish has for its object-matter the End, but there are two opinions respecting it; some thinking that its object is real good, others whatever impresses the mind with a notion of good.

Now those who maintain that the object of Wish is real good are beset by this difficulty, that what is wished for by him who chooses wrongly is not really an object of Wish. Those who maintain, on the contrary, that that which impresses the mind with a notion of good is properly the object of Wish, have to meet this difficulty, that there is nothing naturally an object of Wish but to each individual whatever seems good to him; now different people have different notions, and it may chance contrary ones.

Now since the End is the object of Wish, and the means to the End of Deliberation and Moral Choice, the actions regarding these matters must be in the way of Moral Choice, i.e., voluntary: but the acts of working out the virtues are such actions, and therefore Virtue is in our power.

And so too is Vice: because wherever it is in our power to do it is also in our power to forbear doing, and vice versa: therefore if the doing is in our power, so too is the forbearing, and vice versa.

But if it is in our power to do and to forbear doing what is creditable or the contrary, and these respectively constitute the being good or bad, then the being good or vicious characters is in our power.

If then, as is commonly said, the Virtues are voluntary, the Vices must be voluntary also, because the cases are exactly similar.

Well now, we have stated generally respecting the Moral Virtues, the genus, that they are mean states, and that they are habits, and how

they are formed, and that they are of themselves calculated to act upon the circumstances out of which they were formed, and that they are in our own power and voluntary, and are to be done so as right Reason may direct.

First, then, of Courage. Now that it is a mean state, in respect of fear and boldness, has been already said: further, the objects of our fears are obviously things fearful or, in a general way of statement, evils; which accounts for the common definition of fear, viz. "expectation of evil."

Of course we fear evils of all kinds: disgrace, for instance, poverty, disease, desolateness, death; but not all these seem to be the object-matter of the Brave man, because there are things which to fear is right and noble, and not to fear is base; disgrace, for example, since he who fears this is a good man and has a sense of honour, and he who does not fear it is shameless. But poverty, perhaps, or disease, and in fact whatever does not proceed from viciousness, nor is attributable to his own fault, a man ought not to fear: still, being fearless in respect of these would not constitute a man Brave in the proper sense of the term.

And, again, a man is not a coward for fearing insult to his wife or children, or envy, or any such thing; nor is he a *Brave man for being bold when going to be scourged.

What kind of fearful things then do constitute the object-matter of the Brave man? first of all, must they not be the greatest, since no man is more apt to withstand what is dreadful? Now the object of the greatest dread is death, because it is the end of all things, and the dead man is thought to be capable neither of good nor evil. Still it would seem that the Brave man has not for his object-matter even death in every circumstance; on the sea, for example, or in sickness: in what circumstances then? must it not be in the most honourable? now such is death in war, because it is death in the greatest and most honourable danger; and this is confirmed by the honours awarded in communities, and by monarchs.

He then may be most properly denominated Brave who is fearless in respect of honourable death and such sudden emergencies as threaten death; now such specially are those which arise in the course of war.

Again, fearful is a term of relation, the same thing not being so to all, and there is according to common parlance somewhat so fearful as to be beyond human endurance: this of course would be fearful to every man of sense, but those objects which are level to the capacity of man differ in magnitude and admit of degrees, so too the objects of confidence or boldness.

Now the Brave man cannot be frighted from his propriety. Fear such things indeed he will, but he will stand up against them as he ought and as right reason may direct, with a view to what is honourable, because this is the end of the virtue.

Now it is possible to fear these things too much, or too little, or again to fear what is not really fearful as if it were such. So the errors come to be either that a man fears when he ought not to fear at all, or that he fears in an improper way, or at a wrong time, and so forth; and so too in respect of things inspiring confidence. He is Brave then who withstands, and fears, and is bold, in respect of right objects, from a right motive, in right manner, and at right times: since the Brave man suffers or acts as he ought and as right reason may direct.

Now the end of every separate act of working is that which accords with the habit, and so to the Brave man Courage; which is honourable; therefore such is also the End, since the character of each is determined by the End.

So honour is the motive from which the Brave man withstands things fearful and performs the acts which accord with Courage.

It must be remarked, however, that though Courage has for its object-matter boldness and fear it has not both equally so, but objects of fear much more than the former; for he that under pressure of these is undisturbed and stands related to them as he ought is better entitled to the name of Brave than he who is properly affected towards objects of confidence. So then men are termed Brave for withstanding painful things.

It follows that Courage involves pain and is justly praised, since it is a harder matter to withstand things that are painful than to abstain from such as are pleasant.

It must not be thought but that the End and object of Courage is pleasant, but it is obscured by the surrounding circumstances: which happens also in the gymnastic games; to the boxers the End is pleasant with a view to which they act, I mean the crown and the honours; but the receiving the blows they do is painful and annoying to flesh and blood, and so is all the labour they have to undergo; and, as these drawbacks are many, the object in view being small appears to have no pleasantness in it.

Next let us speak of Perfected Self-Mastery, which seems to claim the next place to Courage, since these two are the Excellences of the Irrational part of the Soul. It is a mean state, having for its object-matter Pleasures. The state of utter absence of self-control has plainly the same object-matter; the next thing then is to determine what kind of Pleasures.

Let Pleasures then be understood to be divided into mental and bodily: instances of the former being love of honour or of learning: it being plain that each man takes pleasure in that of these two objects which he has a tendency to like, his body being no way affected but rather his intellect. Now men are not called perfectly self-mastering or wholly destitute of self-control in respect of pleasures of this class: nor

in fact in respect of any which are not bodily; those for example who love to tell long stories, and are prosy, and spend their days about mere chance matters, we call gossips but not wholly destitute of self-control, nor again those who are pained at the loss of money or friends.

It is bodily Pleasures then which are the object-matter of Perfected Self-Mastery, but not even all these indifferently: I mean, that they who take pleasure in objects perceived by the Sight, as colours, and forms, and painting, are not denominated men of Perfected Self-Mastery, or wholly destitute of self-control; and yet it would seem that one may take pleasure even in such objects, as one ought to do, or excessively, or too little.

Book Four

WE WILL next speak of Liberality. Now this is thought to be the mean state, having for its object-matter Wealth: I mean, the Liberal man is praised not in the circumstances of war, nor in those which constitute the character of perfected self-mastery, nor again in judicial decisions, but in respect of giving and receiving Wealth, chiefly the former. By the term Wealth I mean "all those things whose worth is measured by money."

Now the states of excess and defect in regard of Wealth are respectively Prodigality and Stinginess: the latter of these terms we attach invariably to those who are over-careful about Wealth, but the former we apply sometimes with a complex notion; that is to say, we give the name to those who fail of self-control and spend money on the unrestrained gratification of their passions; and this is why they are thought to be most base, because they have many vices at once.

Now Liberality is a term of relation to a man's means, for the Liberalness depends not on the amount of what is given but on the moral state of the giver which gives in proportion to his means. There is then no reason why he should not be the more Liberal man who gives the less amount, if he has less to give out of.

Again, they are thought to be more Liberal who have inherited, not acquired for themselves, their means; because, in the first place, they have never experienced want, and next, all people love most their own works, just as parents do and poets.

Next in order would seem to come a dissertation on Magnificence, this being thought to be, like liberality, a virtue having for its object-matter Wealth; but it does not, like that, extend to all transactions in respect of Wealth, but only applies to such as are expensive, and in these circumstances it exceeds liberality in respect of magnitude, because it is fitting expense on a large scale: this term is of course relative: I mean,

the expenditure of equipping and commanding a trireme is not the same as that of giving a public spectacle: "fitting" of course also is relative to the individual, and the matter wherein and upon which he has to spend. And a man is not denominated Magnificent for spending as he should do in small or ordinary things, as, for instance,

"Oft to the wandering beggar did I give,"

but for doing so in great matters: that is to say, the Magnificent man is liberal, but the liberal is not thereby Magnificent. The falling short of such a state is called Meanness, the exceeding it Vulgar Profusion, Want of Taste, and so on; which are faulty, not because they are on an excessive scale in respect of right objects, but because they show off in improper objects, and in improper manner: of these we will speak presently. The Magnificent man is like a man of skill, because he can see what is fitting, and can spend largely in good taste; for, as we said at the commencement, the confirmed habit is determined by the separate acts of working, and by its object-matter.

So the Magnificent man must be also a liberal man, because the liberal man will also spend what he ought, and in right manner: but it is the Great, that is to say the large, scale which is distinctive of the Magnificent man, the object-matter of liberality being the same, and without spending more money than another man he will make the work more magnificent. I mean, the excellence of a possession and of a work is not the same: as a piece of property that thing is most valuable which is worth most, gold for instance; but as a work that which is great and beautiful, because the contemplation of such an object is admirable, and so is that which is Magnificent. So the excellence of a work is Magnificence on a large scale.

The man who is in the state of excess, called one of Vulgar Profusion, is in excess because he spends improperly. I mean in cases requiring small expenditure he lavishes much and shows off out of taste; giving his club a feast fit for a wedding-party, or if he has to furnish a chorus for a comedy, giving the actors purple to wear in the first scene, as did the Megarians. And all such things he will do, not with a view to that which is really honourable, but to display his wealth, and because he thinks he shall be admired for these things; and he will spend little where he ought to spend much, and much where he should spend little.

The Mean man will be deficient in every case, and even where he has spent the most he will spoil the whole effect for want of some trifle; he is procrastinating in all he does, and contrives how he may spend the least, and does even that with lamentations about the expense, and thinking that he does all things on a greater scale than he ought.

The very name of Great-mindedness implies that great things are

its object-matter; and we will first settle what kind of things. It makes no difference, of course, whether we regard the moral state in the abstract or as exemplified in an individual.

Well then, he is thought to be Great-minded who values himself highly and at the same time justly, because he that does so without grounds is foolish, and no virtuous character is foolish or senseless. Well, the character I have described is Great-minded. The man who estimates himself lowly, and at the same time justly, is modest; but not Great-minded, since this latter quality implies greatness, just as beauty implies a large bodily conformation while small people are neat and well made but not beautiful.

The Small-minded man is deficient, both as regards himself and also as regards the estimation of the Great-minded: while the Vain man is in excess as regards himself, but does not get beyond the Great-minded man. Now the Great-minded man, being by the hypothesis worthy of the greatest things, must be of the highest excellence, since the better a man is the more is he worth, and he who is best is worth the most: it follows, then, that to be truly Great-minded a man must be good, and whatever is great in each virtue would seem to belong to the Great-minded. It would no way correspond with the character of the Great-minded to flee, spreading his hands all abroad; nor to injure any one; for with what object in view will he do what is base, in whose eyes nothing is great? in short, if one were to go into particulars, the Great-minded man would show quite ludicrously unless he were a good man: he would not be in fact deserving of honour if he were a bad man, honour being the prize of virtue and given to the good.

This virtue, then, of Great-mindedness seems to be a kind of ornament of all the other virtues, in that it makes them better and cannot be without them; and for this reason it is a hard matter to be really and truly Great-minded; for it cannot be without thorough goodness and nobleness of character.

The virtue of Great-mindedness has for its object great Honour, and there seems to be a virtue having Honour also for its object, which may seem to bear to Great-mindedness the same relation that Liberality does to Magnificence: that is, both these virtues stand aloof from what is great but dispose us as we ought to be disposed towards moderate and small matters. Further: as in giving and receiving of wealth there is a mean state, an excess, and a defect, so likewise in grasping after Honour there is the more or less than is right, and also the doing so from right sources and in right manner.

Book Five

Now the points for our inquiry in respect of Justice and Injustice are, what kind of actions are their object-matter, and what kind of a mean state Justice is, and between what points the abstract principle of it, i.e., the Just, is a mean. And our inquiry shall be, if you please, conducted in the same method as we have observed in the foregoing parts of this treatise.

We see then that all men mean by the term Justice a moral state such that in consequence of it men have the capacity of doing what is just, and actually do it, and wish it: similarly also with respect to Injustice, a moral state such that in consequence of it men do unjustly and wish what is unjust: let us also be content then with these as a groundwork sketched out.

But the object of our inquiry is Justice, in the sense in which it is a part of Virtue, and likewise with respect to particular Injustice. And of the existence of this last the following consideration is a proof: there are many vices by practising which a man acts unjustly, of course, but does not grasp at more than his share of good; if, for instance, by reason of cowardice he throws away his shield, or by reason of ill-temper he uses abusive language, or by reason of stinginess does not give a friend pecuniary assistance; but whenever he does a grasping action, it is often in the way of none of these vices, certainly not in all of them, still in the way of some vice or other, and in the way of Injustice. There is then some kind of Injustice distinct from that co-extensive with Vice and related to it as a part to a whole, and some "Unjust" related to that which is co-extensive with violation of the law as a part to a whole.

The Unjust has been divided into the unlawful and the unequal, and the Just accordingly into the lawful and the equal: the aforementioned Injustice is in the way of the unlawful. And as the unequal and the more are not the same, but differing as part to whole, so the Unjust and the Injustice we are now in search of are not the same with, but other than, those before mentioned, the one being the parts, the other the wholes; for this particular Injustice is a part of the Injustice co-extensive with Vice, and likewise this Justice of the Justice co-extensive with Virtue. So that what we have now to speak of is the particular Justice and Injustice, and likewise the particular Just and Unjust.

Here then let us dismiss any further consideration of the Justice ranking as co-extensive with Virtue. It is clear, too, that we must separate off the Just and the Unjust involved in these: because one may pretty well say that most lawful things are those which naturally result in action from Virtue in its fullest sense, because the law enjoins the living in accordance with each Virtue and forbids living in accordance with each Vice. And the producing causes of Virtue in all its bearings are those enactments which have been made respecting education for society.

The unjust man is unequal, and the abstract "Unjust" unequal: further, it is plain that there is some mean of the unequal, that is to say, the equal or exact half. If then the Unjust is unequal the Just is equal, which all must allow without further proof: and as the equal is a mean the Just must be also a mean. Now the equal implies two terms at least: it follows then that the Just is both a mean and equal, and these to certain persons; and, in so far as it is a mean, between certain things, and, so far as it is equal, between two, and in so far as it is just it is so to certain persons. The Just then must imply four terms at least, for those to which it is just are two, and the terms representing the things are two.

And there will be the same equality between the terms representing the persons, as between those representing the things: because as the latter are to one another so are the former: for if the persons are not equal they must not have equal shares; in fact this is the very source of all the quarrelling and wrangling in the world, when either they who are equal have and get awarded to them things not equal, or being not equal those things which are equal. Again, the necessity of this equality of ratios is shown by the common phrase "according to rate," for all agree that the Just in distributions ought to be according to some rate: but what that rate is to be, all do not agree; the democrats are for freedom, oligarchs for wealth, others for nobleness of birth, and the aristocratic party for virtue.

This then is the one species of the Just.

And the remaining one is the Corrective, which arises in voluntary as well as involuntary transactions. Now this Just has a different form from the aforementioned; for that which is concerned in distribution of common property is always according to the aforementioned proportion: I mean that, if the division is made out of common property, the shares will bear the same proportion to one another as the original contributions did: and the Unjust which is opposite to this Just is that which violates the proportionate.

And so the equal is a mean between the more and the less, which represent gain and loss in contrary ways: between which the equal was stated to be a mean, which equal we say is Just: and so the Corrective Just must be the mean between loss and gain. And this is the reason why, upon a dispute arising, men have recourse to the judge: going to the judge is in fact going to the Just, for the judge is meant to be the personification of the Just. And men seek a judge as one in the mean,

which is expressed in a name given by some to judges under the notion that if they can hit on the mean they shall hit on the Just. The Just is then surely a mean, since the judge is also.

So it is the office of a judge to make things equal, and the line, as it were, having been unequally divided, he takes from the greater part that by which it exceeds the half, and adds this on to the less. And when the whole is divided into two exactly equal portions, then men say they have their own, when they have gotten the equal; and the equal is a mean between the greater and the less according to arithmetical equality.

Again, since a man may do unjust acts and not yet have formed a character of injustice, the question arises whether a man is unjust in each particular form of injustice, say a thief, or adulterer, or robber, by doing acts of a given character.

We may say, I think, that this will not of itself make any difference; a man may, for instance, have had connection with another's wife, knowing well with whom he was sinning, but he may have done it not of deliberate choice but from the impulse of passion: of course he acts unjustly, but he has not necessarily formed an unjust character: that is, he may have stolen yet not be a thief; or committed an act of adultery but still not be an adulterer, and so on in other cases which might be enumerated.

For the present we proceed to say that, the Justs and the Unjusts being what have been mentioned, a man is said to act unjustly or justly when he embodies these abstracts in voluntary actions, but when in involuntary, then he neither acts unjustly or justly except accidentally; I mean that the being just or unjust is really only accidental to the agents in such cases.

So both unjust and just actions are limited by the being voluntary or the contrary: for when an embodying of the Unjust is voluntary, then it is blamed and is at the same time also an unjust action: but, if voluntariness does not attach, there will be a thing which is in itself unjust but not yet an unjust action.

Now a question may be raised whether we have spoken with sufficient distinctness as to being unjustly dealt with, and dealing unjustly towards others.

First, whether the case is possible which Euripides has put, saying somewhat strangely,

"My mother he hath slain; the tale is short, Either he willingly did slay her willing, Or else with her will but against his own."

I mean then, is it really possible for a person to be unjustly dealt with with his own consent, or must every case of being unjustly dealt with be

against the will of the sufferer as every act of unjust dealing is voluntary?

And next, are cases of being unjustly dealt with to be ruled all one way as every act of unjust dealing is voluntary, or may we say that some cases are voluntary and some involuntary?

Similarly also as regards being justly dealt with: all just acting is voluntary, so that it is fair to suppose that the being dealt with unjustly or justly must be similarly opposed, as to being either voluntary or involuntary.

Now as for being justly dealt with, the position that every case of this is voluntary is a strange one, for some are certainly justly dealt with without their will. The fact is a man may also fairly raise this question, whether in every case he who has suffered what is unjust is therefore unjustly dealt with, or rather that the case is the same with suffering as it is with acting; namely, that in both it is possible to participate in what is just, but only accidentally. Clearly the case of what is unjust is similar: for doing things in themselves unjust is not identical with acting unjustly, nor is suffering them the same as being unjustly dealt with. So too of acting justly and being justly dealt with, since it is impossible to be unjustly dealt with unless some one else acts unjustly or to be justly dealt with unless some one clse acts justly.

Now if acting unjustly is simply "hurting another voluntarily" and the man who fails of self-control voluntarily hurts himself, then this will be a case of being voluntarily dealt unjustly with, and it will be possible for a man to deal unjustly with himself. Or again, a man may, by reason of failing of self-control, receive hurt from another man acting voluntarily, and so here will be another case of being unjustly dealt with voluntarily.

The solution, I take it, is this: the definition of being unjustly dealt with is not correct, but we must add, to the hurting with the knowledge of the person hurt and the instrument and the manner of hurting him, the fact of its being against the wish of the man who is hurt.

With respect to being unjustly dealt with, then, it is clear that it is not voluntary.

We have next to speak of Equity and the Equitable, that is to say, of the relations of Equity to Justice and the Equitable to the Just; for when we look into the matter the two do not appear identical nor yet different in kind; and we sometimes commend the Equitable and the man who embodies it in his actions, so that by way of praise we commonly transfer the term also to other acts instead of the term good, thus showing that the more Equitable a thing is the better it is: at other times following a certain train of reasoning we arrive at a difficulty, in that the Equitable though distinct from the Just is yet praiseworthy; it seems to follow either that the Just is not good or the Equitable not Just,

since they are by hypothesis different; or if both are good then they are identical.

This is a tolerably fair statement of the difficulty which on these grounds arises in respect of the Equitable; but, in fact, all these may be reconciled and really involve no contradiction: for the Equitable is Just, being also better than one form of Just, but is not better than the Just as though it were different from it in kind: Just and Equitable then are identical, and, both being good, the Equitable is the better of the two.

What causes the difficulty is this: the Equitable is Just, but not the Just which is in accordance with written law, being in fact a correction of that kind of Just. And the account of this is, that every law is necessarily universal while there are some things which it is not possible to speak of rightly in any universal or general statement. Where then there is a necessity for general statement, while a general statement cannot apply rightly to all cases, the law takes the generality of cases, being fully aware of the error thus involved; and rightly too notwithstanding, because the fault is not in the law, or in the framer of the law, but is inherent in the nature of the thing, because the matter of all action is necessarily such.

The answer to the second of the two questions indicated above, whether it is possible for a man to deal unjustly by himself, is obvious from what has been already stated.

In the first place, one class of Justs is those which are enforced by law in accordance with Virtue in the most extensive sense of the term: for instance, the law does not bid a man kill himself; and whatever it does not bid it forbids: well, whenever a man does hurt contrary to the law (unless by way of requital of hurt), voluntarily, i.e., knowing to whom he does it and wherewith, he acts Unjustly. Now he that from rage kills himself, voluntarily, does this in contravention of Right Reason, which the law does not permit. He therefore acts Unjustly: but towards whom? Towards the Community, not towards himself (because he suffers with his own consent, and no man can be Unjustly dealt with with his own consent), and on this principle the Community punishes him; that is, a certain infamy is attached to the suicide as to one who acts Unjustly towards the Community.

Next, a man cannot deal Unjustly by himself in the sense in which a man is Unjust who only does Unjust acts without being entirely bad (for the two things are different, because the Unjust man is in a way bad, as the coward is, not as though he were chargeable with badness in the full extent of the term, and so he does not act Unjustly in this sense), because if it were so then it would be possible for the same thing to have been taken away from and added to the same person: but this is really not possible, the Just and the Unjust always implying a plurality of persons.

Again, an Unjust action must be voluntary, done of deliberate pur-

pose, and aggressive (for the man who hurts because he has first suffered and is merely requiting the same is not thought to act Unjustly), but here the man does to himself and suffers the same things at the same time.

Again, it would imply the possibility of being Unjustly dealt with with one's own consent.

And, besides all this, a man cannot act Unjustly without his act falling under some particular crime; now a man cannot seduce his own wife, commit a burglary on his own premises, or steal his own property.

Book Six

HAVING STATED in a former part of this treatise that men should choose the mean instead of either the excess or defect, and that the mean is according to the dictates of Right Reason, we will now proceed to explain this term.

For in all the habits which we have expressly mentioned, as likewise in all the others, there is, so to speak, a mark with his eye fixed on which the man who has Reason tightens or slacks his rope; and there is a certain limit of those mean states which we say are in accordance with Right Reason, and lie between excess on the one hand and defect on the other.

Now to speak thus is true enough but conveys no very definite meaning: as, in fact, in all other pursuits requiring attention and diligence on which skill and science are brought to bear; it is quite true of course to say that men are neither to labour nor relax too much or too little, but in moderation, and as Right Reason directs; yet if this were all a man had he would not be greatly the wiser; as, for instance, if in answer to the question, what are proper applications to the body, he were to be told, "Oh, of course, whatever the science of medicine, and in such manner as the physician, directs."

And so in respect of the mental states it is requisite not merely that this should be true which has been already stated, but further that it should be expressly laid down what Right Reason is, and what is the definition of it.

Now in our division of the Excellences of the Soul, we said there were two classes, the Moral and the Intellectual: the former we have already gone through; and we will now proceed to speak of the others, premising a few words respecting the Soul itself. It was stated before, you will remember, that the Soul consists of two parts, the Rational and Irrational: we must now make a similar division of the Rational.

Let it be understood then that there are two parts of the Soul possessed of Reason; one whereby we realise those existences whose causes

cannot be otherwise than they are, and one whereby we realise those which can be otherwise than they are; and let us name the former, "that which is apt to know," the latter, "that which is apt to calculate."

There are in the Soul three functions on which depend moral action and truth: Sense, Intellect, Appetition, whether vague Desire or definite Will. Now of these Sense is the originating cause of no moral action, as is seen from the fact that brutes have Sense but are in no way partakers of moral action.

Intellect and Will are thus connected. What in the Intellectual operation is Affirmation and Negation in the Will is Pursuit and Avoidance. And so, since Moral Virtue is a State apt to exercise Moral Choice and Moral Choice is Will consequent on deliberation, the Reason must be true and the Will right, to constitute good Moral Choice, and what the Reason affirms the Will must pursue.

Now this Intellectual operation and this Truth is what bears upon Moral Action; of course truth and falsehood must be the good and the bad of that Intellectual Operation which is purely Speculative and concerned neither with action nor production, because this is manifestly the work of every Intellectual faculty, while of the faculty which is of a mixed Practical and Intellectual nature the work is that Truth which, as I have described above, corresponds to the right movement of the Will.

Now the starting-point of moral action is Moral Choice, Appetition, and Reason directed to a certain result: and thus Moral Choice is neither independent of intellect, i.e., intellectual operation, nor of a certain moral state: for right or wrong action cannot exist independently of operation of the Intellect and moral character.

But operation of the Intellect by itself moves nothing, only when directed to a certain result, i.e., exercised in Moral Action, and so Moral Choice is either Intellect put in a position of Will-ing, or Appetition subjected to an Intellectual Process. And such a Cause is Man.

But nothing which is done and past can be the object of Moral Choice; for instance, no man chooses to have sacked Troy; because, in fact, no one ever deliberates about what is past but only about that which is future and which may therefore be influenced, whereas what has been cannot not have been: and so Agathon is right in saying,

"Of this alone is Deity bereft, To make undone whatever hath been done."

Thus then the Truth is the work of both the Intellectual Parts of the Soul; those states therefore are the Excellences of each in which each will best attain truth.

Commencing then from the point stated above we will now speak of these Excellences again. Let those faculties whereby the Soul attains truth in Affirmation or Negation be assumed to be in number five: viz., Art, Knowledge, Practical Wisdom, Science, Intuition.

What Knowledge is is plain from the following considerations, if one is to speak accurately instead of being led away by resemblances. We all conceive that what we strictly speaking know cannot be otherwise than it is, because as to those things which can be otherwise than they are we are uncertain whether they are or are not the moment they cease to be within the sphere of our actual observation.

So, then, whatever comes within the range of Knowledge is by necessity, and therefore eternal, and all eternal things are without beginning and indestructible.

Again, all Knowledge is thought to be capable of being taught, and what comes within its range capable of being learned. And all teaching is based upon previous knowledge (a statement you will find in the *Analytics* also); for there are two ways of teaching, by Syllogism and by Induction. In fact, Induction is the source of universal propositions, and Syllogism reasons from these universals. Syllogism then may reason from principles which cannot be themselves proved syllogistically; and therefore must be proved by Induction.

So Knowledge is "a state or mental faculty apt to demonstrate syllogistically," etc., as in the *Analytics*: because a man, strictly and properly speaking, *knows*, when he establishes his conclusion in a certain way and the principles are known to him: for if they are not better known to him than the conclusion such knowledge as he has will be merely accidental.

Now Knowledge is a conception concerning universals and Necessary matter, and there are of course certain First Principles in all trains of demonstrative reasoning. That faculty, then, which takes in the first principles of that which comes under the range of Knowledge cannot be either Knowledge, or Art, or Practical Wisdom: not Knowledge, because what is the object of Knowledge must be derived from demonstrative reasoning; not either of the other two, because they are exercised upon Contingent matter only. Nor can it be Science which takes in these, because the Scientific Man must in some cases depend on demonstrative Reasoning.

It comes then to this: since the faculties whereby we always attain truth and are never deceived when dealing with matter Necessary or even Contingent are Knowledge, Practical Wisdom, Science, and Intuition, and the faculty which takes in First Principles cannot be any of the three first, the last, namely, Intuition, must be it which performs this function.

We must inquire again also about Virtue: for it may be divided into Natural Virtue and Matured, which two bear to each other a relation similar to that which Practical Wisdom bears to Cleverness, one not of identity but resemblance. I speak of Natural Virtue, because men hold that each of the moral dispositions attach to us all somehow by nature:

we have dispositions towards justice, self-mastery, and courage, for instance, immediately from our birth: but still we seek Goodness in its highest sense as something distinct from these, and that these dispositions should attach to us in a somewhat different fashion. Children and brutes have these natural states, but then they are plainly hurtful unless combined with an intellectual element: at least thus much is matter of actual experience and observation, that as a strong body destitute of sight must, if set in motion, fall violently because it has not sight, so it is also in the case we are considering: but if it can get the intellectual element it then excels in acting. Just so the Natural State of Virtue, being like this strong body, will then be Virtue in the highest sense when it too is combined with the intellectual element.

So that, as in the case of the Opinionative faculty, there are two forms, Cleverness and Practical Wisdom; so also in the case of the Moral there are two, Natural Virtue and Matured; and of these the latter cannot be formed without Practical Wisdom.

This leads some to say that all the Virtues are merely intellectual Practical Wisdom, and Socrates was partly right in his inquiry and partly wrong: wrong in that he thought all the Virtues were merely intellectual Practical Wisdom, right in saying they were not independent of that faculty.

Book Seven

Next we must take a different point to start from, and observe that of what is to be avoided in respect of moral character there are three forms; Vice, Imperfect Self-Control, and Brutishness. Of the two former it is plain what the contraries are, for we call the one Virtue, the other Self-Control; and as answering to Brutishness it will be most suitable to assign Superhuman, i.e., heroical and godlike Virtue, as, in Homer, Priam says of Hector that "he was very excellent, nor was he like the offspring of mortal man, but of a god": and so, if, as is commonly said, men are raised to the position of gods by reason of very high excellence in Virtue, the state opposed to the Brutish will plainly be of this nature: because as brutes are not virtuous or vicious so neither are gods; but the state of these is something more precious than Virtue, of the former something different in kind from Vice.

And as, on the one hand, it is a rare thing for a man to be godlike, so the brutish man is rare; the character is found most among barbarians, and some cases of it are caused by disease or maining; also such men as exceed in Vice all ordinary measures we therefore designate by this opprobrious term. Well, we must in a subsequent place make some mention of this disposition, and Vice has been spoken of before: for the present we must speak of Imperfect Self-Control and its kindred faults of Softness and Luxury, on the one hand, and of Self-Control and Endurance on the other; since we are to conceive of them, not as being the same states exactly as Virtue and Vice respectively, nor again as differing in kind.

Now we must examine first whether men of Imperfect Self-Control act with a knowledge of what is right or not: next, if with such knowledge, in what sense; and next, what are we to assume is the object-matter of the man of Imperfect Self-Control, and of the man of Self-Control; I mean, whether pleasure and pain of all kinds or certain definite ones; and as to Self-Control and Endurance, whether these are designations of the same character or different. And in like manner we must go into all questions which are connected with the present.

But the real starting point of the inquiry is, whether the two characters of Self-Control and Imperfect Self-Control are distinguished by their object-matter, or their respective relations to it. I mean, whether the man of Imperfect Self-Control is such simply by virtue of having such and such object-matter; or not, but by virtue of his being related to it in such and such a way, or by virtue of both: next, whether Self-Control and Imperfect Self-Control are unlimited in their object-matter: because he who is designated without any addition a man of Imperfect Self-Control is not unlimited in his object-matter, but has exactly the same as the man who has lost all Self-Control: nor is he so designated because of his relation to this object-matter merely, but because of his relation to it being such and such. For the man who has lost all Self-Control is led on with deliberate moral choice, holding that it is his line to pursue pleasure as it rises: while the man of Imperfect Self-Control does not think that he ought to pursue it, but does pursue it all the same.

Now as to the notion that it is True Opinion and not Knowledge in contravention of which men fail in Self-Control, it makes no difference to the point in question, because some of those who hold Opinions have no doubt about them but suppose themselves to have accurate Knowledge; if then it is urged that men holding Opinions will be more likely than men who have Knowledge to act in contravention of their conceptions, as having but a moderate belief in them, we reply, Knowledge will not differ in this respect from Opinion: because some men believe their own Opinions no less firmly than others do their positive Knowledge: Heraclitus is a case in point.

The next question to be discussed is whether there is a character to be designated by the term "of Imperfect Self-Control" simply, or whether all who are so are to be accounted such, in respect of some particular thing; and, if there is such a character, what is his object-matter.

Now that pleasures and pains are the object-matter of men of Self-Control and of Endurance, and also of men of Imperfect Self-Control and Softness, is plain.

Further, things which produce pleasure are either necessary, or objects of choice in themselves but yet admitting of excess. All bodily things which produce pleasure are necessary; and I call such those which relate to food and other grosser appetites, in short such bodily things as we assumed were the Object-matter of absence of Self-Control and of Perfected Self-Mastery.

The other class of objects are not necessary, but objects of choice in themselves: I mean, for instance, victory, honour, wealth, and suchlike good or pleasant things. And those who are excessive in their liking for such things contrary to the principle of Right Reason which is in their own breasts we do not designate men of Imperfect Self-Control simply, but with the addition of the thing wherein, as in respect of money, or gain, or honour, or anger, and not simply; because we consider them as different characters and only having that title in right of a kind of resemblance. And a proof of the real difference between these so designated with an addition and those simply so called is this, that Imperfect Self-Control is blamed, not as an error merely but also as being a vice, either wholly or partially; but none of these other cases is so blamed.

But of those who have for their object-matter the bodily enjoyments, which we say are also the object-matter of the man of Perfected Self-Mastery and the man who has lost all Self-Control, he that pursues excessive pleasures and too much avoids things which are painful, not from moral choice but in spite of his moral choice and intellectual conviction, is termed "a man of Imperfect Self-Control," not with the addition of any particular object-matter as we do in respect of want of control of anger, but simply.

Again, the man utterly destitute of Self-Control, as was observed before, is not given to remorse: for it is part of his character that he abides by his moral choice: but the man of Imperfect Self-Control is almost made up of remorse: and so the case is not as we determined it before, but the former is incurable and the latter may be cured: for depravity is like chronic diseases, dropsy and consumption, for instance, but Imperfect Self-Control is like acute disorders: the former being a continuous evil, the latter not so. And, in fact, Imperfect Self-Control and Confirmed Vice are different in kind: the latter being imperceptible to its victim, the former not so.

But, of the different forms of Imperfect Self-Control, those are better who are carried off their feet by a sudden access of temptation than they who have Reason but do not abide by it; these last being overcome by passion less in degree, and not wholly without premeditation as are the others: for the man of Imperfect Self-Control is like those who are soon intoxicated and by little wine and less than the common run of men.

Well then, that Imperfection of Self-Control is not Confirmed Viciousness is plain: and yet perhaps it is such in a way, because in one sense it is contrary to moral choice and in another the result of it: at all events, in respect of the actions, the case is much like what Demodocus said of the Miletians. "The people of Miletus are not fools, but they do just the kind of things that fools do"; and so they of Imperfect Self-Control are not unjust, but they do unjust acts.

And it is not possible for the same man to be at once a man of Practical Wisdom and of Imperfect Self-Control: because the character of Practical Wisdom includes, as we showed before, goodness of moral character. And again, it is not knowledge merely, but aptitude for action, which constitutes Practical Wisdom: and of this aptitude the man of Imperfect Self-Control is destitute. But there is no reason why the Clever man should not be of Imperfect Self-Control: and the reason why some men are occasionally thought to be men of Practical Wisdom, and yet of Imperfect Self-Control, is this, that Cleverness differs from Practical Wisdom in the way I stated in a former book, and is very near it so far as the intellectual element is concerned but differs in respect of the moral choice.

Nor is the man of Imperfect Self-Control like the man who both has and calls into exercise his knowledge, but like the man who, having it, is overpowered by sleep or wine.

Again, he acts voluntarily, but he is not a confirmed bad man, for his moral choice is good, so he is at all events only half bad. Nor is he unjust, because he does not act with deliberate intent: for of the two chief forms of the character, the one is not apt to abide by his deliberate resolutions, and the other, the man of constitutional strength of passion, is not apt to deliberate at all.

So in fact the man of Imperfect Self-Control is like a community which makes all proper enactments and has admirable laws, only does not act on them, verifying the scoff of Anaxandrides,

"That State did will it, which cares nought for laws";

whereas the bad man is like one which acts upon its laws, but then unfortunately they are bad ones.

Book Eight

NEXT would seem properly to follow a dissertation on Friendship: because, in the first place, it is either itself a virtue or connected with virtue;

and next it is a thing most necessary for life, since no one would choose to live without friends though he should have all the other good things in the world: and, in fact, men who are rich or possessed of authority and influence are thought to have special need of friends: for where is the use of such prosperity if there be taken away the doing of kindnesses of which friends are the most usual and most commendable objects? Or how can it be kept or preserved without friends? because, the greater it is, so much the more slippery and hazardous: in poverty moreover and all other adversities men think friends to be their only refuge.

Furthermore, Friendship helps the young to keep from error: the old, in respect of attention and such deficiencies in action as their weakness makes them liable to; and those who are in their prime, in respect of noble deeds, because they are thus more able to devise plans and carry them out.

Again, it seems to be implanted in us by Nature: as, for instance, in the parent towards the offspring and the offspring towards the parent, and in those of the same tribe towards one another, and specially in men of the same nation; for which reason we commend those men who love their fellows: and one may see in the course of travel how close of kin and how friendly man is to man.

Furthermore, Friendship seems to be the bond of Social Communities, and legislators seem to be more anxious to secure it than Justice even. I mean, Unanimity is somewhat like to Friendship, and this they certainly aim at and specially drive out faction as being inimical.

As the motives to Friendship differ in kind so do the respective feelings and Friendships. The species then of Friendship are three, in number equal to the objects of it, since in the line of each there may be "mutual affection mutually known."

Now they who have Friendship for one another desire one another's good according to the motive of their Friendship; accordingly they whose motive is utility have no Friendship for one another really, but only in so far as some good arises to them from one another.

And they whose motive is pleasure are in like case: I mean, they have Friendship for men of easy pleasantry, not because they are of a given character but because they are pleasant to themselves. So then they whose motive to Friendship is utility love their friends for what is good to themselves; they whose motive is pleasure do so for what is pleasurable to themselves; that is to say, not in so far as the friend beloved is but in so far as he is useful or pleasurable. These Friendships then are a matter of result: since the object is not beloved in that he is the man he is but in that he furnishes advantage or pleasure as the case may be.

Such Friendships are of course very liable to dissolution if the parties do not continue alike: I mean, that the others cease to have any Friendship

for them when they are no longer pleasurable or useful. Now it is the nature of utility not to be permanent but constantly varying: so, of course, when the motive which made them friends is vanished, the Friendship likewise dissolves; since it existed only relatively to those circumstances.

Friendship of this kind is thought to exist principally among the old, and in such of men in their prime and of the young as are given to the pursuit of profit. They that are such have no intimate intercourse with one another; for sometimes they are not even pleasurable to one another: nor, in fact, do they desire such intercourse unless their friends are profitable to them, because they are pleasurable only in so far as they have hopes of advantage. With these Friendships is commonly ranked that of hospitality.

Further; just as in respect of the different virtues some men are termed good in respect of a certain inward state, others in respect of acts of working, so is it in respect of Friendship: I mean, they who live together take pleasure in, and impart good to, one another: but they who are asleep or are locally separated do not perform acts, but only are in such a state as to act in a friendly way if they acted at all: distance has in itself no direct effect upon Friendship, but only prevents the acting it out: yet, if the absence be protracted, it is thought to cause a forgetfulness even of the Friendship: and hence it has been said, "many and many a Friendship doth want of intercourse destroy."

Accordingly, neither the old nor the morose appear to be calculated for Friendship, because the pleasurableness in them is small, and no one can spend his days in company with that which is positively painful or even not pleasurable; since to avoid the painful and aim at the pleasurable is one of the most obvious tendencies of human nature. They who get on with one another very fairly, but are not in habits of intimacy, are rather like people having kindly feelings towards one another than friends; nothing being so characteristic of friends as the living with one another, because the necessitous desire assistance, and the happy companionship, they being the last persons in the world for solitary existence: but people cannot spend their time together unless they are mutually pleasurable and take pleasure in the same objects, a quality which is thought to appertain to the Friendship of companionship.

The connection then subsisting between the good is Friendship par excellence, as has already been frequently said: since that which is abstractedly good or pleasant is thought to be an object of Friendship and choiceworthy, and to each individual whatever is such to him; and the good man to the good man for both these reasons.

But there is another form of Friendship, that, namely, in which the one party is superior to the other; as between father and son, elder and younger, husband and wife, ruler and ruled. These also differ one from another: I mean, the Friendship between parents and children is not the same as be-

tween ruler and the ruled, nor has the father the same towards the son as the son towards the father, nor the husband towards the wife as she towards him; because the work, and therefore the excellence, of each of these is different, and different therefore are the causes of their feeling Friendship; distinct and different therefore are their feelings and states of Friendship.

And the same results do not accrue to each from the other, nor in fact ought they to be looked for: but, when children render to their parents what they ought to the authors of their being, and parents to their sons what they ought to their offspring, the Friendship between such parties will be permanent and equitable.

Further, the feeling of Friendship should be in a due proportion in all Friendships which are between superior and inferior; I mean, the better man, or the more profitable, and so forth, should be the object of a stronger feeling than he himself entertains, because when the feeling of Friendship comes to be after a certain rate then equality in a certain sense is produced, which is thought to be a requisite in Friendship.

And that equality is thus requisite is plainly shown by the occurrence of a great difference of goodness or badness, or prosperity, or something else: for in this case, people are not any longer friends, nay they do not even feel that they ought to be. The clearest illustration is perhaps the case of the gods, because they are most superior in all good things. It is obvious too, in the case of kings, for they who are greatly their inferiors do not feel entitled to be friends to them; nor do people very insignificant to be friends to those of very high excellence or wisdom. Of course, in such cases it is out of the question to attempt to define up to what point they may continue friends: for you may remove many points of agreement and the Friendship last nevertheless; but when one of the parties is very far separated, it cannot continue any longer.

Now of course all Friendship is based upon Communion, as has been already stated: but one would be inclined to separate off from the rest the Friendship of Kindred, and that of Companions: whereas those of men of the same city, or tribe, or crew, and all such, are more peculiarly, it would seem, based upon Communion, inasmuch as they plainly exist in right of some agreement expressed or implied: among these one may rank also the Friendship of Hospitality.

The Friendship of Kindred is likewise of many kinds, and appears in all its varieties to depend on the Parental: parents, I mean, love their children as being a part of themselves, children love their parents as being themselves somewhat derived from them. But parents know their offspring more than these know that they are from the parents, and the source is more closely bound to that which is produced than that which is produced is to that which formed it: of course, whatever is derived

from one's self is proper to that from which it is so derived: but the source to it is in no degree proper, or in an inferior degree at least.

Then again the greater length of time comes in: the parents love their offspring from the first moment of their being, but their offspring them only after a lapse of time when they have attained intelligence or instinct. These considerations serve also to show why mothers have greater strength of affection than fathers.

There are then, as was stated at the commencement of this book, three kinds of Friendship, and in each there may be friends on a footing of equality and friends in the relation of superior and inferior; we find, I mean, that people who are alike in goodness become friends, and better with worse, and so also pleasant people; again, because of advantage people are friends, either balancing exactly their mutual profitableness or differing from one another herein. Well then, those who are equal should in right of this equality be equalised also by the degree of their Friendship and the other points, and those who are on a footing of inequality by rendering Friendship in proportion to the superiority of the other party.

Quarrels arise also in those Friendships in which the parties are unequal because each party thinks himself entitled to the greater share, and of course, when this happens, the Friendship is broken up.

The man who is better than the other thinks that having the greater share pertains to him of right, for that more is always awarded to the good man: and similarly the man who is more profitable to another than that other to him: "one who is useless," they say, "ought not to share equally, for it comes to a tax, and not a Friendship, unless the fruits of the Friendship are reaped in proportion to the works done": their notion being that, as in a money partnership, they who contribute more receive more, so should it be in Friendship likewise.

On the other hand, the needy man and the less virtuous advance the opposite claim: they urge that "it is the very business of a good friend to help those who are in need, else what is the use of having a good or powerful friend if one is not to reap the advantage at all?"

Now each seems to advance a right claim and to be entitled to get more out of the connection than the other, only not more of the same thing: but the superior man should receive more respect, the needy man more profit: respect being the reward of goodness and beneficence, profit being the aid of need.

Book Nine

Well, in all the Friendships the parties to which are dissimilar it is the proportionate which equalises and preserves the Friendship, as has been already stated: I mean, in the Social Friendship the cobbler, for instance, gets an equivalent for his shoes after a certain rate; and the weaver, and all others in like manner. Now in this case a common measure has been provided in money, and to this accordingly all things are referred and by this are measured: but in the Friendship of Love the complaint is sometimes from the lover that, though he loves exceedingly, his love is not requited; he having perhaps all the time nothing that can be the object of Friendship: again, oftentimes from the object of love that he who as a suitor promised any and every thing now performs nothing. These cases occur because the Friendship of the lover for the beloved object is based upon pleasure, that of the other for him upon utility, and in one of the parties the requisite quality is not found: for, as these are respectively the grounds of the Friendship, the Friendship comes to be broken up because the motives to it cease to exist: the parties loved not one another but qualities in one another which are not permanent, and so neither are the Friendships: whereas the Friendship based upon the moral character of the parties, being independent and disinterested, is permanent, as we have already stated.

Quarrels arise also when the parties realise different results and not those which they desire; for the not attaining one's special object is all one, in this case, with getting nothing at all: as in the well-known case where a man made promises to a musician, rising in proportion to the excellence of his music; but when, the next morning, the musician claimed the performance of his promises, he said that he had given him pleasure for pleasure: of course, if each party had intended this, it would have been all right: but if the one desires amusement and the other gain, and the one gets his object but the other not, the dealing cannot be fair: because a man fixes his mind upon what he happens to want, and will give so and so for that specific thing.

Now the friendly feelings which are exhibited towards our friends, and by which Friendships are characterised, seem to have sprung out of those which we entertain towards ourselves.

I mean, people define a friend to be "one who intends and does what is good to another for that other's sake"; or "one who wishes his friend to be and to live for that friend's own sake." Others again, "one who lives with another and chooses the same objects," or "one who sympathises with his friend in his sorrows and in his joys."

Well, by some one of these marks people generally characterise Friendship: and each of these the good man has towards himself, and all others have them in so far as they suppose themselves to be good.

For he is at unity in himself, and with every part of his soul he desires the same objects; and he wishes for himself both what is, and what he believes to be, good; and he does it; and for the sake of himself, inasmuch as he does it for the sake of his Intellectual Principle which is generally thought to be a man's Self. Again, he wishes himself, and specially this Principle whereby he is an intelligent being, to live and be preserved in life, because existence is a good to him that is a good man.

But it is to himself that each individual wishes what is good, and no man, conceiving the possibility of his becoming other than he now is, chooses that that New Self should have all things indiscriminately: a god, for instance, has at the present moment the Chief Good, but he has it in right of being whatever he actually now is: and the Intelligent Principle must be judged to be each man's Self, or at least eminently so [though other Principles help, of course, to constitute him the man he is].

Benefactors are commonly held to have more Friendship for the objects of their kindness than these for them: and the fact is made a subject of discussion and inquiry, as being contrary to reasonable expectation.

The account of the matter which satisfies most persons is that the one are debtors and the others creditors: and therefore that, as in the case of actual loans the debtors wish their creditors out of the way while the creditors are anxious for the preservation of their debtors, so those who have done kindnesses desire the continued existence of the people they have done them to, under the notion of getting a return of their good offices, while these are not particularly anxious about requital.

Epicharmus, I suspect, would very probably say that they who give this solution judge from their own baseness; yet it certainly is like human nature, for the generality of men have short memories on these points, and aim rather at receiving than conferring benefits.

But the real cause, it would seem, rests upon nature, and the case is not parallel to that of creditors; because in this there is no affection to the persons, but merely a wish for their preservation with a view to the return: whereas, in point of fact, they who have done kindnesses feel friendship and love for those to whom they have done them, even though they neither are, nor can by possibility hereafter be, in a position to serve their benefactors.

A question is raised also respecting the Happy man, whether he will want Friends, or no?

Some say that they who are blessed and independent have no need

of Friends, for they already have all that is good, and so, as being independent, want nothing further: whereas the notion of a friend's office is to be as it were a second Self and procure for a man what he cannot get by himself: hence the saying,

"When Fortune gives us good, what need we Friends?"

On the other hand, it looks absurd, while we are assigning to the Happy man all other good things, not to give him Friends, which are, after all, thought to be the greatest of external goods.

Again, if it is more characteristic of a friend to confer than to receive kindnesses, and if to be beneficent belongs to the good man and to the character of virtue, and if it is more noble to confer kindnesses on friends than strangers, the good man will need objects for his benefactions. And out of this last consideration springs a question whether the need of Friends be greater in prosperity or adversity, since the unfortunate man wants people to do him kindnesses and they who are fortunate want objects for their kind acts.

Again, it is perhaps absurd to make our Happy man a solitary, because no man would choose the possession of all goods in the world on the condition of solitariness, man being a social animal and formed by nature for living with others: of course the Happy man has this qualification since he has all those things which are good by nature: and it is obvious that the society of friends and good men must be preferable to that of strangers and ordinary people, and we conclude, therefore, that the Happy man does need Friends.

But then, what do they mean whom we quoted first, and how are they right? Is it not that the mass of mankind mean by Friends those who are useful? and of course the Happy man will not need such because he has all good things already; neither will he need such as are Friends with a view to the pleasurable, or at least only to a slight extent; because his life, being already pleasurable, does not want pleasure imported from without; and so, since the Happy man does not need Friends of these kinds, he is thought not to need any at all.

But it may be, this is not true: for it was stated originally, that Happiness is a kind of Working; now Working plainly is something that must come into being, not be already there like a mere piece of property.

If then the being happy consists in living and working, and the good man's working is in itself excellent and pleasurable, and if what is our own reckons among things pleasurable, and if we can view our neighbours better than ourselves and their actions better than we can our own, then the actions of their Friends who are good men are pleasurable to the good; inasmuch as they have both the requisites which are naturally pleasant. So the man in the highest state of happiness will need Friends of this

kind, since he desires to contemplate good actions, and actions of his own, which those of his friend, being a good man, are.

Are we then to make our Friends as numerous as possible? Or, as in respect of acquaintance it is thought to have been well said, "Have not thou many acquaintances yet be not without," so too in respect of Friendship may we adopt the precept and say that a man should not be without Friends, nor again have exceeding many Friends?

Now as for Friends who are intended for use, the maxim I have quoted will, it seems, fit in exceedingly well, because to requite the services of many is a matter of labour, and a whole life would not be long enough to do this for them. So that, if more numerous than what will suffice for one's own life, they become officious, and are hindrances in respect of living well: and so we do not want them. And again, of those who are to be for pleasure a few are quite enough, just like sweetening in our food.

But of the good are we to make as many as ever we can, or is there any measure of the number of Friends, as there is of the number to constitute a Political Community? I mean, you cannot make one out of ten men, and if you increase the number to one hundred thousand it is not any longer a Community. However, the number is not perhaps some one definite number but any between certain extreme limits.

Well, of Friends likewise there is a limited number, which perhaps may be laid down to be the greatest number with whom it would be possible to keep up intimacy; this being thought to be one of the greatest marks of Friendship, and it being quite obvious that it is not possible to be intimate with many, in other words, to part one's self among many. And besides it must be remembered that they also are to be Friends to one another if they are all to live together: but it is a matter of difficulty to find this in many men at once.

Book Ten

Next, it would seem, follows a discussion respecting Pleasure, for it is thought to be most closely bound up with our kind: and so men train the young, guiding them on their course by the rudders of Pleasure and Pain. And to like and dislike what one ought is judged to be most important for the formation of good moral character: because these feelings extend all one's life through, giving a bias towards and exerting an influence on the side of Virtue and Happiness, since men choose what is pleasant and avoid what is painful.

Now Eudoxus thought Pleasure to be the Chief Good because he saw

all, rational and irrational alike, aiming at it: and he argued that, since in all what was the object of choice must be good and what most so the best, the fact of all being drawn to the same thing proved this thing to be the best for all: "For each," he said, "finds what is good for itself just as it does its proper nourishment, and so that which is good for all, and the object of the aim of all, is their Chief Good."

And he thought his position was not less proved by the argument from the contrary: that is, since Pain was in itself an object of avoidance to all, the contrary must be in like manner an object of choice.

Again he urged that that is most choiceworthy which we choose, not by reason of, or with a view to, anything further; and that Pleasure is confessedly of this kind because no one ever goes on to ask to what purpose he is pleased, feeling that Pleasure is in itself choiceworthy.

Again, that when added to any other good it makes it more choiceworthy; as, for instance, to actions of justice, or perfected self-mastery; and good can only be increased by itself.

However, this argument at least seems to prove only that it belongs to the class of goods, and not that it does so more than anything else: for every good is more choiceworthy in combination with some other than when taken quite alone. In fact, it is by just such an argument that Plato proves that Pleasure is not the Chief Good: "For," says he, "the life of Pleasure is more choiceworthy in combination with Practical Wisdom than apart from it; but, if the compound be better, then simple Pleasure cannot be the Chief Good; because the very Chief Good cannot by any addition become more choiceworthy than it is already": and it is obvious that nothing else can be the Chief Good, which by combination with any of the things in themselves good comes to be more choiceworthy.

Nor again is Pleasure therefore excluded from being a good because it does not belong to the class of qualities: the acts of virtue are not qualities, neither is Happiness, yet surely both are goods.

Again, they say the Chief Good is limited but Pleasure unlimited, in that it admits of degrees.

Now if they judge this from the act of feeling Pleasure, then the same thing will apply to justice and all the other virtues, in respect of which clearly it is said that men are more or less of such and such characters (according to the different virtues), they are more just or more brave, or one may practise justice and self-mastery more or less.

If, on the other hand, they judge in respect of the Pleasures themselves, then it may be they miss the true cause, namely, that some are unmixed and others mixed: for just as health, being in itself limited, admits of degrees, why should not Pleasure do so and yet be limited? In the former case we account for it by the fact that there is not the same adjustment of parts in all men, nor one and the same always in the same individual: but health, though relaxed, remains up to a certain point, and differs in degrees; and of course the same may be the case with Pleasure.

Again, assuming the Chief Good to be perfect and all Movements and Generations imperfect, they try to show that Pleasure is a Movement and a Generation.

Yet they do not seem warranted in saying even that it is a Movement: for to every Movement are thought to belong swiftness and slowness, and if not in itself, as to that of the universe, yet relatively: but to Pleasure neither of these belongs: for though one may have got quickly into the state of Pleasure, as into that of anger, one cannot be in the state quickly, nor relatively to the state of any other person; but we can walk or grow, and so on, quickly or slowly.

An act of Sight is thought to be complete at any moment; that is to say, it lacks nothing the accession of which subsequently will complete its whole nature.

Well, Pleasure resembles this: because it is a whole, as one may say; and one could not at any moment of time take a Pleasure whose whole nature would be completed by its lasting for a longer time. And for this reason it is not a Movement: for all Movement takes place in time of certain duration and has a certain End to accomplish; for instance, the Movement of house-building is then only complete when the builder has produced what he intended, that is, either in the whole time [necessary to complete the whole design], or in a given portion. But all the subordinate Movements are incomplete in the parts of the time, and are different in kind from the whole Movement and from one another (I mean, for instance, that the fitting the stones together is a Movement different from that of fluting the column, and both again from the construction of the Temple as a whole: but this last is complete as lacking nothing to the result proposed; whereas that of the basement, or of the triglyph, is incomplete, because each is a Movement of a part merely).

As I said then, they differ in kind, and you cannot at any time you choose find a Movement complete in its whole nature, but, if at all, in the whole time requisite.

And so it is with the Movement of walking and all others: for, if motion be a Movement from one place to another place, then of it too there are different kinds, flying, walking, leaping, and suchlike. And not only so, but there are different kinds even in walking: the where-from and where-to are not the same in the whole Course as in a portion of it; nor in one portion as in another; nor is crossing this line the same as crossing that: because a man is not merely crossing a line but a line in a given place, and this is in a different place from that.

Of Movement I have discoursed exactly in another treatise. I will

now therefore only say that it seems not to be complete at any given moment; and that most Movements are incomplete and specifically different, since the whence and whither constitute different species.

But of Pleasure the whole nature is complete at any given moment: it is plain then that Pleasure and Movement must be different from one another, and that Pleasure belongs to the class of things whole and complete. And this might appear also from the impossibility of moving except in a definite time, whereas there is none with respect to the sensation of Pleasure, for what exists at the very present moment is a kind of "whole."

From these considerations then it is plain that people are not warranted in saying that Pleasure is a Movement or a Generation: because these terms are not applicable to all things, only to such as are divisible and not "wholes": I mean that of an act of Sight there is no Generation, nor is there of a point, nor of a monad, nor is any one of these a Movement or a Generation: neither then of Pleasure is there Movement or Generation, because it is, as one may say, "a whole."

Now that we have spoken about the Excellences of both kinds, and Friendship in its varieties, and Pleasures, it remains to sketch out Happiness, since we assume that to be the one End of all human things: and we shall save time and trouble by recapitulating what was stated before.

Well then, we said that it is not a State merely; because, if it were, it might belong to one who slept all his life through and merely vegetated, or to one who fell into very great calamities: and so, if these possibilities displease us and we would rather put it into the rank of some kind of Working, and Workings are of different kinds, it is plain we must rank Happiness among those choiceworthy for their own sakes and not among those which are so with a view to something further: because Happiness has no lack of anything but is self-sufficient.

By choiceworthy in themselves are meant those from which nothing is sought beyond the act of Working: and of this kind are thought to be the actions according to Virtue, because doing what is noble and excellent is one of those things which are choiceworthy for their own sake alone.

Now if Happiness is a Working in the way of Excellence, of course that Excellence must be the highest, that is to say, the Excellence of the best Principle. Whether then this best Principle is Intellect or some other which is thought naturally to rule and to lead and to conceive of noble and divine things, whether being in its own nature divine or the most divine of all our internal Principles, the Working of this in accordance with its own proper Excellence must be the perfect Happiness.

It is Contemplative; and this would seem to be consistent with what we said before and with truth: for, in the first place, this Working is of

the highest kind, since the Intellect is the highest of our internal Principles and the subjects with which it is conversant the highest of all which fall within the range of our knowledge.

Next, it is also most Continuous: for we are better able to contemplate than to do anything else whatever, continuously.

Again, we think Pleasure must be in some way an ingredient in Happiness, and of all Workings in accordance with Excellence that in the way of Science is confessedly most pleasant: at least the pursuit of Science is thought to contain Pleasures admirable for purity and permanence; and it is reasonable to suppose that the employment is more pleasant to those who have mastered, than to those who are yet seeking for, it.

And the Self-Sufficiency which people speak of will attach chiefly to the Contemplative Working: of course the actual necessaries of life are needed alike by the man of science, and the just man, and all the other characters; but, supposing all sufficiently supplied with these, the just man needs people towards whom, and in concert with whom, to practise his justice; and in like manner the man of perfected self-mastery, and the brave man, and so on of the rest; whereas the man of science can contemplate and speculate even when quite alone, and the more entirely he deserves the appellation the more able is he to do so: it may be he can do better for having fellow-workers, but still he is certainly most Self-Sufficient.

Again, this alone would seem to be rested in for its own sake, since nothing results from it beyond the fact of having contemplated; whereas from all things which are objects of moral action we do mean to get something beside the doing them, be the same more or less.

Also, Happiness is thought to stand in perfect rest; for we toil that we may rest, and war that we may be at peace. Now all the Practical Virtues require either society or war for their Working, and the actions regarding these are thought to exclude rest; those of war entirely, because no one chooses war, nor prepares for war, for war's sake: he would indeed be thought a bloodthirsty villain who should make enemies of his friends to secure the existence of fighting and bloodshed. The Working also of the statesman excludes the idea of rest, and, beside the actual work of government, seeks for power and dignities or at least Happiness for the man himself and his fellow-citizens: a Happiness distinct from the national Happiness which we evidently seek as being different and distinct.

And second in degree of Happiness will be that Life which is in accordance with the other kind of Excellence, for the Workings in accordance with this are proper to Man: I mean, we do actions of justice, courage, and the other virtues, towards one another, in contracts, services of different kinds, and in all kinds of actions and feelings too, by ob-

serving what is befitting for each: and all these plainly are proper to man. Further, the Excellence of the Moral character is thought to result in some points from physical circumstances, and to be, in many, very closely connected with the passions.

Again, Practical Wisdom and Excellence of the Moral character are very closely united; since the Principles of Practical Wisdom are in accordance with the Moral Virtues and these are right when they accord with Practical Wisdom.

These moreover, as bound up with the passions, must belong to the composite nature, and the Excellences or Virtues of the composite nature are proper to man: therefore so too will be the life and Happiness which is in accordance with them. But that of the Pure Intellect is separate and distinct: and let this suffice upon the subject, since great exactness is beyond our purpose.

It would seem, moreover, to require supply of external goods to a small degree, or certainly less than the Moral Happiness: for, as far as necessaries of life are concerned, we will suppose both characters to need them equally, but when we come to consider their Workings there will be found a great difference.

Now then that we have said enough in our sketchy kind of way on these subjects—I mean, on the Virtues, and also on Friendship and Pleasure—are we to suppose that our original purpose is completed? Must we not rather acknowledge, what is commonly said, that in matters of moral action mere Speculation and Knowledge is not the real End but rather Practice: and if so, then neither in respect of Virtue is Knowledge enough; we must further strive to have and exert it, and take whatever other means there are of becoming good.

Now if talking and writing were of themselves sufficient to make men good, they would justly, as Theognis observes, have reaped numerous and great rewards, and the thing to do would be to provide them: but in point of fact, while they plainly have the power to guide and stimulate the generous among the young and to base upon true virtuous principle any noble and truly high-minded disposition, they as plainly are powerless to guide the mass of men to Virtue and goodness; because it is not their nature to be amenable to a sense of shame but only to fear; nor to abstain from what is low and mean because it is disgraceful to do it but because of the punishment attached to it: in fact, as they live at the beck and call of passion, they pursue their own proper pleasures and the means of securing them, and they avoid the contrary pains; but as for what is noble and truly pleasurable they have not an idea of it, inasmuch as they have never tasted of it.

Men such as these then what mere words can transform? No, indeed! it is either actually impossible, or a task of no mean difficulty, to alter by

words what has been of old taken into men's very dispositions: and, it may be, it is a ground for contentment if with all the means and appliances for goodness in our hands we can attain to Virtue.

The formation of a virtuous character some ascribe to Nature, some to Custom, and some to Teaching. Now Nature's part, be it what it may, obviously does not rest with us; but belongs to those who in the truest sense are fortunate, by reason of certain divine agency.

NOVUM ORGANUM

by FRANCIS BACON

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First Vintage Concerning the Form of Heat

FRANCIS BACON

1561-1626

In MANY WAYS Francis Bacon is one of the most tragic characters in the history of philosophy. His overmastering desire was to be of service to humanity, the state, the Church, and—it must be reluctantly admitted—himself. He rose to the highest legal office in the kingdom and, on the way up, composed philosophical works which have profoundly influenced the world down to the present day. But at the height of his career he was accused, tried, and sentenced for having taken bribes from men whose cases he had been appointed to decide in the courts. He was condemned and disgraced and died in retirement.

The son of Nicholas Bacon, Keeper of the Great Seal under Queen Elizabeth, and the nephew of the Queen's principal adviser, Lord Burghley, Bacon had every opportunity for rapid advancement. But his rise was slow. Because his health was always delicate, he received the greater part of his early education at home. At the age of twelve he entered Trinity College, Cambridge, where he became interested in the sciences and gradually reached the conclusion that the methods employed and the results attained were alike erroneous. This led him to begin a search for a "true and fruitful" method of science.

At fifteen Bacon decided to study law and entered Gray's. Inn, one of the famous law schools of England. Here he began to show that hungry ambition which dominated his entire life. He applied for a minor post in court, and his application was successful.

Then, in 1588, he made the acquaintance of the Earl of Essex, the favorite of Queen Elizabeth. Shortly thereafter he

became confidential adviser to the earl and worked closely with him for many years.

In 1593 Bacon won a seat in Parliament. Here he distinguished himself for his deep loyalty to the Crown. Indeed, he felt that the Crown was supreme in the realm and that everything else must be subordinated to its authority. Thus when Essex was arrested for treason—an arrest which to Bacon seemed wholly justified—Bacon turned from him and helped to send him to the block.

Upon the death of Elizabeth, Bacon transferred his loyalty to James and worked constantly for his sovereign's welfare. The King, nevertheless, was slow in promoting Bacon to high office—a tardiness due in some degree to the machinations of court favorites.

But a man like Bacon could not be kept down. On January 4, 1617, he was made Lord Chancellor, and in 1620 he was created Viscount St. Albans. In that same year (1620) Bacon published his most famous work, the *Novum Organum*. The philosopher-politician had now attained the heights.

But one so high may fall far, and Bacon toppled downward in a most tragic manner. He had received "gifts" from individuals who were to come before him as jurist. In several of the cases, to be sure, he decided against the givers of these gifts. But the fact that he had accepted their bounty was sufficient ground for the charge of bribery; and it was on this charge that Bacon was brought to trial. The evidence was unmistakable. Bacon made an eloquent plea in his behalf. But the judges were unimpressed. On May 3, 1621, they returned a verdict imposing a fine of £40,000, imprisoning him in the Tower during the King's pleasure, denying him forever any office in the state, debarring him from ever sitting in Parliament, and excluding him from the court.

This was indeed a harsh sentence. But actually it was never enforced. The fine was remitted by the King, and Bacon's imprisonment lasted only four days. In 1621 he received a general pardon from the King. But Bacon never again sat in Parliament. He was disgraced.

For the remaining five years of his life Bacon devoted himself to writings which have proved to be of far greater value to society than all his political and judicial activities in England.

Then, on the ninth of April, 1626, Bacon died of bronchitis brought on as he was attempting an experiment on the effect of snow in preserving flesh. The Novum Organum, Bacon's greatest work, is the second part of a magnificent Instauration in which he planned to rethink the sciences and philosophy. This masterpiece was to contain six parts as follows:

- 1-The Divisions of the Sciences.
- 2—The New Organon; or, Directions concerning the Interpretation of Nature.
- 3—The Phenomena of the Universe; or a Natural and Experimental History of the Foundation of Philosophy.
- 4-The Ladder of the Intellect.
- 5—The Forerunners; or, Anticipations of the New Philosophy.
- 6—The New Philosophy; or, Active Science.

This great *Instauration* was to be "nothing less than a complete renovation of the sciences." Bacon was unable to complete this undertaking. The period in which he lived afforded him neither the technique nor the breadth of vision sufficient to do more than to suggest the general line of thinking in this direction.

Yet this general line of thinking, as outlined in the *Novum Organum*, has given the world a new method of scientific inquiry—"an easier approach to the truth."

Before we can investigate the truth, said Bacon, we must do away with a number of fallacies, or *Idols*, that have hampered us in our search.

Fallacy Number 1—the *Idols of the Tribe*. This class of idols assumes the foolish tribal doctrine that the universe has been created for any individual man or for any group of men. It impels us to seek for an order in a world which has not been made to our design. "The human understanding, from its peculiar nature, supposes a greater degree of regularity in things than it really finds . . . although most cogent and abundant instances may exist to the contrary. . . ."

Fallacy Number 2—the *Idols of the Cave*. "Every one of us," observes Bacon, "has a cave or den of his own, which refracts and discolors the light of nature." Every mind, in other words, sees the world through spectacles of a different color. Some minds are analytic—they see the world divided into diverse elements; other minds are synthetic—they visualize the world united into a coherent structure. To the first group belongs the scientist; to the second, the artist. But all of us, insists Bacon, must realize that the truth is independent

both of analysis and of synthesis. There are more facets to the universe than are dreams of either in our philosophies or in our sciences.

Fallacy Number 3—the *Idols of the Market Place*. These idols, or false images, arise "from the commerce and association of men with one another." There is too much loose talk about the world; too many erroneous definitions are taken for granted by laymen and scholars alike. "There arises, from a bad and inept formation of words, a wonderful obstruction of the mind." We must remove this obstruction through a clearer understanding of our terms. Let us learn to say what we mean, and to mean what we say.

Fallacy Number 4—the *Idols of the Theater*. These idols emanate from the dogmas of the philosophers, who dramatize all life into an artificial plot. Our various systems of philosophy "are but so many stage plays, representing worlds of their own creation after an unreal and scenic fashion." These fanciful worlds of the philosophers are "more as we should wish them to be than true stories . . . out of history."

These, then, are the old fallacies, the smoky lamps that have blurred our vision in the past. Let us replace them with the light of our new method. And what is this new method? It is the procedure of doubt, of trial and error, of classification and reclassification. It is, in short, the method of simple experiment. Bacon's Novum Organum is the philosopher's—and the scientist's—Declaration of Independence. It marks the birth of the "laboratory method" in man's experimental pursuit of the truth.

NOVUM ORGANUM

PREFACE.

Those who have taken upon them to lay down the law of nature as a thing already searched out and understood, whether they have spoken in simple assurance or professional affectation, have therein done philosophy and the sciences great injury. For as they have been successful in inducing belief, so they have been effective in quenching and stopping inquiry; and have done more harm by spoiling and putting an end to other men's efforts than good by their own. Those on the other hand who have taken a contrary course, and asserted that absolutely nothing can be known—whether it were from hatred of the ancient sophists, or from uncertainty and fluctuation of mind, or even from a kind of fulness of learning, that they fell upon this opinion,—have certainly advanced reasons for it that are not to be despised; but yet they have neither started from true principles nor rested in the just conclusion, zeal and affectation having carried them much too far. The more ancient of the Greeks took up with better judgment a position between these two extremes,—between the presumption of pronouncing on everything, and the despair of comprehending anything; and though frequently and bitterly complaining of the difficulty of inquiry and the obscurity of things, and like impatient horses champing the bit, they did not the less follow up their object and engage with nature; thinking that this very questionviz., whether or no anything can be known—was to be settled not by arguing, but by trying. And yet they too, trusting entirely to the force of their understanding, applied no rule, but made everything turn upon hard thinking and perpetual working and exercise of the mind.

Now my method, though hard to practice, is easy to explain; and it is this. I propose to establish progressive stages of certainty. The evidence of the sense, helped and guarded by a certain process of correction, I retain. But the mental operation which follows the act of sense I for the most part reject; and instead of it, I open and lay out a new and certain path for the mind to proceed in, starting directly from the simple sensuous perception. The necessity of this was felt no doubt by those who

attributed so much importance to logic; showing thereby that they were in search of helps for the understanding, and had no confidence in the native and spontaneous process of the mind. But this remedy comes too late to do any good, when the mind is already, through the daily intercourse and conversation of life, occupied with unsound doctrines and beset on all sides by vain imaginations. And therefore that art of logic, coming too late to the rescue, and no way able to set matters right again, has had the effect of fixing errors rather than disclosing truth. There remains but one course for the recovery of a sound and healthy condition,namely, that the entire work of the understanding be commenced afresh, and the mind itself be from the very outset not left to take its own course, but guided at every step; and the business be done as if by machinery. Certainly if in things mechanical men had set to work with their naked hands, without help or force of instruments, just as in things intellectual they have set to work with little else than the naked forces of the understanding, very small would the matters have been which, even with their best efforts applied in conjunction, they could have attempted or accomplished.

Upon these premises two things occur to me of which, that they may not be overlooked, I would have men reminded. First it falls out, fortunately as I think for the allaying of contradictions and heart-burnings, that the honor and reverence due to the ancients remains untouched and undiminished; while I may carry out my designs and at the same time reap the fruit of my modesty. For if I should profess that I, going the same road as the ancients, have something better to produce, there must needs have been some comparison or rivalry between us in respect of excellency or ability of wit; and though in this there would be nothing unlawful or new, yet the contest, however just and allowable, would have been an unequal one perhaps, in respect of the measure of my own powers. As it is, however,—my object being to open a new way for the understanding, a way by them untried and unknown,—the case is altered; party zeal and emulation are at an end; and I appear merely as a guide to point out the road; an office of small authority, and depending more upon a kind of luck than upon any ability or excellency. And thus much relates to the persons only. The other point of which I would have men reminded relates to the matter itself.

Be it remembered then that I am far from wishing to interfere with the philosophy which now flourishes, or with any other philosophy more correct and complete than this which has been or may hereafter be propounded. For I do not object to the use of this received philosophy, or others like it, for supplying matter for disputations or ornaments for discourse,—for the professor's lecture and for the business of life. Nay more, I declare openly that for these uses the philosophy which I bring

forward will not be much available. It does not lie in the way. It cannot be caught up in passage. It does not flatter the understanding by conformity with preconceived notions. Nor will it come down to the apprehension of the vulgar except by its utility and effects.

Let there be therefore two streams and two dispensations of knowledge; and in like manner two tribes or kindreds of students in philosophy—tribes not hostile or alien to each other, but bound together by mutual services;—let there in short be one method for the cultivation, another for the invention, of knowledge.

And for those who prefer the former, either from hurry or from considerations of business or for want of mental power to take in and embrace the other, I wish that they may succeed to their desire in what they are about, and obtain what they are pursuing. But if any man there be who, not content to rest in and use the knowledge which has already been discovered, aspires to penetrate further; to overcome, not an adversary in argument, but nature in action; to seek, not pretty and probable conjectures, but certain and demonstrable knowledge;—I invite all such to join themselves, as true sons of knowledge, with me, that passing by the outer courts of nature, which numbers have trodden, we may find a way at length into her inner chambers. And to make my meaning clearer and to familiarize the thing by giving it a name, I have chosen to call one of these methods or ways Anticipation of the Mind, the other Interpretation of Nature.

Aphorisms Concerning the Interpretation of Nature and the Kingdom of Man

APHORISM

i

MAN, being the servant and interpreter of nature, can do and understand so much and so much only as he has observed in fact or in thought of the course of nature: beyond this he neither knows anything nor can do anything.

ii

Neither the naked hand nor the understanding left to itself can effect much. It is by instruments and helps that the work is done, which are as much wanted for the understanding as for the hand. And as the instruments of the hand either give motion or guide it, so the instruments of the mind supply either suggestions for the understanding or cautions.

iii

Human knowledge and human power meet in one; for where the cause is not known the effect cannot be produced. Nature to be commanded must be obeyed; and that which in contemplation is as the cause is in operation as the rule

iv

Towards the effecting of works, all that man can do is to put together or put asunder natural bodies. The rest is done by nature working within.

v

The study of nature with a view to works is engaged in by the mechanic, the mathematician, the physician, the alchemist, and the magician; but by all with slight endeavor and scanty success.

vi

It would be an unsound fancy and self-contradictory to expect that things which have never yet been done can be done except by means which have never yet been tried.

vii

The productions of the mind and hand seem very numerous in books and manufactures. But all this variety lies in an exquisite subtlety and derivations from a few things already known; not in the number of axioms.

viii

Moreover the works already known are due to chance and experiment rather than to sciences; for the sciences we now possess are merely systems for the nice ordering and setting forth of things already invented; not methods of invention or directions for new works.

ix

The cause and root of nearly all evils in the sciences is this—that while we falsely admire and extol the powers of the human mind we neglect to seek for its true helps.

X

The subtlety of nature is greater many times over than the subtlety of the senses and understanding; so that all those specious meditations, speculations, and glosses in which men indulge are quite from the purpose, only there is no one by to observe it.

хi

As the sciences which we now have do not help us in finding out new works, so neither does the logic which we now have help us in finding out new sciences.

xii

The logic now in use serves rather to fix and give stability to the errors which have their foundation in commonly received notions, than to help the search after truth. So it does more harm than good.

xiii

The syllogism is not applied to the first principles of sciences, and is applied in vain to intermediate axioms; being no match for the subtlety of nature. It commands assent therefore to the proposition, but does not take hold of the thing.

xiv

The syllogism consists of propositions, propositions consist of words, words are symbols of notions. Therefore if the notions themselves are confused and overhastily abstracted from the facts, there can be no firmness in the superstructure. Our only hope therefore lies in a true induction.

X۷

There is no soundness in our notions whether logical or physical. Substance, Quality, Action, Passion, Essence itself, are not sound notions: much less are Heavy, Light, Dense, Rare, Moist, Dry, Generation, Corruption, Attraction, Repulsion, Element, Matter, Form, and the like; but all are fantastical and ill defined.

xvi

Our notions of less general species as Man, Dog, Dove, and of the immediate perceptions of the sense, as Hot, Cold, Black, White, do not

materially mislead us; yet even these are sometimes confused by the flux and alteration of matter and the mixing of one thing with another. All the others which men have hitherto adopted are but wanderings, not being abstracted and formed from things by proper methods.

xvii

Nor is there less of willfulness and wandering in the construction of axioms than in the formations of notions; not excepting even those very principles which are obtained by common induction; but much more in the axioms and lower propositions educed by the syilogism.

xviii

The discoveries which have hitherto been made in the sciences are such as lie close to vulgar notions, scarcely beneath the surface. In order to penetrate into the inner and further recesses of nature, it is necessary that both notions and axioms be derived from things by a more sure and guarded way; and that a method of intellectual operation be introduced altogether better and more certain.

xix

There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from these principles, the truth of which it takes for settled and immovable, proceeds to judgment and to the discovery of middle axioms. And this way is now in fashion. The other derives axioms from the senses and particulars, rising by a gradual and unbroken ascent, so that it arrives at the most general axioms last of all. This is the true way, but as yet untried.

XX

The understanding left to itself takes the same course which it takes in accordance with logical order. For the mind longs to spring up to positions of higher generality, that it may find rest there; and so after a little while wearies of experiment. But this evil is increased by logic, because of the order and solemnity of its disputations.

xxi

The understanding left to itself, in a sober, patient, and grave mind, especially if it be not hindered by received doctrines, tries a little that

other way, which is the right one, but with little progress; since the understanding, unless directed and assisted, is a thing unequal, and quite unfit to contend with the obscurity of things.

xxii

Both ways set out from the senses and particulars, and rest in the highest generalities; but the difference between them is infinite. For the one just glances at experiment and particulars in passing, the other dwells duly and orderly among them. The one, again, begins at once by establishing certain abstract and useless generalities, the other rises by gradual steps to that which is prior and better known in the order of nature.

xxiii

There is a great difference between the *Idols* of the human mind and the *Idoas* of the divine. That is to say, between certain empty dogmas, and the true signatures and marks set upon the works of creation as they are found in nature.

xxiv

It cannot be that axioms established by argumentation should avail for the discovery of new works; since the subtlety of nature is greater many times over than the subtlety of argument. But axioms duly and orderly formed from particulars easily discover the way to new particulars, and thus render sciences active.

XXV

The axioms now in use, having been suggested by a scanty and manipular experience and a few particulars of most general occurrence, are made for the most part just large enough to fit and take these in: and therefore it is no wonder if they do not lead to new particulars. And if some opposite instance, not observed or not known before, chance to come in the way, the axiom is rescued and preserved by some frivolous distinction: whereas the truer course would be to correct the axiom itself.

xxvi

The conclusions of human reason as ordinarily applied in matter of nature, I call for the sake of distinction *Anticipations of Nature*. That reason which is elicited from facts by a just and methodical process, I call *Interpretation of Nature*.

xxvii

Anticipations are a ground sufficiently firm for consent; for even if men went mad all after the same fashion, they might agree one with another well enough.

XXVIII

For the winning of assent, indeed, anticipations are far more powerful than interpretations; because being collected from a few instances, and those for the most part of familiar occurrence, they straightway touch the understanding and fill the imagination; whereas interpretations on the other hand, being gathered here and there from very various and widely dispersed facts, cannot suddenly strike the understanding; and therefore they must needs, in respect of the opinions of the time, seem harsh and out of tune; much as the mysteries of faith do.

xxix

In sciences founded on opinions and dogmas, the use of anticipations and logic is good; for in them the object is to command assent to the proposition, not to master the thing.

XXX

Though all the wits of all the ages should meet together and combine and transmit their labors, yet will no great progress ever be made in science by means of anticipations; because radical errors in the first concoction of the mind are not to be cured by the excellence of functions and remedies subsequent.

xxxi

It is idle to expect any great advancement in science from the superinducing and engrafting of new things upon old. We must begin anew from the very foundations, unless we would revolve forever in a circle with mean and contemptible progress.

xxxii

The honor of the ancient authors, and indeed of all, remains untouched; since the comparison I challenge is not of wits or faculties, but of ways and methods, and the part I take upon myself is not that of a judge, but of a guide.

xxxiii

This must be plainly avowed: no judgment can be rightly formed either of my method or of the discoveries to which it leads, by means of anticipations; since I cannot be called on to abide by the sentence of a tribunal which is itself on its trial.

xxxiv

Even to deliver and explain what I bring forward is no easy matter; for things in themselves new will yet be apprehended with reference to what is old.

XXXV

It was said by Borgia of the expedition of the French into Italy, that they came with chalk in their hands to mark out their lodgings, not with arms to force their way in. I in like manner would have my doctrine enter quietly into the minds that are fit and capable of receiving it; for confutations cannot be employed, when the difference is upon first principles and very notions and even upon forms of demonstration.

xxxvi

One method of delivery alone remains to us; which is simply this: we must lead men to the particulars themselves, and their series and order; while men on their side must force themselves for a while to lay their notions by and begin to familiarize themselves with facts.

xxxvii

The doctrine of those who have denied that certainty could be attained at all, has some agreement with my way of proceeding at the first setting out; but they end in being infinitely separated and opposed. For the holders of that doctrine assert simply that nothing can be known; I also assert that not much can be known in nature by the way which is now in use. But then they go on to destroy the authority of the senses and understanding; whereas I proceed to devise and supply helps for the same.

xxxviii

The idols and false notions which are now in possession of the human understanding, and have taken deep root therein, not only so beset men's

.

minds that truth can hardly find entrance, but even after entrance obtained, they will again in the very instauration of the sciences meet and trouble us, unless men being forewarned of the danger fortify themselves as far as may be against their assaults.

xxxix

There are four classes of idols which beset men's minds. To these for distinction's sake I have assigned names,—calling the first class Idols of the Tribe; the second, Idols of the Cave; the third, Idols of the Market Place; the fourth, Idols of the Theater.

xl

The formation of ideas and axioms by true induction is no doubt the proper remedy to be applied for the keeping off and clearing away of idols. To point them out, however, is of great use, for the doctrine of idols is to the interpretation of nature what the doctrine of the refutation of sophisms is to common logic.

xli

The *Idols of the Tribe* have their foundation in human nature itself, and in the tribe or race of men. For it is a false assertion that the sense of man is the measure of things. On the contrary, all perceptions, as well of the sense as of the mind, are according to the measure of the individual and not according to the measure of the universe. And the human understanding is like a false mirror, which, receiving rays irregularly, distorts and discolors the nature of things by mingling its own nature with it.

xlii

The *Idols of the Cave* are the idols of the individual man. For everyone has a cave or den of his own, which refracts and discolors the light of nature; owing either to his own proper and peculiar nature or to his education and conversation with others; or to the reading of books, and the authority of those whom he esteems and admires; or to the differences of impressions, accordingly as they take place in a mind preoccupied and predisposed or in a mind indifferent and settled; or the like. So that the spirit of man is in fact a thing variable and full of perturbation, and governed as it were by chance. Whence it was well observed by Heraclitus that men look for sciences in their own lesser worlds, and not in the greater or common world.

xliii

There are also idols formed by the intercourse and association of men with each other, which I call *Idols of the Market Place*, on account of the commerce and consort of men there. For it is by discourse that men associate; and words are imposed according to the apprehension of the vulgar. And therefore the ill and unfit choice of words wonderfully obstructs the understanding. Nor do the definitions or explanations wherewith in some things learned men are wont to guard and defend themselves, by any means set the matter right. But words plainly force and overrule the understanding, and throw all into confusion, and lead men away into numberless empty controversies and idle fancies.

xliv

Lastly, there are idols which have immigrated into men's minds from the various dogmas of philosophies, and also from wrong laws of demonstration. These I call *Idols of the Theater*; because in my judgment all the received systems are but so many stage-plays, representing worlds of their own creation after an unreal and scenic fashion. Nor is it only of the systems now in vogue, or only of the ancient sects and philosophies, that I speak: for many more plays of the same kind may yet be composed and in like artificial manner set forth; seeing that errors the most widely different have nevertheless causes for the most part alike. Neither again do I mean this only of entire systems, but also of many principles and axioms in science, which by tradition, credulity, and negligence have come to be received.

xlv

The human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds. And though there be many things in nature which are singular and unmatched, yet it devises for them parallels and conjugates and relatives which do not exist.

xlvi

The human understanding when it has once adopted an opinion (either as being the received opinion or as being agreeable to itself) draws all things else to support and agree with it. And though there be a greater number and weight of instances to be found on the other side, yet these it either neglects and despises, or else by some distinction sets aside and

rejects; in order that by this great and pernicious predetermination the authority of its former conclusions may remain inviolate.

xlvii

The human understanding is moved by those things most which strike and enter the mind simultaneously and suddenly, and so fill the imagination; and then it feigns and supposes all other things to be somehow, though it cannot see how, similar to those few things by which it is surrounded. But for that going to and fro to remote and heterogeneous instances, by which axioms are tried as in the fire, the intellect is altogether slow and unfit, unless it be forced thereto by severe laws and overruling authority.

xlviii

The human understanding is unquiet; it cannot stop or rest, and still presses onward, but in vain. Therefore it is that we cannot conceive of any end or limit to the world; but always as of necessity it occurs to us that there is something beyond. Neither again can it be conceived how eternity has flowed down to the present day: for that distinction which is commonly received of infinity in time past and in time to come can by no means hold; for it would thence follow that one infinity is greater than another, and that infinity is wasting away and tending to become finite. The like subtlety arises touching the infinite divisibility of lines, from the same inability of thought to stop.

xlix

The human understanding is no dry light, but receives an infusion from the will and affections; whence proceed sciences which may be called "sciences as one would." For what a man had rather were true he more readily believes.

1

But by far the greatest hindrance and aberration of the human understanding proceeds from the dullness, incompetency, and deceptions of the senses; in that things which strike the sense outweigh things which do not immediately strike it, though they be more important. Hence it is that speculation commonly ceases where sight ceases, insomuch that of things invisible there is little or no observation. Hence all the working of the spirits inclosed in tangible bodies lies hid and unobserved of men. So also all the more subtle changes of form in the parts of coarser substances are in like manner unobserved. And yet unless these two things just mentioned be searched out and brought to light, nothing great can be achieved in nature, as far as the production of works is concerned.

li

The human understanding is of its own nature prone to abstractions and gives a substance and reality to things which are fleeting. But to resolve nature into abstractions is less to our purpose than to dissect her into parts; as did the school of Democritus, which went further into nature than the rest. Matter rather than forms should be the object of our attention, its configurations and changes of configuration, and simple action, and law of action or motion; for forms are figments of the human mind, unless you will call those laws of action forms.

lii

Such then are the idols which I call *Idols of the Tribe*; and which take their rise either from the homogeneity of the substance of the human spirit, or from its preoccupation, or from its narrowness, or from its restless motion, or from an infusion of the affections, or from the incompetency of the senses, or from the mode of impression.

liii

The *Idols of the Cave* take their rise in the peculiar constitution, mental or bodily, of each individual; and also in education, habit, and accident. Of this kind there is a great number and variety; but I will instance those the pointing out of which contains the most important caution, and which have most effect in disturbing the clearness of the understanding.

liv

Men become attached to certain particular sciences and speculations, either because they fancy themselves the authors and inventors thereof, or because they have bestowed the greatest pains upon them and become most habituated to them. But men of this kind, if they betake themselves to philosophy and contemplations of a general character, distort and color them in obedience to their former fancies; a thing especially to be noticed

in Aristotle, who made his natural philosophy a mere bondservant to his logic, thereby rendering it contentious and well nigh useless.

lv

There is one principal and as it were radical distinction between different minds, in respect of philosophy and the sciences; which is this: that some minds are stronger and apter to mark the differences of things, others to mark their resemblances. The steady and acute mind can fix its contemplations and dwell and fasten on the subtlest distinctions; the lofty and discursive mind recognizes and puts together the finest and most general resemblances. Both kinds however easily err in excess, by catching the one at gradations the other at shadows.

lvi

There are found some minds given to an extreme admiration of antiquity, others to an extreme love and appetite for novelty; but few so duly tempered that they can hold the mean, neither carping at what has been well laid down by the ancients, nor despising what is well introduced by the moderns. This however turns to the great injury of the sciences and philosophy: since these affectations of antiquity and novelty are the humors of partisans rather than judgments; and truth is to be sought for not in the felicity of any age, which is an unstable thing, but in the light of nature and experience, which is eternal. These factions therefore must be abjured, and care must be taken that the intellect be not hurried by them into assent.

lvii

Contemplations of nature and of bodies in their simple form break up and distract the understanding, while contemplations of nature and bodies in their composition and configuration overpower and dissolve the understanding: a distinction well seen in the school of Leucippus and Democritus as compared with the other philosophies. For that school is so busied with the particles that it hardly attends to the structure; while the others are so lost in admiration of the structure that they do not penetrate to the simplicity of nature. These kinds of contemplation should therefore be alternated and taken by turns; that so the understanding may be rendered at once penetrating and comprehensive, and the inconveniences above mentioned, with the idols which proceed from them, may be avoided.

lviii

Let such then be our provision and contemplative prudence for keeping off and dislodging the *Idols of the Cave*, which grow for the most part either out of the predominance of a favorite subject, or out of an excessive tendency to compare or to distinguish, or out of partiality for particular ages, or out of the largeness or minuteness of the objects contemplated. And generally let every student of nature take this as a rule,—that whatever his mind seizes and dwells upon with peculiar satisfaction is to be held in suspicion, and that so much the more care is to be taken in dealing with such questions to keep the understanding even and clear.

lix

But the Idols of the Market Place are the most troublesome of all: idols which have crept into the understanding through the alliances of words and names. For men believe that their reason governs words; but it is also true that words react on the understanding; and this it is that has rendered philosophy and the sciences sophistical and inactive. Now words, being commonly framed and applied according to the capacity of the vulgar, follow those lines of division which are most obvious to the vulgar understanding. And whenever an understanding of greater acuteness or a more diligent observation would alter those lines to suit the true divisions of nature, words stand in the way and resist the change. Whence it comes to pass that the high and formal discussions of learned men end oftentimes in disputes about words and names; with which it would be more prudent to begin, and so by means of definitions reduce them to order. Yet even definitions cannot cure this evil in dealing with natural and material things; since the definitions themselves consist of words, and those words beget others: so that it is necessary to recur to individual instances, and those in due series and order; as I shall say presently when I come to the method and scheme for the formation of notions and axioms.

lx

The idols imposed by words on the understanding are of two kinds. They are either names of things which do not exist, or they are names of things which exist, but yet confused and ill-defined, and hastily and irregularly derived from realities. And this class of idols is more easily expelled, because to get rid of them it is only necessary that all theories should be steadily rejected and dismissed as obsolete.

But the other class, which springs out of a faulty and unskillful abstraction, is intricate and deeply rooted.

lxi

But the *Idols of the Theater* are not innate, nor do they steal into the understanding secretly, but are plainly impressed and received into the mind from the play-books of philosophical systems and the perverted rules of demonstration. To attempt refutations in this case would be merely inconsistent with what I have already said: for since we agree neither upon principles nor upon demonstrations there is no place for argument.

lxii

Idols of the Theater, or of Systems, are many, and there can be and perhaps will be yet many more. For were it not that now for many ages men's minds have been busied with religion and theology; and were it not that civil governments, especially monarchies, have been averse to such novelties, even in matters speculative; so that men labor therein to the peril and harming of their fortunes,—not only unrewarded, but exposed also to contempt and envy: doubtless there would have arisen many other philosophical sects like to those which in great variety flourished once among the Greeks. For as on the phenomena of the heavens many hypotheses may be constructed, so likewise many various dogmas may be set up and established on the phenomena of philosophy. And in the plays of this philosophical theater you may observe the same thing which is found in the theater of the poets, that stories invented for the stage are more compact and elegant, and more as one would wish them to be, than true stories out of history.

So that this parent stock of errors—this false philosophy—is of three kinds; the sophistical, the empirical, and the superstitious.

lxiii

The most conspicuous example of the first class was Aristotle, who corrupted natural philosophy by his logic: fashioning the world out of categories; assigning to the human soul, the noblest of substances, a genus from words of the second intention; doing the business of density and rarity by the frigid distinction of act and power; asserting that single bodies have each a single and proper motion, and that if they participate in any other, then this results from an external cause; and imposing countless other arbitrary restrictions on the nature of things: being always more solicitous to provide an answer to the question and affirm something positive in words, than about the inner truth of things; a failing best shown when his philosophy is compared with other systems of note among the Greeks.

lxiv

But the empirical school of philosophy gives birth to dogmas more deformed and monstrous than the sophistical or rational school. For it has its foundations not in the light of common notions but in the narrowness and darkness of a few experiments. To those therefore who are daily busied with these experiments, and have infected their imagination with them, such a philosophy seems probable and all but certain; to all men else incredible and vain.

lxv

But the corruption of philosophy by superstition and an admixture of theology is far more widely spread, and does the greatest harm, whether to entire systems or to their parts. For the human understanding is obnoxious to the influence of the imagination no less than to the influence of common notions. For the contentious and sophistical kind of philosophy ensnares the understanding; but this kind, being fanciful and tumid and half poetical, misleads it more by flattery. For there is in man an ambition of the understanding, no less than of the will, especially in high and lofty spirits.

lxvi

So much then for the mischievous authorities of systems, which are founded either on common notions, or on a few experiments, or on superstition. It remains to speak of the faulty subject-matter of contemplations, especially in natural philosophy. Now the human understanding is infected by the sight of what takes place in the mechanical arts, in which the alteration of bodies proceeds chiefly by composition or separation, and so imagines that something similar goes on in the universal nature of things. From this source has flowed the fiction of elements. and of their concourse for the formation of natural bodies. Again, when man contemplates nature working freely, he meets with different species of things, of animals, of plants, of minerals; whence he readily passes into the opinion that there are in nature certain primary forms which nature intends to educe, and that the remaining variety proceeds from hindrances and aberrations of nature in the fulfillment of her work, or from the collision of different species and the transplanting of one into another. To the first of these speculations we owe our primary qualities of the elements; to the other our occult properties and specific virtues; and both of them belong to those empty compendia of thought wherein the mind rests, and whereby it is diverted from more solid pursuits. It is to better

purpose that the physicians bestow their labor on the secondary qualities of matter, and the operations of attraction, repulsion, attenuation, conspissation, dilatation, astriction, dissipation, maturation, and the like; and were it not that by those two compendia which I have mentioned they corrupted their correct observations in these other matters,—either reducing them to first qualities and their subtle and incommensurable mixtures, or not following them out with greater and more diligent observation to third and fourth qualities, but breaking off the scrutiny prematurely,—they had made much greater progress. Nor are powers of this kind to be sought for only in the medicines of the human body, but also in the changes of all other bodies.

lxvii

A caution must also be given to the understanding against the intemperance which systems of philosophy manifest in giving or withholding assent; because intemperance of this kind seems to establish idols and in some sort to perpetuate them, leaving no way open to reach and dislodge them.

This excess is of two kinds: the first being manifest in those who are ready in deciding; and render sciences dogmatic and magisterial; the other in those who deny that we can know anything, and so introduce a wandering kind of inquiry that leads to nothing; of which kinds the former subdues, the latter weakens the understanding.

lxviii

So much concerning the several classes of idols, and their equipage: all of which must be renounced and put away with a fixed and solemn determination, and the understanding thoroughly freed and cleansed; the entrance into the kingdom of man, founded on the sciences, being not much other than the entrance into the kingdom of heaven, whereinto none may enter except as a little child.

lxix

But vicious demonstrations are as the strongholds and defenses of idols; and those we have in logic do little else than make the world the bondslave of human thought, and human thought the bondslave of words. Demonstrations truly are in effect the philosophies themselves and the sciences. For such as they are, well or ill established, such are the systems of philosophy and the contemplations which follow. Now in the whole of the process which leads from the sense and objects to axioms and con-

clusions, the demonstrations which we use are deceptive and incompetent. This process consists of four parts, and has as many faults. In the first place, the impressions of the sense itself are faulty; for the sense both fails us and deceives us. But its shortcomings are to be supplied, and its deceptions to be corrected. Secondly, notions are ill drawn from the impressions of the senses, and are indefinite and confused, whereas they should be definite and distinctly bounded. Thirdly, the induction is amiss which infers the principles of sciences by simple enumeration, and does not, as it ought, employ exclusions and solutions (or separations) of nature. Lastly, that method of discovery and proof according to which the most general principles are first established, and then intermediate axioms are tried and proved by them, is the parent of error and the curse of all science.

lxx

But the best demonstration by far is experience, if it go not beyond the actual experiment. For if it be transferred to other cases which are deemed similar, unless such transfer be made by a just and orderly process, it is a fallacious thing. But the manner of making experiments which men now use is blind and stupid. And therefore, wandering and straying as they do with no settled course, and taking counsel only from things as they fall out, they fetch a wide circuit and meet with many matters, but make little progress; and sometimes are full of hope, sometimes are distracted; and always find that there is something beyond to be sought. For it generally happens that men make their trials carelessly, and as it were in play; slightly varying experiments already known, and, if the thing does not answer, growing weary and abandoning the attempt. And even if they apply themselves to experiments more seriously and earnestly and laboriously, still they spend their labor in working out some one experiment, as Gilbert with the magnet, and the chemists with gold,—a course of proceeding not less unskillful in the design than small in the attempt. For no one successfully investigates the nature of a thing in the thing itself; the inquiry must be enlarged, so as to become more general.

lxxi

The sciences which we possess come for the most part from the Greeks. For what has been added by Roman, Arabic, or later writers is not much nor of much importance; and whatever it is, it is built on the foundation of Greek discoveries. Now the wisdom of the Greeks was professorial and much given to disputations; a kind of wisdom most adverse to the inquisition of truth.

lxxii

Nor does the character of the time and age yield much better signs than the character of the country and nation. For at that period there was but a narrow and meager knowledge either of time or place; which is the worst thing that can be, especially for those who rest all on experience. For they had no history, worthy to be called history, that went back a thousand years; but only fables and rumors of antiquity. In our times on the other hand both many parts of the New World and the limits on every side of the Old World are known, and our stock of experience has increased to an infinite amount. Wherefore if we draw signs from the season of their nativity or birth, nothing great can be predicted of those systems of philosophy.

lxxiii

Of all signs there is none more certain or more noble than that taken from fruits. For fruits and works are as it were sponsors and sureties for the truth of philosophies. Now, from all these systems of the Greeks and their ramifications through particular sciences there can hardly after the lapse of so many years be adduced a single experiment which tends to relieve and benefit the condition of man, and which can with truth be referred to the speculations and theories of philosophy.

Some little has indeed been produced by the industry of chemists; but it has been produced accidentally and in passing, or else by a kind of variation of experiments, such as mechanics use; and not by any art or theory; for the theory which they have devised rather confuses the experiments than aids them. They too who have busied themselves with natural magic, as they call it, have but few discoveries to show, and those trifling and imposture-like. Wherefore, as in religion we are warned to show our faith by works, so in philosophy by the same rule the system should be judged of by its fruits, and pronounced frivolous if it be barren; more especially if, in place of fruits of grape and olive, it bear thorns and briars of dispute and contention.

lxxiv

Signs also are to be drawn from the increase and progress of systems and sciences. For what is founded on nature grows and increases; while what is founded on opinion varies but increases not. If therefore those doctrines had not plainly been like a plant torn up from its roots, but had remained attached to the womb of nature and continued to draw nourishment from her, that could never have come to pass which we have

seen now for twice a thousand years; namely, that the sciences stand where they did and remain almost in the same condition; receiving no noticeable increase, but on the contrary, thriving most under their first founder, and then declining. Whereas in the mechanical arts, which are founded on nature and the light of experience, we see the contrary happen, for these are continually thriving and growing, as having in them a breath of life; at first rude, then convenient, afterwards adorned, and at all times advancing.

lxxv

There is still another sign remaining; I mean the confession of the very authorities whom men now follow. For even they who lay down the law on all things so confidently, do still in their more sober moods fall to complaints of the subtlety of nature, the obscurity of things, and the weakness of the human mind. Now if this were all they did, some perhaps of a timid disposition might be deterred from further search, while others of a more ardent and hopeful spirit might be whetted and incited to go on farther. But not content to speak for themselves, whatever is beyond their own or their master's knowledge or reach they set down as beyond the bounds of possibility, and pronounce, as if on the authority of their art, that it cannot be known or done; thus most presumptuously and invidiously turning the weakness of their own discoveries into a calumny on nature herself, and the despair of the rest of the world.

lxxvi

Neither is this other sign to be omitted;—that formerly there existed among philosophers such great disagreement, and such diversities in the schools themselves; a fact which sufficiently shows that the road from the senses to the understanding was not skillfully laid out, when the same groundwork of philosophy was torn and split up into such vague and multifarious errors. And although in these times disagreements and diversities of opinion on first principles and entire systems are for the most part extinguished, still on parts of philosophy there remain innumerable questions and disputes, so that it plainly appears that neither in the systems themselves nor in the modes of demonstration is there anything certain or sound.

lxxvii

And as for the general opinion that in the philosophy of Aristotle at any rate there is great agreement; since after its publication the systems

of older philosophers died away, while in the times which followed nothing better was found; so that it seems to have been so well laid and established as to have drawn both ages in its train; I answer in the first place, that the common notion of the falling off of the old systems upon the publication of Aristotle's works is a false one; for long afterwards, down even to the times of Cicero and subsequent ages, the works of the old philosophers still remained. But in the times which followed, when on the inundation of barbarians into the Roman empire human learning had suffered shipwreck, then the systems of Aristotle and Plato, like planks of lighter and less solid material, floated on the waves of time, and were preserved. Upon the point of consent also men are deceived, if the matter be looked into more keenly. For true consent is that which consists in the coincidence of free judgments, after due examination. But far the greater number of those who have assented to the philosophy of Aristotle have addicted themselves thereto from prejudgment and upon the authority of others; so that it is a following and going along together, rather than consent. But even if it had been a real and widespread consent, still so little ought consent to be deemed a sure and solid confirmation, that it is in fact a strong presumption the other way.

lxxviii

I now come to the causes of these errors, and of so long a continuance in them through so many ages; which are very many and very potent;—that all wonder how these considerations which I bring forward should have escaped men's notice till now, may cease; and the only wonder be, how now at last they should have entered into any man's head and become the subject of his thoughts; which truly I myself esteem as the result of some happy accident, rather than of any excellence of faculty in me; a birth of time rather than a birth of wit. Now, in the first place, those so many ages, if you weigh the case truly, shrink into a very small compass. For out of the five and twenty centuries over which the memory and learning of men extends, you can hardly pick out six that were fertile in sciences or favorable to their development. In times no less than in regions there are wastes and deserts.

lxxix

In the second place there presents itself a cause of great weight in all ways; namely, that during those very ages in which the wits and learning of men have flourished most, or indeed flourished at all, the least part of their diligence was given to natural philosophy. Yet this very philosophy it is that ought to be esteemed the great mother of the sciences. For all

arts and all sciences, if torn from this root, though they may be polished and shaped and made fit for use, yet they will hardly grow.

lxxx

To this it may be added that natural philosophy, even among those who have attended to it, has scarcely ever possessed, especially in these later times, a disengaged and whole man (unless it were some monk studying in his cell, or some gentleman in his country house), but that it has been made merely a passage and bridge to something else. And so this great mother of the sciences has with strange indignity been degraded to the offices of a servant; having to attend on the business of medicine or mathematics, and likewise to wash and imbue youthful and unripe wits with a sort of first dye, in order that they may be the fitter to receive another afterwards. Meanwhile let no man look for much progress in the sciences—especially in the practical part of them—unless natural philosophy be carried on and applied to particular sciences, and particular sciences be carried back again to natural philosophy.

lxxxi

Again there is another great and powerful cause why the sciences have made but little progress; which is this: it is not possible to run a course aright when the goal itself has not been rightly placed. Now the true and lawful goal of the sciences is none other than this: that human life be endowed with new discoveries and powers. But of this the great majority have no feeling, but are merely hireling and professorial; except when it occasionally happens that some workman of acuter wit and covetous of honor applies himself to a new invention; which he mostly does at the expense of his fortunes. But in general, so far are men from proposing to themselves to augment the mass of arts and sciences, that from the mass already at hand they neither take nor look for anything more than what they may turn to use in their lectures, or to gain, or to reputation, or to some similar advantage.

lxxxii

And as men have misplaced the end and goal of the sciences; so again, even if they had placed it right, yet they have chosen a way to it which is altogether erroneous and impassable. And an astonishing thing it is to one who rightly considers the matter, that no mortal should have seriously applied himself to the opening and laying out of a road for the human understanding direct from the sense, by a course of experiment orderly

conducted and well built up; but that all has been left either to the mist of tradition, or the whirl and eddy of argument, or the fluctuations and mazes of chance and of vague and ill-digested experience.

lxxxiii

This evil however has been strangely increased by an opinion or conceit, which though of long standing is vain and hurtful; namely, that the dignity of the human mind is impaired by long and close intercourse with experiments and particulars, subject to sense and bound in matter; especially as they are laborious to search, ignoble to meditate, harsh to deliver, illiberal to practice, infinite in number, and minute in subtlety. So that it has come at length to this, that the true way is not merely deserted, but shut out and stopped up; experience being, I do not say abandoned or badly managed, but rejected with disdain.

lxxxiv

Again, men have been kept back as by a kind of enchantment from progress in the sciences by reverence for antiquity, by the authority of men accounted great in philosophy, and then by general consent.

lxxxv

Nor is it only the admiration of antiquity, authority, and consent that has forced the industry of man to rest satisfied with the discoveries already made; but also an admiration for the works themselves of which the human race has long been in possession. For when a man looks at the variety and the beauty of the provision which the mechanical arts have brought together for men's use, he will certainly be more inclined to admire the wealth of man than to feel his wants: not considering that the original observations and operations of nature are not many nor deeply fetched, and that the rest is but patience, and the subtle and ruled motion of the hand and instruments;—as the making of clocks is certainly a subtle and exact work: their wheels seem to imitate the celestial orbs, and their alternating and orderly motion, the pulse of animals: and yet all this depends on one or two axioms of nature.

lxxxvi

Further, this admiration of men for knowledges and arts,—an admiration in itself weak enough, and well-nigh childish,—has been increased by the craft and artifices of those who have handled and transmitted

sciences. For they set them forth with such ambition and parade, and bring them into the view of the world so fashioned and masked, as if they were complete in all parts and finished. For if you look at the method of them and the divisions, they seem to embrace and comprise everything which can belong to the subject. And although these divisions are ill filled out and are but as empty cases, still to the common mind they present the form and plan of a perfect science. But the first and most ancient seekers after truth were wont, with better faith and better fortune too, to throw the knowledge which they gathered from the contemplation of things, and which they meant to store up for use, into aphorisms; that is, into short and scattered sentences, not linked together by an artificial method; and did not pretend or profess to embrace the entire art. But as the matter now is, it is nothing strange if men do not seek to advance in things delivered to them as long since perfect and complete.

lxxxvii

Moreover the ancient systems have received no slight accession of reputation and credit from the vanity and levity of those who have propounded new ones; especially in the active and practical department of natural philosophy.

lxxxviii

Far more however has knowledge suffered from littleness of spirit and the smallness and slightness of the tasks which human industry has proposed to itself. And what is worst of all, this very littleness of spirit comes with a certain air of arrogance and superiority.

Thus then it is no wonder if noble inventions and worthy of mankind have not been brought to light, when men have been contented and delighted with such trifling and puerile tasks, and have even fancied that in them they have been endeavoring after, if not accomplishing, some great matter.

lxxxix

Neither is it to be forgotten that in every age natural philosophy has had a troublesome adversary and hard to deal with; namely, superstition, and the blind and immoderate zeal of religion.

XC

Again, in the customs and institutions of schools, academies, colleges, and similar bodies destined for the abode of learned men and the cultivation of learning, everything is found adverse to the progress of science.

For the lectures and exercises there are so ordered, that to think or speculate on anything out of the common way can hardly occur to any man. And if one or two have the boldness to use any liberty of judgment, they must undertake the task all by themselves; they can have no advantage from the company of others. And if they can endure this also, they will find their industry and largeness of mind no slight hindrance to their fortune.

XCI

Nay, even if that jealousy were to cease, still it is enough to check the growth of science, that efforts and labors in this field go unrewarded. For it does not rest with the same persons to cultivate sciences and to reward them. The growth of them comes from great wits; the prizes and rewards of them are in the hands of the people, or of great persons, who are but in very few cases even moderately learned. Moreover this kind of progress is not only unrewarded with prizes and substantial benefits; it has not even the advantage of popular applause. For it is a greater matter than the generality of men can take in, and is apt to be overwhelmed and extinguished by the gales of popular opinions. And it is nothing strange if a thing not held in honor does not prosper.

XC11

But by far the greatest obstacle to the progress of science and to the undertaking of new tasks and provinces therein, is found in this-that men despair and think things impossible. For wise and serious men are wont in these matters to be altogether distrustful; considering with themselves the obscurity of nature, the shortness of life, the deceitfulness of the senses, the weakness of the judgment, the difficulty of experiment and the like; and so supposing that in the revolution of time and of the ages of the world the sciences have their ebbs and flows; that at one season they grow and flourish, at another wither and decay, yet in such sort that when they have reached a certain point and condition they can advance no further. If therefore anyone believes or promises more, they think this comes of an ungoverned and unripened mind, and that such attempts have prosperous beginnings, become difficult as they go on, and end in confusion. Now since these are thoughts which naturally present themselves to grave men and of great judgment, we must take good heed that we be not led away by our love for a most fair and excellent object to relax or diminish the severity of our judgment; we must observe diligently what encouragement dawns upon us and from what quarter; and, putting aside the lighter breeze of hope, we must

thoroughly sift and examine those which promise greater steadiness and constancy. Nay, and we must take state-prudence too into our counsels, whose rule is to distrust, and to take the less favorable view of human affairs. I am now therefore to speak touching hope.

xciii

The beginning is from God: for the business which is in hand, having the character of good so strongly impressed upon it, appears manifestly to proceed from God, who is the Author of Good, and the Father of Lights. Now in divine operations even the smallest beginnings lead of a certainty to their end.

xciv

Next comes a consideration of the greatest importance as an argument of hope; I mean that drawn from the errors of past time, and of the ways hitherto trodden. For most excellent was the censure once passed upon a government that had been unwisely administered. "That which is the worst thing in reference to the past, ought to be regarded as best for the future. For if you had done all that your duty demanded, and yet your affairs were no better, you would not have even a hope left you that further improvement is possible. But now, when your misfortunes are owing, not to the force of circumstances, but to your own errors, you may hope that by dismissing or correcting these errors, a great change may be made for the better."

xcv

Those who have handled sciences have been either men of experiment or men of dogmas. The men of experiment are like the ant; they only collect and use: the reasoners resemble spiders, who make cobwebs out of their own substance. But the bee takes a middle course, it gathers its material from the flowers of the garden and of the field, but transforms and digests it by a power of its own. Not unlike this is the true business of philosophy: for it neither relies solely or chiefly on the powers of the mind, nor does it take the matter which it gathers from natural history and mechanical experiments and lay it up in the memory whole, as it finds it; but lays it up in the understanding altered and digested.

xcvi

We have as yet no natural philosophy that is pure; all is tainted and corrupted: in Aristotle's school by logic; in Plato's by natural theology;

in the second school of Platonists, such as Proclus and others, by mathematics, which ought only to give definiteness to natural philosophy, not to generate or give it birth. From a natural philosophy pure and unmixed, better things are to be expected.

xcvii

No one has yet been found so firm of mind and purpose as resolutely to compel himself to sweep away all theories and common notions, and to apply the understanding, thus made fair and even, to a fresh examination of particulars. Thus it happens that human knowledge, as we have it, is a mere medley and ill-digested mass, made up of much credulity and much accident, and also of the childish notions which we at first imbibed.

Now if anyone of ripe age, unimpaired senses, and well-purged mind apply himself anew to experience and particulars, better hopes may be entertained of that man.

xcviii

Now for grounds of experience—since to experience we must come—we have as yet had either none or very weak ones; no search has been made to collect a store of particular observations sufficient either in number, or in kind, or in certainty, to inform the understanding, or in any way adequate. On the contrary, men of learning, but easy withal and idle, have taken for the construction or for the confirmation of their philosophy certain rumors and vague fames or airs of experience, and allowed to these the weight of lawful evidence. And just as if some kingdom or state were to direct its counsels and affairs, not by letters and reports from ambassadors and trustworthy messengers, but by the gossip of the streets; such exactly is the system of management introduced into philosophy with relation to experience.

xcix

Again, even in the great plenty of mechanical experiments, there is yet a great scarcity of those which are of most use for the information of the understanding. For the mechanic, not troubling himself with the investigation of truth, confines his attention to those things which bear upon his particular work, and will not either raise his mind-or stretch out his hand for anything else. But then only will there be good ground of hope for the further advance of knowledge, when there shall be received and gathered together into natural history a variety of experi-

ments, which are of no use in themselves, but simply serve to discover causes and axioms; which I call experimenta lucifera, experiments of light, to distinguish them from those which I call fructifera, experiments of fruit.

c

But not only is a greater abundance of experiments to be sought for and procured, and that too of a different kind from those hitherto tried; an entirely different method, order, and process for carrying on and advancing experience must also be introduced. For experience, when it wanders in its own track, is, as I have already remarked, mere groping in the dark, and confounds men rather than instructs them. But when it shall proceed in accordance with a fixed law, in regular order, and without interruption, then may better things be hoped of knowledge.

ci

But even after such a store of natural history and experience as is required for the work of the understanding, or of philosophy, shall be ready at hand, still the understanding is by no means competent to deal with it offhand and by memory alone; no more than if a man should hope by force of memory to retain and make himself master of the computation of an ephemeris. And yet hitherto more has been done in matter of invention by thinking than by writing; and experience has not yet learned her letters. Now no course of invention can be satisfactory unless it be carried on in writing. But when this is brought into use, and experience has been taught to read and write, better things may be hoped.

cii

Moreover, since there is so great a number and army of particulars, and that army so scattered and dispersed as to distract and confound the understanding, little is to be hoped for from the skirmishings and slight attacks and desultory movements of the intellect, unless all the particulars which pertain to the subject of inquiry shall, by means of Tables of Discovery, apt, well arranged, and as it were animate, be drawn up and marshaled; and the mind be set to work upon the helps duly prepared and digested which these tables supply.

ciii

But after this store of particulars has been set out duly and in order before our eyes, we are not to pass at once to the investigation and discovery of new particulars or works; or at any rate if we do so we must not stop there. For although I do not deny that when all the experiments of all the arts shall have been collected and digested, and brought within one man's knowledge and judgment, the mere transferring of the experiments of one art to others may lead, by means of that experience which I term *literate*, to the discovery of many new things of service to the life and state of man; yet it is no great matter that can be hoped from that: but from the new light of axioms, which having been educed from those particulars by a certain method and rule, shall in their turn point out the way again to new particulars, greater things may be looked for. For our road does not lie on a level, but ascends and descends; first ascending to axioms, then descending to works.

civ

The understanding must not however be allowed to jump and fly from particulars to remote axioms and of almost the highest generality (such as the first principles, as they are called, of arts and things), and taking stand upon them as truths that cannot be shaken, proceed to prove and frame the middle axioms by reference to them: which has been the practice hitherto; the understanding being not only carried that way by a natural impulse, but also by the use of syllogistic demonstration trained and inured to it. But then, and then only, may we hope well of the sciences, when in a just scale of ascent, and by successive steps not interrupted or broken, we rise from particulars to lesser axioms; and then to middle axioms, one above the other; and last of all to the most general.

cv

In establishing axioms, another form of induction must be devised than has hitherto been employed; and it must be used for proving and discovering not first principles only, but also the lesser axioms, and the middle, and indeed all. For the induction which proceeds by simple enumeration is childish; its conclusions are precarious, and exposed to peril from a contradictory instance; and it generally decides on too small a number of facts, and on those only which are at hand. But the induction which is to be available for the discovery and demonstration of sciences and arts, must analyze nature by proper rejections and exclusions; and then, after a sufficient number of negatives, come to a conclusion on the affirmative instances: which has not yet been done or even attempted, save only by Plato, who does indeed employ this form of induction to a certain extent for the purpose of discussing definitions and ideas. But in order to furnish this induction or demonstration well and duly for

its work, very many things are to be provided which no mortal has yet thought of; insomuch that greater labor will have to be spent in it than has hitherto been spent on the syllogism. And this induction must be used not only to discover axioms, but also in the formation of notions. And it is in this induction that our chief hope lies.

cvi

But in establishing axioms by this kind of induction, we must also examine and try whether the axiom so established be framed to the measure of those particulars only from which it is derived, or whether it be larger and wider. And if it be larger and wider, we must observe whether by indicating to us new particulars it confirm that wideness and largeness as by a collateral security: that we may not either stick fast in things already known, or loosely grasp at shadows and abstract forms; not at things solid and realized in matter. And when this process shall have come into use, then at last shall we see the dawn of a solid hope.

cvii

And here also should be remembered what was said above concerning the extending of the range of natural philosophy to take in the particular sciences, and the referring or bringing back of the particular sciences to natural philosophy; that the branches of knowledge may not be severed and cut off from the stem. For without this the hope of progress will not be so good.

cviii

So much then for the removing of despair and the raising of hope through the dismissal or rectification of the errors of past time. We must now see what else there is to ground hope upon. And this consideration occurs at once—that if many useful discoveries have been made by accident or upon occasion, when men were not seeking for them but were busy about other things; no one can doubt but that when they apply themselves to seek and make this their business, and that too by method and in order and not by desultory impulses, they will discover far more.

cix

Another argument of hope may be drawn from this—that some of the inventions already known are such as before they were discovered it could hardly have entered any man's head to think of; they would have been simply set aside as impossible. For in conjecturing what may be men set before them the example of what has been, and divine of the

new with an imagination preoccupied and colored by the old; which way of forming opinions is very fallacious; for streams that are drawn from the springheads of nature do not always run in the old channels.

There is therefore much ground for hoping that there are still laid up in the womb of nature many secrets of excellent use, having no affinity or parallelism with anything that is now known, but lying entirely out of the beat of the imagination, which have not yet been found out. They too no doubt will some time or other, in the course and revolution of many ages, come to light of themselves, just as the others did; only by the method of which we are now treating they can be speedily and suddenly and simultaneously presented and anticipated.

CX

But we have also discoveries to show of another kind, which prove that noble inventions may be lying at our very feet, and yet mankind may step over without seeing them.

But such is the infelicity and unhappy disposition of the human mind in this course of invention, that it first distrusts and then despises itself: first will not believe that any such thing can be found out; and when it is found out, cannot understand how the world should have missed it so long. And this very thing may be justly taken as an argument of hope; namely, that there is a great mass of inventions still remaining, which not only by means of operations that are yet to be discovered, but also through the transferring, comparing, and applying of those already known, by the help of that learned experience of which I spoke, may be deduced and brought to light.

cxi

There is another ground of hope that must not be omitted. Let men but think over their infinite expenditure of understanding, time, and means on matters and pursuits of far less use and value; whereof if but a small part were directed to sound and solid studies, there is no difficulty that might not be overcome. This I thought good to add, because I plainly confess that a collection of history natural and experimental, such as I conceive it and as it ought to be, is a great, I may say a royal work, and of much labor and expense.

cxii

Meantime, let no man be alarmed at the multitude of particulars, but let this rather encourage him to hope. For the particular phenomena of art and nature are but a handful to the inventions of the wit, when disjoined and separated from the evidence of things. Moreover this road has an issue in the open ground and not far off; the other has no issue at all, but endless entanglement. For men hitherto have made but short stay with experience, but passing her lightly by, have wasted an infinity of time on meditations and glosses of the wit. But if someone were by that could answer our questions and tell us in each case what the fact in nature is, the discovery of all causes and sciences would be but the work of a few years.

cxiii

Moreover I think that men may take some hope from my own example. And this I say not by way of boasting, but because it is useful to say it. If there be any that despond, let them look at me, that being of all men of my time the most busied in affairs of state, and a man of health not very strong, and in this course altogether a pioneer, following in no man's track, nor sharing these counsels with anyone, have nevertheless by resolutely entering on the true road, and submitting my mind to things, advanced these matters, as I suppose, some little way. And then let them consider what may be expected from men abounding in leisure, and from association of labors, and from successions of ages: the rather because it is not a way over which only one man can pass at a time, but one in which the labors and industries of men may with the best effect be first distributed and then combined. For then only will men begin to know their strength, when instead of great numbers doing all the same things, one shall take charge of one thing and another of another.

cxiv

Lastly, even if the breath of hope which blows on us from that new continent were fainter than it is and harder to perceive; yet the trial must by all means be made. For there is no comparison between that which we may lose by not trying and by not succeeding; since by not rying we throw away the chance of an immense good; by not succeeding we only incur the loss of a little human labor. But as it is, it appears to me from what has been said, and also from what has been left unsaid, that there is hope enough and to spare, not only to make a bold man try, but also to make a sober-minded and wise man believe.

CXV

Concerning the grounds then for putting away despair, which has been one of the most powerful causes of delay and hindrance to the

progress of knowledge, I have now spoken. And this also concludes what I had to say touching the *signs* and *causes* of the errors, sluggishness, and ignorance which have prevailed; especially since the more subtle causes, which do not fall under popular judgment and observation, must be referred to what has been said on the idols of the human mind.

It is time therefore to proceed to the art itself and rule of interpreting nature; still however there remains something to be premised. For whereas in this first book of aphorisms I proposed to prepare men's minds as well for understanding as for receiving what is to follow; now that I have purged and swept and leveled the floor of the mind, it remains that I place the mind in a good position and as it were in a favorable aspect towards what I have to lay before it. For in a new matter, it is not only the strong preoccupation of some old opinion that tends to create a prejudice, but also a false preconception or prefiguration of the new thing which is presented. I will endeavor therefore to impart sound and true opinions as to the things I propose, although they are to serve only for the time and by way of interest (so to speak), till the thing itself, which is the principal, be fully known.

cxvi

First, then, I must request men not to suppose that after the fashion of ancient Greeks, and of certain moderns, as Telesius, Patricius, Severinus, I wish to found a new sect in philosophy. For this is not what I am about; nor do I think that it matters much to the fortunes of men what abstract notions one may entertain concerning nature and the principles of things; and no doubt many old theories of this kind can be revived and many new ones introduced; just as many theories of the heavens may be supposed, which agree well enough with the phenomena and yet differ with each other.

cxvii

And as I do not seek to found a school, so neither do I hold out offers or promises of particular works. It may be thought indeed, that I who make such frequent mention of works and refer everything to that end, should produce some myself by way of earnest. But my course and method, as I have often clearly stated and would wish to state again, is this—not to extract works from works or experiments from experiments, but from works and experiments to extract causes and axioms, and again from those causes and axioms new works and experiments, as a legitimate interpreter of nature. And although in my tables of discovery, and also in the examples of particulars (which I shall adduce in the second part),

and moreover in my observations on the history, any reader of even moderate sagacity and intelligence will everywhere observe indications and outlines of many noble works; still I candidly confess that the natural history which I now have, whether collected from books or from my own investigations, is neither sufficiently copious nor verified with sufficient accuracy to serve the purposes of legitimate interpretation.

cxviii

It remains for me to say a few words touching the excellency of the end in view. Had they been uttered earlier, they might have seemed like idle wishes; but now that hopes have been raised and unfair prejudices removed, they may perhaps have greater weight. Also, if I had finished all myself, and had no occasion to call in others to help and take part in the work, I should even now have abstained from such language, lest it might be taken as a proclamation of my own deserts. But since I want to quicken the industry and rouse and kindle the zeal of others, it is fitting that I put men in mind of some things.

In the first place then, the introduction of famous discoveries appears to hold by far the first place among human actions; and this was the judgment of the former ages.

Again, discoveries are as it were new creations, and imitations of God's works.

Again, let a man only consider what a difference there is between the life of men in the most civilized province of Europe, and in the wildest and most barbarous districts of New India; he will feel it be great enough to justify the saying that "man is a god to man," not only in regard of aid and benefit, but also by a comparison of condition. And this difference comes not from soil, not from climate, not from race, but from the arts.

Again, it is well to observe the force and virtue and consequences of discoveries; and these are to be seen nowhere more conspicuously than in those three which were unknown to the ancients, and of which the origin, though recent, is obscure and inglorious; namely, printing, gunpowder, and the magnet. For these three have changed the whole face and state of things throughout the world; the first in literature, the second in warfare, the third in navigation; whence have followed innumerable changes; insomuch that no empire, no sect, no star seems to have exerted greater power and influence in human affairs than these mechanical discoveries.

Lastly, if the debasement of arts and sciences to purposes of wickedness, luxury, and the like, be made a ground of objection, let no one be moved thereby. For the same may be said of all earthly goods; of wit, courage, strength, beauty, wealth, light itself, and the rest. Only let the

human race recover the right over nature which belongs to it by divine bequest, and let power be given it; the exercise thereof will be governed by sound reason and true religion.

cxix

And now it is time for me to propound the art itself of interpreting nature; in which, although I conceive that I have given true and most useful precepts, yet I do not say either that it is absolutely necessary or that it is perfect. For I am of opinion that if men had ready at hand a just history of nature and experience, and labored diligently thereon; and if they could bind themselves to two rules,—the first, to lay aside received opinions and notions; and the second, to refrain the mind for a time from the highest generalizations, and those next to them,—they would be able by the native and genuine force of the mind, without any other art, to fall into my form of interpretation. For interpretation is the true and natural work of the mind when freed from impediments. It is true however that by my precepts everything will be in more readiness, and much more sure.

Nor again do I mean to say that no improvement can be made upon these. On the contrary, I that regard the mind not only in its own faculties but in its connection with things, must needs hold that the art of discovery may advance as discoveries advance.

The Second Book of Aphorisms Concerning the Interpretation of Nature and the Kingdom of Man

APHORISM

i

On a given body to generate and superinduce a new nature or new natures, is the work and aim of human power. Of a given nature to discover the form, or true specific difference, or nature-engendering nature, or source of emanation, is the work and aim of human knowledge. Subordinate to these primary works are two others that are secondary and of inferior mark: to the former, the transformation of concrete bodies, so far as this is possible; to the latter, the discovery, in every case of generation and motion, of the latent process carried on from the manifest efficient and the manifest material to the form which is engendered; and in like manner the discovery of the latent configuration of bodies at rest and not in motion.

ii

In what an ill condition human knowledge is at the present time, is apparent even from the commonly received maxims. It is a correct position that "true knowledge is knowledge by causes." And causes again are not improperly distributed into four kinds: the material, the formal, the efficient, and the final. But of these the final cause rather corrupts than advances the sciences, except such as have to do with human action. The discovery of the formal is despaired of. The efficient and the material are but slight and superficial, and contribute little, if anything, to true and active science.

iii

If a man be acquainted with the cause of any nature (as whiteness or heat) in certain subjects only, his knowledge is imperfect; and if he be able to superinduce an effect on certain substances only (of those susceptible of such effect), his power is in like manner imperfect. Now if a man's knowledge be confined to the efficient and material causes, he may arrive at new discoveries in reference to substances in some degree similar to one another, and selected beforehand; but he does not touch the deeper boundaries of things. But whosoever is acquainted with forms, embraces the unity of nature in substances the most unlike; and is able therefore to detect and bring to light things never yet done, and such as neither the vicissitudes of nature, nor industry in experimenting, nor accident itself, would ever have brought into act, and which would never have occurred to the thought of man. From the discovery of forms therefore results truth in speculation and freedom in operation.

iv

Although the roads to human power and to human knowledge lie close together, and are nearly the same, nevertheless on account of the pernicious and inveterate habit of dwelling on abstractions, it is safer to begin and raise the sciences from those foundations which have relation to practice, and to let the active part itself be as the seal which prints and determines the contemplative counterpart. We must therefore consider, if a man wanted to generate and superinduce any nature upon a given body, what kind of rule or direction or guidance he would most wish for, and express the same in the simplest and least abstruse language.

For a true and perfect rule of operation then the direction will be that it be certain, free, and disposing or leading to action. And this is the same thing with the discovery of the true form. For the form of a nature is such that, given the form, the nature infallibly follows. Therefore it

is always present when the nature is present, and universally implies it, and is constantly inherent in it. Again, the form is such that if it be taken away, the nature infallibly vanishes. Therefore it is always absent when the nature is absent, and implies its absence, and inheres in nothing else. Lastly, the true form is such that it deduces the given nature from some source of being which is inherent in more natures, and which is better known in the natural order of things than the form itself. For a true and perfect axiom of knowledge then the direction and precept will be, that another nature be discovered which is convertible with the given nature, and yet is a limitation of a more general nature, as of a true and real genus. Now these two directions, the one active, the other contemplative, are one and the same thing; and what in operation is most useful, that in knowledge is most true.

ν

The rule or axiom for the transformation of bodies is of two kinds. The first regards a body as a troop or collection of simple natures. For the principle of generating some one simple nature is the same as that of generating many; only that a man is more fettered and tied down in operation if more are required, by reason of the difficulty of combining into one so many natures, which do not readily meet except in the beaten and ordinary paths of nature. It must be said however that this mode of operation proceeds from what in nature is constant and eternal and universal, and opens broad roads to human power, such as human thought can scarcely comprehend or anticipate.

The second kind of axiom, which is concerned with the discovery of the Latent Process, proceeds not by simple natures, but by compound bodies, as they are found in nature in its ordinary course.

vi

But this Latent Process, of which I speak, is quite another thing than men, preoccupied as their minds now are, will easily conceive. For what I understand by it is not certain measures or signs or successive steps of process in bodies, which can be seen; but a process perfectly continuous, which for the most part escapes the sense.

vii

In like manner the investigation and discovery of the Latent Configuration in bodies is a new thing, no less than the discovery of the Latent Process and of the Form. For as yet we are but lingering in the

outer courts of nature, nor are we preparing ourselves a way into her inner chambers. Yet no one can endow a given body with a new nature, or successfully and aptly transmute it into a new body, unless he has attained a competent knowledge of the body so to be altered or transformed. Otherwise he will run into methods which, if not useless, are at any rate difficult and perverse and unsuitable to the nature of the body on which he is operating. It is clear therefore that to this also a way must be opened and laid out.

viii

Nor shall we thus be led to the doctrine of atoms, which implies the hypothesis of a vacuum and that of the unchangeableness of matter (both false assumptions); we shall be led only to real particles, such as really exist. Nor again is there any reason to be alarmed at the subtlety of the investigation, as if it could not be disentangled: on the contrary, the nearer it approaches to simple natures, the easier and plainer will everything become; the business being transferred from the complicated to the simple, from the incommensurable to the commensurable, from surds to rational quantities, from the infinite and vague to the finite and certain,—as in the case of the letters of the alphabet and the notes of music. And inquiries into nature have the best result when they begin with physics and end in mathematics. Again, let no one be afraid of high numbers or minute fractions. For in dealing with numbers it is as easy to set down or conceive a thousand as one, or the thousandth part of an integer as an integer itself.

ix

From the two kinds of axioms which have been spoken of, arises a just division of philosophy and the sciences; taking the received terms in a sense agreeable to my own views. Thus, let the investigation of forms, which are (in the eye of reason at least, and in their essential law) eternal and immutable, constitute metaphysics; and let the investigation of the Efficient Cause, and of Matter, and of the Latent Process, and the Latent Configuration (all of which have reference to the common and ordinary course of nature, not to her eternal and fundamental laws) constitute physics. And to these let there be subordinate two practical divisions: to physics, mechanics; to metaphysics, what I call magic, on account of the broadness of the ways it moves in, and its greater command over nature.

x

Having thus set up the mark of knowledge, we must go on to precepts, and that in the most direct and obvious order. Now my directions for the interpretation of nature embrace two generic divisions: the one how to educe and form axioms from experience; the other how to deduce and derive new experiments from axioms. The former again is divided into three ministrations: a ministration to the sense, a ministration to the memory, and a ministration to the mind or reason.

For first of all we must prepare a Natural and Experimental History, sufficient and good; and this is the foundation of all; for we are not to imagine or suppose, but to discover, what nature does or may be made to do.

But natural and experimental history is so various and diffuse, that it confounds and distracts the understanding, unless it be ranged and presented to view in a suitable order. We must therefore form Tables and Arrangements of Instances, in such a method and order that the understanding may be able to deal with them.

And even when this is done, still the understanding, if left to itself and its own spontaneous movements, is incompetent and unfit to form axioms, unless it be directed and guarded. Therefore in the third place we must use Induction, true and legitimate induction, which is the very key of interpretation. But of this, which is the last, I must speak first, and then go back to the other ministrations.

The investigation of Forms proceeds thus: a nature being given, we must first of all have a muster or presentation before the understanding of all known instances which agree in the same nature, though in substances the most unlike. And such collection must be made in the manner of a history, without premature speculation, or any great amount of subtlety. For example, let the investigation be into the Form of heat:

Instances Agreeing in the Nature of Heat

- 1. The rays of the sun, especially in summer and at noon.
- 2. The rays of the sun reflected and condensed, as between mountains, or on walls, and most of all in burning-glasses and mirrors.
 - 3. Fiery meteors.
 - 4. Burning thunderbolts.
 - 5. Eruptions of flames from the cavities of mountains.
 - 6. All flame.
 - 7. Ignited solids.
 - 8. Natural warm-baths.
 - 9. Liquids boiling or heated.
- 10. Hot vapors and fumes, and the air itself, which conceives the most powerful and glowing heat, if confined, as in reverbatory furnaces.

This table I call the Table of Essence and Presence.

xii

Secondly, we must make a presentation to the understanding of instances in which the given nature is wanting; because the Form, as stated above, ought no less to be absent when the given nature is absent, than present when it is present. But to note all these would be endless.

The negatives should therefore be subjoined to the affirmatives, and the absence of the given nature inquired of in those subjects only that are most akin to the others in which it is present and forthcoming. This I call the *Table of Deviation*, or of *Absence in Proximity*.

Instances in Proximity where the Nature of Heat is Absent

1. The rays of the moon and of stars and comets are not found to be hot to the touch; indeed the severest colds are observed to be at the full moons.

The larger fixed stars however, when passed or approached by the sun, are supposed to increase and give intensity to the heat of the sun; as is the case when the sun is in the sign Leo, and in the Dog-days.

- 2. The rays of the sun in what is called the middle region of the air do not give heat; for which there is commonly assigned not a bad reason, viz., that that region is neither near enough to the body of the sun from which the rays emanate, nor to the earth from which they are reflected.
- 3. The reflection of the rays of the sun in regions near the polar circles is found to be very weak and ineffective in producing heat; insomuch that the Dutch who wintered in Nova Zembla, and expected their ship to be freed from the obstructions of the mass of ice which hemmed her in by the beginning of July, were disappointed of their expectation, and obliged to take to their boat.
- 4. Try the following experiment. Take a glass fashioned in a contrary manner to a common burning-glass, and placing it between your hand and the rays of the sun, observe whether it diminishes the heat of the sun, as a burning-glass increases and strengthens it. For it is evident in the case of optical rays that according as the glass is made thicker or thinner in the middle as compared with the sides, so do the objects seen through it appear more spread or more contracted. Observe therefore whether the same is the case with heat.
- 5. Let the experiment be carefully tried, whether by means of the most powerful and best constructed burning-glasses, the rays of the moon can be so caught and collected as to produce even the least degree of warmth. But should this degree of warmth prove too subtle and weak to be perceived and apprehended by the touch, recourse must be had to those glasses which indicate the state of the atmosphere in respect of heat and cold. Thus, let the rays of the moon fall through a burning-

glass on the top of a glass of this kind, and then observe whether there ensues a sinking of the water through warmth.

- 6. Let a burning-glass also be tried with a heat that does not emit rays or light, as that of iron or stone heated but not ignited, boiling water, and the like; and observe whether there ensues an increase of the heat, as in the case of the sun's rays.
 - 7. Let a burning-glass also be tried with common flame.
- 8. Comets (if we are to reckon these too among meteors) are not found to exert a constant or manifest effect in increasing the heat of the season, though it is observed that they are often followed by droughts. Moreover bright beams and pillars and openings in the heavens appear more frequently in winter than in summer time, and chiefly during the intensest cold, but always accompanied by dry weather. Lightning, however, and coruscations and thunder, seldom occur in the winter, but about the time of great heat. Falling stars, as they are called, are commonly supposed to consist rather of some bright and lighted viscous substance, than to be of any strong fiery nature. But on this point let further inquiry be made.
- 9. There are certain coruscations which give light but do not burn. And these always come without thunder.
- 10. Eructations and eruptions of flame are found no less in cold than in warm countries, as in Iceland and Greenland. In cold countries too the trees are in many cases more inflammable and more pitchy and resinous than in warm; as the fir, pine, and others. The situations however and the nature of the soil in which eruptions of this kind usually occur have not been carefully enough ascertained to enable us to subjoin a Negative to this Affirmative Instance.

xiii

Thirdly, we must make a presentation to the understanding of instances in which the nature under inquiry is found in different degrees, more or less; which must be done by making a comparison either of its increase and decrease in the same subject, or of its amount in different subjects, as compared one with another. For since the Form of a thing is the very thing itself, and the thing differs from the form no otherwise than as the apparent differs from the real, or the external from the internal, or the thing in reference to man from the thing in reference to the universe; it necessarily follows that no nature can be taken as the true form, unless it always decrease when the nature in question decreases, and in like manner always increase when the nature in question increases. This Table therefore I call the Table of Degrees or the Table of Comparison.

Table of Degrees or Comparison in Heat

I will therefore first speak of those substances which contain no degree at all of heat perceptible to the touch, but seem to have a certain potential heat only, or disposition and preparation for hotness. After that I shall proceed to substances which are hot actually, and to the touch, and to their intensities and degrees.

- 1. In solid and tangible bodies we find nothing which is in its nature originally hot. For no stone, metal, sulphur, fossil, wood, water, or carcass of animal is found to be hot. And the hot water in baths seems to be heated by external causes; whether it be by flame or subterraneous fire, such as is thrown up from Aetna and many other mountains, or by the conflict of bodies, as heat is caused in the dissolutions of iron and tin. There is therefore no degree of heat palpable to the touch in animate substances; but they differ in degree of cold, wood not being equally cold with metal.
- 2. As far however as potential heat and aptitude for flame is concerned, there are many inanimate substances found strongly disposed thereto, as sulphur, naphtha, rock oil.
- 3. Substances once hot, as horse-dung from animal heat, and lime or perhaps ashes and soot from fire, retain some latent remains of their former heat. Hence certain distillations and resolutions of bodies are made by burying them in horse-dung, and heat is excited in lime by sprinkling it with water.
- 4. In the vegetable creation we find no plant or part of plant (as gum or pitch) which is warm to the human touch. But yet, as stated above, green herbs gain warmth by being shut up; and to the internal touch, as the palate or stomach, and even to external parts, after a little time, as in plasters and ointments, some vegetables are perceptibly warm and others cold.
- 5. In the parts of animals after death or separation from the body, we find nothing warm to the human touch. Not even horse-dung, unless enclosed and buried, retains its heat. But yet all dung seems to have a potential heat, as is seen in the fattening of the land. In like manner carcasses of animals have some such latent and potential heat; insomuch that in burying grounds, where burials take place daily, the earth collects a certain hidden heat, which consumes a body newly laid in it much more speedily than pure earth. We are told too that in the East there is discovered a fine soft texture, made of the down of birds, which by an innate force dissolves and melts butter when lightly wrapped in it.
- 6. Substances which fatten the soil, as dung of all kinds, chalk, seasand, salt, and the like, have some disposition to heat.
 - 7. All putrefaction contains in itself certain elements of a slight heat,

though not so much as to be perceived by the touch. For not even those substances which on putrefaction turn to animalculae, as flesh, cheese, &c., feel warm to the touch; no more does rotten wood, which shines in the dark. Heat however in putrid substances sometimes betrays itself by foul and powerful odors.

- 8. The first degree of heat therefore among those substances which feel hot to the touch, seems to be the heat of animals, which has a pretty great extent in its degrees. For the lowest, as in insects, is hardly perceptible to the touch; but the highest scarce equals the sun's heat in the hottest countries and seasons, nor is it too great to be borne by the hand. It is said however of Constantius, and some others of a very dry constitution and habit of body, that in violent fevers they became so hot as somewhat to burn the hand that touched them.
- 9. Animals increase in heat by motion and exercise, wine, feasting, venus, burning fevers, and pain.
- ro. When attacked by intermittent fevers, animals are at first seized with cold and shivering, but soon after they become exceedingly hot, which is their condition from the first in burning and pestilential fevers.

xiv

How poor we are in history anyone may see from the foregoing tables; where I not only insert sometimes mere traditions and reports in place of history proved and instances certain, but am also forced to use the words "Let trial be made," or "Let it be further inquired."

χv

The work and office of these three tables I call the Presentation of Instances to the Understanding. Which presentation having been made, Induction itself must be set at work; for the problem is, upon a review of the instances, all and each, to find such a nature as is always present or absent with the given nature, and always increases and decreases with it; and which is, as I have said, a particular case of a more general nature. Now if the mind attempt this affirmatively from the first, as when left to itself it is always wont to do, the result will be fancies and guesses and notions ill defined and axioms that must be mended every day; unless like the schoolmen we have a mind to fight for what is false; though doubtless these will be better or worse according to the faculties and strength of the understanding which is at work. To God, truly, the Giver and Architect of Forms, and it may be to the angels and higher intelligences, it belongs to have an affirmative knowledge of Forms immediately, and from the first contemplation. But this assuredly is

more than man can do, to whom it is granted only to proceed at first by negatives, and at last to end in affirmatives, after exclusion has been exhausted.

xvi

We must make therefore a complete solution and separation of nature, not indeed by fire, but by the mind, which is a kind of divine fire. The first work therefore of true induction is the rejection or exclusion of the several natures which are not found in some instance where the given nature is present, or are found in some instance where the given nature is absent, or are found to increase in some instance when the given nature decreases, or to decrease when the given nature increases. Then indeed after the rejection and exclusion has been duly made, there will remain at the bottom, all light opinions vanishing into smoke, a Form affirmative, solid and true and well defined. This is quickly said; but the way to come at it is winding and intricate. I will endeavor however not to overlook any of the points which may help us towards it.

xvii

But when I assign so prominent a part to Forms, I cannot too often warn and admonish men against applying what I say to those forms to which their thoughts and contemplations have hitherto been accustomed.

For in the first place I do not at present speak of Compound Forms, which are, as I have remarked, combinations of simple natures according to the common course of the universe; as of the lion, eagle, rose, gold, and the like. It will be time to treat of these when we come to the Latent Processes and Latent Configurations, and the discovery of them, as they are found in what are called substances or natures concrete.

And even in the case of simple natures I would not be understood to speak of abstract Forms and Ideas, either not defined in matter at all, or ill defined. For when I speak of Forms, I mean nothing more than those laws and determinations of absolute actuality, which govern and constitute any simple nature, as heat, light, weight, in every kind of matter and subject that is susceptible of them. Thus the Form of heat or the Form of light is the same thing as the Law of heat or the Law of light. Nor indeed do I ever allow myself to be drawn away from things themselves and the operative part. And therefore when I say in the investigation of the Form of heat, "Reject rarity," or "Rarity does not belong to the form of heat," it is the same as if I said, "It is possible to superinduce heat on a dense body," or "It is possible to take away or keep out heat from a rare body."

But if anyone conceive that my Forms too are of a somewhat abstract

nature, because they mix and combine things heterogeneous (for the heat of heavenly bodies and the heat of fire seem to be very heterogeneous: so do the fixed red of the rose or the like, and the apparent red in the rainbow, the opal, or the diamond; so again do the different kinds of death, death by drowning, by hanging, by stabbing, by apoplexy, by atrophy; and yet they agree severally in the nature of heat, redness, death); if anyone, I say, be of this opinion, he may be assured that his mind is held in captivity by custom, by the gross appearance of things, and by men's opinions. For it is most certain that these things, however heterogeneous and alien from each other, agree in the Form or Law which governs heat, redness, and death; and that the power of man cannot possibly be emancipated and freed from the common course of nature, and expanded and exalted to new efficients and new modes of operation, except by the revelation and discovery of Forms of this kind. And yet, when I have spoken of this union of nature, which is the point of most importance, I shall proceed to the divisions and veins of nature, as well the ordinary as those that are more inward and exact, and speak of them in their place.

xviii

I must now give an example of the Exclusion or Rejection of natures which by the Tables of Presentation are found not to belong to the Form of heat; observing in the meantime that not only each table suffices for the rejection of any nature, but even any one of the particular instances contained in any of the tables. For it is manifest from what has been said that any one contradictory instance overthrows a conjecture as to the Form. But nevertheless for clearness' sake and that the use of the tables may be more plainly shown, I sometimes double or multiply an exclusion.

An Example of Exclusion, or Rejection of Natures from the Form of Heat

- 1. On account of the rays of the sun, reject the nature of the elements.
- 2. On account of common fire, and chiefly subterraneous fires (which are the most remote and most completely separate from the rays of heavenly bodies), reject the nature of heavenly bodies.
- 3. On account of the warmth acquired by all kinds of bodies (minerals, vegetables, skin of animals, water, oil, air, and the rest) by mere approach to a fire, or other hot body, reject the distinctive or more subtle texture of bodies.
- 4. On account of ignited iron and other metals, which communicate heat to other bodies and yet lose none of their weight or substance, reject the communication or admixture of the substance of another hot body.

- 5. On account of boiling water and air, and also on account of metals and other solids that receive heat but not to ignition or red heat, reject light or brightness.
- 6. On account of the rays of the moon and other heavenly bodies, with the exception of the sun, also reject light and brightness.
- 7. By a comparison of ignited iron and the flame of spirit of wine (of which ignited iron has more heat and less brightness, while the flame of spirit of wine has more brightness and less heat), also reject light and brightness.
- 8. On account of ignited gold and other metals, which are of the greatest density as a whole, reject rarity.
- 9. On account of air, which is formed for the most part cold and yet remains rare, also reject rarity.
- 10. On account of ignited iron, which does not swell in bulk, but keeps within the same visible dimensions, reject local or expansive motion of the body as a whole.

There are other natures beside these; for these tables are not perfect, but meant only for examples.

All and each of the above-mentioned natures do not belong to the Form of heat. And from all of them man is freed in his operations on heat.

xix

In the process of Exclusion are laid the foundations of true Induction, which however is not completed till it arrives at an Affirmative. Nor is the Exclusive part itself at all complete, nor indeed can it possibly be so at first. For Exclusion is evidently the rejection of simple natures; and if we do not yet possess sound and true notions of simple natures, how can the process of Exclusion be made accurate? Now some of the abovementioned notions (as that of the nature of the elements, of the nature of heavenly bodies, of rarity) are vague and ill-defined. I therefore, well knowing and nowise forgetting how great a work I am about, do not rest satisfied with the precepts I have laid down; but proceed further to devise and supply more powerful aids for the use of the understanding; which I shall now subjoin. And assuredly in the Interpretation of Nature the mind should by all means be so prepared and disposed, that while it rests and finds footing in due stages and degrees of certainty, it may remember withal that what it has before it depends in great measure upon what remains behind.

 $\mathbf{x}\mathbf{x}$

And yet since truth will sooner come out from error than from confusion, I think it expedient that the understanding should have permission,

after the three Tables of First Presentation (such as I have exhibited) have been made and weighed, to make an essay of the Interpretation of Nature in the affirmative way; on the strength both of the instances given in the tables, and of any others it may meet with elsewhere. Which kind of essay I call the *indulgence of the understanding*, or the *commencement of interpretation*, or the *First Vintage*.

First Vintage concerning the Form of Heat

Let this then be the First Vintage or Commencement of Interpretation concerning the Form of Heat, made by way of indulgence to the understanding.

Now from this our First Vintage it follows that the Form or true definition of heat (heat, that is, in relation to the universe, not simply in relation to man) is in few words as follows: Heat is a motion, expansive, restrained, and acting in its strife upon the smaller particles of bodies. But the expansion is thus modified: while it expands all ways, it has at the same time an inclination upwards. And the struggle in the particles is modified also: it is not sluggish, but hurried and with violence.

Viewed with reference to operation it is the same thing. For the direction is this: If in any natural body you can excite a dilating or expanding motion, and can so repress this motion and turn it back upon itself that the dilation shall not proceed equably, but have its way in one part and be counteracted in another, you will undoubtedly generate heat;—without taking into account whether the body be elementary (as it is called) or subject to celestial influence; whether it be luminous or opaque; rare or dense; locally expanded or confined within the bounds of its first dimension; verging to dissolution or remaining in its original state; animal, vegetable, or mineral, water, oil or air, or any other substance whatever susceptible of the above-mentioned motion. Sensible heat is the same thing; only it must be considered with reference to the sense. Let us now proceed to further aids.

XXI

The Tables of First Presentation and the Rejection or process of Exclusion being completed, and also the First Vintage being made thereupon, we are to proceed to the other helps of the understanding in the Interpretation of Nature and true and perfect Induction. In propounding which, I mean, when Tables are necessary, to proceed upon the Instances of Heat and Cold; but when a small number of examples will suffice, I shall proceed at large; so that the inquiry may be kept clear, and yet more room be left for the exposition of the system.

xxii

Among Prerogative Instances I will place first Solitary Instances. Those are Solitary Instances which exhibit the nature under investigation in subjects which have nothing in common with other subjects except that nature; or, again, which do not exhibit the nature under investigation in subjects which resemble other subjects in every respect except in not having that nature. For it is clear that such instances make the way short, and accelerate and strengthen the process of exclusion; so that a few of them are as good as many.

For instance, if we are inquiring into the nature of Color, prisms, crystals, which show colors not only in themselves but externally on a wall, dews, &c., are Solitary Instances. For they have nothing in common with the colors fixed in flowers, colored stones, metals, woods, &c., except the color. From which we easily gather that color is nothing more than a modification of the image of light received upon the object, resulting in the former case from the different degrees of incidence, in the latter from the various textures and configurations of the body. These instances are Solitary in respect of resemblance.

Again, in the same investigation, the distinct veins of white and black in marble, and the variegation of color in flowers of the same species, are Solitary Instances. For the black and white streaks in marble, or the spots of pink and white in a pink, agree in everything almost except the color. From which we easily gather that color has little to do with the intrinsic nature of a body, but simply depends on the coarser and as it were mechanical arrangement of the parts. These instances are Solitary in respect of difference. Both kinds I call Solitary Instances, or Ferine, to borrow a term from astronomers.

xxiii

Among Prerogative Instances I will next place Migratory Instances. They are those in which the nature in question is in the process of being produced when it did not previously exist, or on the other hand of disappearing when it existed before. And therefore, in either transition, such instances are always twofold, or rather it is one instance in motion or passage, continued till it reaches the opposite state. Such instances not only accelerate and strengthen the exclusive process, but also drive the affirmative or Form itself into a narrow compass. For the Form of a thing must necessarily be something which in the course of this migration is communicated, or on the other hand which in the course of this migration is removed and destroyed. And though every exclusion promotes the affirmative, yet this is done more decidedly when it occurs in the same than in different subjects. And the betrayal of the form in a single in-

stance leads the way (as is evident from all that has been said) to the discovery of it in all. And the simpler the Migration, the more must the instance be valued. Besides Migratory Instances are of great use with a view to operation; because in exhibiting the form in connection with that which causes it to be or not to be, they supply a clear direction for practice in some cases; whence the passage is easy to the cases that lie next. There is however in these instances a danger which requires caution; viz., lest they lead us to connect the Form too much with the efficient, and so possess the understanding, or at least touch it, with a false opinion concerning the Form, drawn from a view of the efficient. But the efficient is always understood to be merely the vehicle that carries the Form. This is a danger however easily remedied by the process of exclusion legitimately conducted.

I must now give an example of a Migratory Instance. Let the nature to be investigated be Whiteness; an instance migrating to production or existence is glass whole and pounded. Again, simple water and water agitated into froth. For glass and water in their simple state are transparent, not white; whereas pounded glass and water in froth are white, not transparent. We must therefore inquire what has happened to the glass of water from this Migration. For it is obvious that the Form of Whiteness is communicated and conveyed by that pounding of the glass and that agitation of the water. We find, however, that nothing has been added except the breaking up of the glass and water into small parts, and the introduction of air. But we have made no slight advance to the discovery of the Form of Whiteness when we know that two bodies, both transparent but in a greater or less degree (viz., air and water, or air and glass), do when mingled in small portions together exhibit whiteness, through the unequal refraction of the rays of light.

But an example must at the same time be given of the danger and caution to which I alluded. For at this point it might readily suggest itself to an understanding led astray by efficient causes of this kind, that air is always required for the Form of Whiteness, or that Whiteness is generated by transparent bodies only; notions entirely false, and refuted by numerous exclusions. Whereas it will be found that (setting air and the like aside) bodies entirely even in the particles which affect vision are transparent, bodies simply uneven are white; bodies uneven and in a compound yet regular texture are all colors except black; while bodies uneven and in a compound, irregular, and confused texture are black. Here then I have given an example of an Instance Migrating to production or existence in the proposed nature of Whiteness. An Instance Migrating to destruction in the same nature of Whiteness, is froth or snow in dissolution. For the water puts off Whiteness and puts on transparency, on returning to its integral state without air.

Nor must I by any means omit to mention that under Migratory Instances are to be included not only those which are passing towards production and destruction, but also those which are passing towards increase and decrease. Thus paper, which is white when dry, but when wetted (that is, when air is excluded and water introduced) is less white and approaches nearer to the transparent, is analogous to the above-given Instances.

xxiv

After Prerogative Instances I will put in the third place Striking Instances, which I also call Shining Instances, or Instances Freed and Predominant. They are those which exhibit the nature in question naked and standing by itself, and also in its exaltation or highest degree of power; as being disenthralled and freed from all impediments, or at any rate by virtue of its strength dominant over, suppressing and coercing them. For since every body contains in itself many forms of natures united together in a concrete state, the result is that they severally crush, depress, break, and enthrall one another, and thus the individual forms are obscured. But certain subjects are found wherein the required nature appears more in its vigor than in others, either through the absence of impediments or the predominance of its own virtue. And instances of this kind strikingly display the Form. At the same time in these instances also we must use caution, and check the hurry of the understanding. For whatever displays the Form too conspicuously, and seems to force it on the notice of the understanding, should be held suspect, and recourse be had to a rigid and careful exclusion.

PRINCIPLES OF PHILOSOPHY

by RENÉ DESCARTES

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RENÉ DESCARTES

1596-1650

When René Descartes was born, March 31, 1596, the thinking world was in great confusion. Medievalism with its assurances and its simple theological and cosmological systems had been challenged and shaken to its depths by Renaissance scientists. Religious men were fearful that the foundations of the religious life would be swept away and morality would have no certain moorings. Keen minds everywhere were seeking certainty, and the scientists assured them that only in their sciences could this certainty be found.

Thus the scene was set for the entrance of the man who could discover certainty in the midst of complete doubt, who could assert with perfect confidence, "I think, therefore I am," and who from this assertion could build an entire philosophy which would serve as a foundation for religion and morality.

A child of delicate physique but of strenuous mind—his father called him "my little philosopher"—Descartes did not spend his time in the sports of other boys, but devoted himself to study and meditation. At eight he entered the Jesuit college of La Flèche, where he remained until he was sixteen. During this time he developed the habit of meditating in bed, a practice which he continued throughout his life. He began early to show great promise and openly criticized the authority of tradition and of his teachers. He studied physics and philosophy according to the scholastic system, but devoted much time to mathematics, which soon became his foremost love.

After his graduation from college he went to Paris and entered the brilliant social circles of that city. Here he met

several famous personalities of the time. Among these were the mathematician Claude Mydorge and Father Mersenne of the order of Minim friars. These men became fast friends of Descartes and exerted considerable influence upon his thinking.

Dissatisfied with Parisian life, Descartes abandoned his social activities for a while and took up a military career. This he did, he tells us, so that he might "study the great book of the world." He served under Maurice of Orange in Holland, and under the Elector of Bavaria in Germany. But, despite his preoccupation with military affairs, he devoted a part of each day to the study of mathematics.

While in winter quarters at Newburg, November 10, 1619, Descartes experienced a mental crisis which "revealed" to him the general method of his philosophy. It was on the eve of St. Martin's day, he tells us, that he "was filled with enthusiasm, and discovered the foundations of a marvelous science." He secluded himself in his room for several days and devoted himself to thinking out the ideas which had come to him on this eventful day.

The next ten years he spent in military service, travel, and study; and then, in the spring of 1629, he moved to Holland, where he lived until 1649, devoting himself to the examination of truth, to writing, and to carrying on a voluminous correspondence with friends throughout Europe. Many of his letters during this period were written to Mersenne and to Princess Elizabeth, eldest daughter of the deposed Elector Palatine, who lived at The Hague. It was to her that he dedicated his *Principles of Philosophy*.

Holland at this time was the home of a brilliant group of men devoted to creative work in many fields. Dutch navigators were dominating world trade, Rembrandt was painting at his best, and Grotius, Vossius, and the elder Heinsius were leading the philosophic thought of the times. Many of these individuals were frequent visitors to Descartes's reception room and took a keen interest in the researches of this scientistphilosopher.

Early in this period Descartes wrote Le Monde (The World)—a book in which he advanced the then revolutionary theory that the earth was in motion. But he hesitated to publish this book because he saw how Galileo had been persecuted for a similar idea, and therefore abandoned the idea of giving the work to the public. He had the manuscript hidden

away and told only a few close friends of its existence. The public did not see *Le Monde* until after Descartes's death.

Nevertheless, other writings published by Descartes resulted in his condemnation by the Church on the charge of infidelity and atheism. His attempt to prove the existence of God seemed to many churchmen to be meddling with matters which should be left to faith. Many biblical scholars attacked him, and some of his best ideas are to be found in the replies which he gave to their criticisms.

In 1644 the *Principles of Philosophy* appeared in Amsterdam. In this book Descartes was careful not to offend the Church. He rejected the Copernican theory in name but clung to it in principle; and he concluded the book with a statement: "I submit all my opinions to the authority of the Church." But this did not help him. His philosophy had offended the traditions of many a conservative group. In some circles the mere mention of his name was a high offense.

In Sweden, however, thanks to the interest of Queen Christina, who corresponded with the philosopher and to whom his *Passions of the Mind* was dedicated, Descartes was popular. In 1649 he accepted an invitation to the Swedish court. A vessel of the royal navy carried him to his destination, and a royal reception awaited him on his arrival.

But the climate of Sweden was too severe for a man of Descartes's frail constitution. His friend Pierre Chanut, the French ambassador to the court of Sweden, had fallen ill. Descartes attended him constantly, with the result that Chanut recovered but Descartes contracted the same disease—inflammation of the lungs—and died on February 1, 1650.

Only after his death did Descartes receive the honors rightfully due him. His philosophy spread throughout Europe. He was buried in a Catholic cemetery in Sweden, where his ashes remained for sixteen years. They were then taken to France and laid in the Church of Saint Geneviève du Mont, the modern Pantheon. In 1819 the ashes were again removed and interred at Saint Germain-des-Prés, where they still repose.

Descartes has been called "the father of modern philosophy." This philosophy, as developed in his *Discourse on Method* and his *Meditations*, is based upon "the method of mathematics," to quote his own words, "as applied to philosophy." To begin with, declares Descartes, we must take nothing for granted—we must accept nothing as true. We must look into the secret of the universe with an open mind.

And what do we discover? One certain, solid fact. "The fact of my thinking reveals to me something that thinks." Cogito, ergo sum. I think, therefore I am. This is the one fact I know—I exist.

But who is this I that exists? The answer to this is, a Thinking Thing, or a Mind. "I know that I am a substance whose entire nature it is to think and for whose existence there is no need of any place, nor does it depend on any material thing. . . . The soul (or mind) by which I am what I am, is entirely distinct from my body . . . and even if the body were not, the soul would not cease to be what it is."

And thus Descartes establishes, as he believes, the one certain fact of existence—the existence of the soul.

Does this lead, inquires Descartes, to any other facts? Yes, he replies—two other facts: the presence of my body and the existence of God.

PRINCIPLES OF PHILOSOPHY

PART ONE: OF THE PRINCIPLES OF HUMAN KNOWLEDGE

I. That in order to seek truth, it is necessary once in the course of our life to doubt, as far as possible, of all things.

As we were at one time children, and as we formed various judgments regarding the objects presented to our senses, when as yet we had not the entire use of our reason, numerous prejudices stand in the way of our arriving at the knowledge of truth; and of these it seems impossible for us to rid ourselves, unless we undertake, once in our lifetime, to doubt of all those things in which we may discover even the smallest suspicion of uncertainty.

II. That we ought also to consider as false all that is doubtful.

Moreover, it will be useful likewise to esteem as false the things of which we shall be able to doubt, that we may with greater clearness discover what possesses most certainty and is the easiest to know.

III. That we ought not meanwhile to make use of doubt in the conduct of life.

In the meantime, it is to be observed that we are to avail ourselves of this general doubt only while engaged in the contemplation of truth. For, as far as concerns the conduct of life, we are very frequently obliged to follow opinions merely probable, or even sometimes, though of two courses of action we may not perceive more probability in the one than in the other, to choose one or other, seeing the opportunity of acting would not unfrequently pass away before we could free ourselves from our doubts.

IV. Why we may doubt of sensible things.

Accordingly, since we now only design to apply ourselves to the investigation of truth, we will doubt, first, whether of all the things that have ever fallen under our senses, or which we have ever imagined, any one really exists; in the first place, because we know by experience that the senses sometimes err, and it would be imprudent to trust too much to what has even once deceived us; secondly, because in dreams we per-

petually seem to perceive or imagine innumerable objects which have no existence. And to one who has thus resolved upon a general doubt, there appear no marks by which he can with certainty distinguish sleep from the waking state.

· V. Why we may also doubt of mathematical demonstrations.

We will also doubt of the other things we have before held as most certain, even of the demonstrations of mathematics, and of their principles which we have hitherto deemed self-evident; in the first place, because we have sometimes seen men fall into error in such matters, and admit as absolutely certain and self-evident what to us appeared false, but chiefly because we have learnt that God who created us is all-powerful; for we do not yet know whether perhaps it was his will to create us so that we are always deceived, even in the things we think we know best: since this does not appear more impossible than our being occasionally deceived, which, however, as observation teaches us, is the case. And if we suppose that an all-powerful God is not the author of our being, and that we exist of ourselves or by some other means, still, the less powerful we suppose our author to be, the greater reason will we have for believing that we are not so perfect as that we may not be continually deceived.

VI. That we possess a free will, by which we can withhold our assent from what is doubtful, and thus avoid error.

But meanwhile, whoever in the end may be the author of our being, and however powerful and deceitful he may be, we are nevertheless conscious of a freedom, by which we can refrain from admitting to a place in our belief aught that is not manifestly certain and undoubted, and thus guard against ever being deceived.

VII. That we cannot doubt of our existence while we doubt, and that this is the first knowledge we acquire when we philosophise in order.

While we thus reject all of which we can entertain the smallest doubt, and even imagine that it is false, we easily indeed suppose that there is neither God, nor sky, nor bodies, and that we ourselves even have neither hands nor feet, nor, finally, a body; but we cannot in the same way suppose that we are not while we doubt of the truth of these things; for there is a repugnance in conceiving that what thinks does not exist at the very time when it thinks. Accordingly, the knowledge, I think, therefore I am, is the first and most certain that occurs to one who philosophises orderly.

VIII. That we hence discover the distinction between the mind and the body, or between a thinking and corporeal thing.

And this is the best mode of discovering the nature of the mind, and its distinctness from the body: for examining what we are, while supposing, as we now do, that there is nothing really existing apart from our thought, we clearly perceive that neither extension, nor figure, nor local motion, nor anything similar that can be attributed to body, pertains to

our nature, and nothing save thought alone; and, consequently, that the notion we have of our mind precedes that of any corporeal thing, and is more certain, seeing we still doubt whether there is any body in existence, while we already perceive that we think.

IX. What thought is.

By the word thought, I understand all that which so takes place in us that we of ourselves are immediately conscious of it; and, accordingly, not only to understand, to will, to imagine, but even to perceive, are here the same as to think. For if I say, I see, or, I walk, therefore I am; and if I understand by vision or walking the act of my eyes or of my limbs, which is the work of the body, the conclusion is not absolutely certain, because, as is often the case in dreams, I may think that I see or walk, although I do not open my eyes or move from my place, and even, perhaps, although I have no body: but, if I mean the sensation itself, or consciousness of seeing or walking, the knowledge is manifestly certain, because it is then referred to the mind, which alone perceives or is conscious that it sees or walks.

X. That the notions which are simplest and self-evident are obscured by logical definitions; and that such are not to be reckoned among the cognitions acquired by study [but as born with us].

I do not here explain several other terms which I have used, or design to use in the sequel, because their meaning seems to me sufficiently self-evident. And I frequently remarked that philosophers erred in attempting to explain, by logical definitions, such truths as are most simple and self-evident; for they thus only rendered them more obscure. And when I said that the proposition, I think, therefore I am, is of all others the first and most certain which occurs to one philosophising orderly, I did not therefore deny that it was necessary to know what thought, existence, and certitude are, and the truth that, in order to think it is necessary to be, and the like; but, because these are the most simple notions, and such as of themselves afford the knowledge of nothing existing, I did not judge it proper there to enumerate them.

XI. How we can know our mind more clearly than our body.

But now that it may be discerned how the knowledge we have of the mind not only precedes, and has greater certainty, but is even clearer, than that we have of the body, it must be remarked, as a matter that is highly manifest by the natural light, that to nothing no affections or qualities belong; and, accordingly, that where we observe certain affections, there a thing or substance to which these pertain is necessarily found. The same light also shows us that we know a thing or substance more clearly in proportion as we discover in it a greater number of qualities. Now, it is manifest that we remark a greater number of qualities in our mind than in any other thing; for there is no occasion on which we know anything

whatever when we are not at the same time led with much greater certainty to the knowledge of our own mind. For example, if I judge that there is an earth because I touch or see it, on the same ground, and with still greater reason, I must be persuaded that my mind exists; for it may be, perhaps, that I think I touch the earth while there is none in existence; but it is not possible that I should so judge, and my mind which thus judges not exist; and the same holds good of whatever object is presented to our mind.

XII. How it happens that every one does not come equally to know this.

Those who have not philosophised in order have had other opinions on this subject, because they never distinguished with sufficient care the mind from the body. For, although they had no difficulty in believing that they themselves existed, and that they had a higher assurance of this than of any other thing, nevertheless, as they did not observe that by themselves, they ought here to understand their minds alone; and since, on the contrary, they rather meant their bodies which they saw with their eyes, touched with their hands, and to which they erroneously attributed the faculty of perception, they were prevented from distinctly apprehending the nature of the mind.

XIII. In what sense the knowledge of other things depends upon the knowledge of God.

But when the mind, which thus knows itself but is still in doubt as to all other things, looks around on all sides, with a view to the farther extension of its knowledge, it first of all discovers within itself the ideas of many things; and while it simply contemplates them, and neither affirms nor denies that there is anything beyond itself corresponding to them, it is in no danger of erring. The mind also discovers certain common notions out of which it frames various demonstrations that carry conviction to such a degree as to render doubt of their truth impossible, so long as we give attention to them. For example, the mind has within itself ideas of numbers and figures, and it has likewise among its common notions the principle that if equals be added to equals the wholes will be equal, and the like; from which it is easy to demonstrate that the three angles of a triangle are equal to two right angles, etc. Now, so long as we attend to the premises from which this conclusion and others similar to it were deduced, we feel assured of their truth; but, as the mind cannot always think of these with attention, when it has the remembrance of a conclusion without recollecting the order of its deduction, and is uncertain whether the author of its being has created it of a nature that is liable to be deceived, even in what appears most evident, it perceives that there is just ground to distrust the truth of such conclusions, and that it cannot possess any certain knowledge until it has discovered its author.

XIV. That we may validly infer the existence of God from necessary existence being comprised in the concept we have of him.

When the mind afterwards reviews the different ideas that are in it, it discovers what is by far the chief among them—that of a Being omniscient, all-powerful, and absolutely perfect; and it observes that in this idea there is contained not only possible and contingent existence, as in the ideas of all other things which it clearly perceives, but existence absolutely necessary and eternal. And just as because, for example, the equality of its three angles to two right angles is necessarily comprised in the idea of a triangle, the mind is firmly persuaded that the three angles of a triangle are equal to two right angles; so, from its perceiving necessary and eternal existence to be comprised in the idea which it has of an all-perfect Being, it ought manifestly to conclude that this all-perfect Being exists.

XV. That necessary existence is not in the same way comprised in the notions which we have of other things, but merely contingent existence.

The mind will be still more certain of the truth of this conclusion, if it consider that it has no idea of any other thing in which it can discover that necessary existence is contained; for, from this circumstance alone, it will discern that the idea of an all-perfect Being has not been framed by itself, and that it does not represent a chimera, but a true and immutable nature, which must exist since it can only be conceived as necessarily existing.

XVI. That prejudices hinder many from clearly knowing the necessity of the existence of God.

Our mind would have no difficulty in assenting to this truth, if it were, first of all, wholly free from prejudices; but as we have been accustomed to distinguish, in all other things, essence from existence, and to imagine at will many ideas of things which neither are nor have been, it easily happens, when we do not steadily fix our thoughts on the contemplation of the all-perfect Being, that a doubt arises as to whether the idea we have of him is not one of those which we frame at pleasure, or at least of that class to whose essence existence does not pertain.

XVII. That the greater objective perfection there is in our idea of a thing, the greater also must be the perfection of its cause.

When we further reflect on the various ideas that are in us, it is easy to perceive that there is not much difference among them, when we consider them simply as certain modes of thinking, but that they are widely different, considered in reference to the objects they represent; and that their causes must be so much the more perfect according to the degree of objective perfection contained in them. For there is no difference between this and the case of a person who has the idea of a machine, in the

construction of which great skill is displayed, in which circumstances we have a right to inquire how he came by this idea, whether, for example, he somewhere saw such a machine constructed by another, or whether he was so accurately taught the mechanical sciences, or is endowed with such force of genius, that he was able of himself to invent it, without having elsewhere seen anything like it; for all the ingenuity which is contained in the idea objectively only, or as it were in a picture, must exist at least in its first and chief cause, whatever that may be, not only objectively or representatively, but in truth formally or eminently.

XVIII. That the existence of God nay be again inferred from the above.

Thus, because we discover in our minds the idea of God, or of an all-perfect Being, we have a right to inquire into the source whence we derive it; and we will discover that the perfections it represents are so immense as to render it quite certain that we could only derive it from an all-perfect Being; that is, from a God really existing. For it is not only manifest by the natural light that nothing cannot be the cause of anything whatever, and that the more perfect cannot arise from the less perfect, so as to be thereby produced as by its efficient and total cause, but also that it is impossible we can have the idea or representation of anything whatever, unless there be somewhere, either in us or out of us, an original which comprises, in reality, all the perfections that are thus represented to us; but, as we do not in any way find in ourselves those absolute perfections of which we have the idea, we must conclude that they exist in some nature different from ours, that is, in God, or at least that they were on 2 in him; and it most manifestly follows that they are still there.

XIX. That, although we may not comprehend the nature of God, there is yet nothing which we know so clearly as his perfections.

This will appear sufficiently certain and manifest to those who have been accustomed to contemplate the idea of God, and to turn their thoughts to his infinite perfections; for, although we may not comprehend them, because it is of the nature of the infinite not to be comprehended by what is finite, we nevertheless conceive them more clearly and distinctly than material objects, for this reason, that, being simple, and unobscured by limits, they occupy our mind more fully.

XX. That we are not the cause of ourselves, but that this is God, and consequently that there is a God.

But, because every one has not observed this, and because, when we have an idea of any machine in which great skill is displayed, we usually know with sufficient accuracy the manner in which we obtained it, and as we cannot even recollect when the idea we have of a God was communicated to us by him, seeing it was always in our minds, it is still necessary that we should continue our review, and make inquiry after our author,

possessing, as we do, the idea of the infinite perfections of a God: for it is in the highest degree evident by the natural light, that that which knows something more perfect than itself, is not the source of its own being, since it would thus have given to itself all the perfections which it knows; and that, consequently, it could draw its origin from no other being than from him who possesses in himself all those perfections, that is, from God.

XXI. That the duration alone of our life is sufficient to demonstrate the existence of God.

The truth of this demonstration will clearly appear, provided we consider the nature of time, or the duration of things; for this is of such a kind that its parts are not mutually dependent, and never co-existent; and, accordingly, from the fact that we now are, it does not necessarily follow that we shall be a moment afterwards, unless some cause, viz., that which first produced us, shall, as it were, continually reproduce us, that is, conserve us. For we easily understand that there is no power in us by which we can conserve ourselves, and that the being who has so much power as to conserve us out of himself, must also by so much the greater reason conserve himself, or rather stand in need of being conserved by no one whatever, and, in fine, be God.

XXII. That in knowing the existence of God, in the manner here explained, we likewise know all his attributes, as far as they can be known by the natural light alone.

There is the great advantage in proving the existence of God in this way, viz., by his idea, that we at the same time know what he is, as far as the weakness of our nature allows; for, reflecting on the idea we have of him which is born with us, we perceive that he is eternal, omniscient, omnipotent, the source of all goodness and truth, creator of all things, and that, in fine, he has in himself all that in which we can clearly discover any infinite perfection or good that is not limited by any imperfection.

XXIII. That God is not corporeal, and does not perceive by means of senses as we do, or will the evil of sin.

For there are indeed many things in the world that are to a certain extent imperfect or limited, though possessing also some perfection; and it is accordingly impossible that any such can be in God. Thus, looking to corporeal nature, since divisibility is included in local extension, and this indicates imperfection, it is certain that God is not body. And although in men it is to some degree a perfection to be capable of perceiving by means of the senses, nevertheless since in every sense there is passivity which indicates dependency, we must conclude that God is in no manner possessed of senses, and that he only understands and wills, not, however, like us, by acts in any way distinct, but always by an act that is one,

identical, and the simplest possible, understands, wills, and operates all, that is, all things that in reality exist; for he does not will the evil of sin, seeing this is but the negation of being.

XXIV. That in passing from the knowledge of God to the knowledge of the creatures, it is necessary to remember that our understanding is finite, and the power of God infinite.

But as we know that God alone is the true cause of all that is or can be, we will doubtless follow the best way of philosophising, if, from the knowledge we have of God himself, we pass to the explication of the things which he has created, and essay to deduce it from the notions that are naturally in our minds, for we will thus obtain the most perfect science, that is, the knowledge of effects through their causes. But that we may be able to make this attempt with sufficient security from error, we must use the precaution to bear in mind as much as possible that God, who is the author of things, is infinite, while we are wholly finite.

XXV. That we must believe all that God has revealed, although it may surpass the reach of our faculties.

Thus, if perhaps God reveal to us or others, matters concerning himself which surpass the natural powers of our mind, such as the mysteries of the incarnation and of the trinity, we will not refuse to believe them, although we may not clearly understand them; nor will we be in any way surprised to find in the immensity of his nature, or even in what he has created, many things that exceed our comprehension.

XXVI. That it is not needful to enter into disputes regarding the infinite, but merely to hold all that in which we can find no limits as indefinite, such as the extension of the world, the divisibility of the parts of matter, the number of the stars, etc.

We will thus never embarrass ourselves by disputes about the infinite, seeing it would be absurd for us who are finite to undertake to determine anything regarding it, and thus as it were to limit it by endeavouring to comprehend it. We will accordingly give ourselves no concern to reply to those who demand whether the half of an infinite line is also infinite, and whether an infinite number is even or odd, and the like, because it is only such as imagine their minds to be infinite who seem bound to entertain questions of this sort. And, for our part, looking to all those things in which in certain senses we discover no limits, we will not, therefore, affirm that they are infinite, but will regard them simply as indefinite. Thus, because we cannot imagine extension so great that we cannot still conceive greater, we will say that the magnitude of possible things is indefinite, and because a body cannot be divided into parts so small that each of these may not be conceived as again divided into others still smaller, let us regard quantity as divisible into parts whose number is indefinite; and

as we cannot imagine so many stars that it would seem impossible for God to create more, let us suppose that their number is indefinite, and so in other instances.

XXVII. What difference there is between the indefinite and the infinite.

And we will call those things indefinite rather than infinite, with the view of reserving to God alone the appellation of infinite; in the first place, because not only do we discover in him alone no limits on any side, but also because we positively conceive that he admits of none; and in the second place, because we do not in the same way positively conceive that other things are in every part unlimited, but merely negatively admit that their limits, if they have any, cannot be discovered by us.

XXVIII. That we must examine, not the final, but the efficient, causes of created things.

Likewise, finally, we will not seek reasons of natural things from the end which God or nature proposed to himself in their creation, for we ought not to presume so far as to think that we are sharers in the counsels of Deity, but, considering him as the efficient cause of all things, let us endeavour to discover by the natural light which he has planted in us, applied to those of his attributes of which he has been willing we should have some knowledge, what must be concluded regarding those effects we perceive by our senses; bearing in mind, however, what has been already said, that we must only confide in this natural light so long as nothing contrary to its dictates is revealed by God himself.

XXIX. That God is not the cause of our errors.

The first attribute of God which here falls to be considered, is that he is absolutely veracious and the source of all light, so that it is plainly repugnant for him to deceive us, or to be properly and positively the cause of the errors to which we are consciously subject; for although the address to deceive seems to be some mark of subtlety of mind among men, yet without doubt the will to deceive only proceeds from malice or from fear and weakness, and consequently cannot be attributed to God.

XXX. That consequently all which we clearly perceive is true, and that we are thus delivered from the doubts above proposed.

Whence it follows, that the light of nature, or faculty of knowledge given us by God, can never compass any object which is not true, in as far as it attains to a knowledge of it, that is, in as far as the object is clearly and distinctly apprehended. For God would have merited the appellation of a deceiver if he had given us this faculty perverted, and such as might lead us to take falsity for truth. Thus the highest doubt is removed, which arose from our ignorance on the point as to whether perhaps our nature was such that we might be deceived even in those

things that appear to us the most evident. The same principle ought also to be of avail against all the other grounds of doubting that have been already enumerated. For mathematical truths ought now to be above suspicion, since these are of the clearest. And if we perceive anything by our senses, whether while awake or asleep, we will easily discover the truth, provided we separate what is clear and distinct in the knowledge from what is obscure and confused. There is no need that I should here say more on this subject; and what follows will serve to explain it still more accurately.

XXXI. That our errors are, in respect of God, merely negations, but, in respect of ourselves, privations.

But as it happens that we frequently fall into error, although God is no deceiver, if we desire to inquire into the origin and cause of our errors, with a view to guard against them, it is necessary to observe that they depend less on our understanding than on our will, and that they have no need of the actual concourse of God, in order to their production; so that, when considered in reference to God, they are merely negations, but in reference to ourselves, privations.

XXXII. That there are only two modes of thinking in us, viz., the perception of the understanding and the action of the will.

For all the modes of thinking of which we are conscious may be referred to two general classes, the one of which is the perception or operation of the understanding, and the other the volition or operation of the will. Thus, to perceive by the senses, to imagine, and to conceive things purely intelligible, are only different modes of perceiving; but to desire, to be averse from, to affirm, to deny, to doubt, are different modes of willing.

XXXIII. That we never err unless when we judge of something which we do not sufficiently apprehend.

When we apprehend anything we are in no danger of error, if we refrain from judging of it in any way; and even when we have formed a judgment regarding it, we would never fall into error, provided we gave our assent only to what we clearly and distinctly perceived; but the reason why we are usually deceived is that we judge without possessing an exact knowledge of that of which we judge.

XXXIV. That the will as well as the understanding is required for judging.

I admit that the understanding is necessary for judging, there being no room to suppose that we can judge of that which we in no way apprehend; but the will also is required in order to our assenting to what we have in any degree perceived. It is not necessary, however, at least to form any judgment whatever, that we have an entire and perfect apprehension of a thing; for we may assent to many things of which we have only a very obscure and confused knowledge.

XXXV. That the will is of greater extension than the understanding, and is thus the source of our errors.

Further, the perception of the intellect extends only to the few things that are presented to it, and is always very limited: the will, on the other hand, may, in a certain sense, be said to be infinite, because we observe nothing that can be the object of the will of any other, even of the unlimited will of God, to which ours cannot also extend, so that we easily carry it beyond the objects we clearly perceive; and when we do this, it is not wonderful that we happen to be deceived.

XXXVI. That our errors cannot be imputed to God.

But although God has not given us an omniscient understanding, he is not on this account to be considered in any wise the author of our errors, for it is of the nature of created intellect to be finite, and of finite intellect not to embrace all things.

XXXVII. That the chief perfection of man is his being able to act freely or by will, and that it is this which renders him worthy of praise or blame.

That the will should be the more extensive is in harmony with its nature; and it is a high perfection in man to be able to act by means of it, that is, freely; and thus in a peculiar way to be the master of his own actions, and merit praise or blame. For self-acting machines are not commended because they perform with exactness all the movements for which they were adapted, seeing their motions are carried on necessarily; but the maker of them is praised on account of the exactness with which they were framed, because he did not act of necessity, but freely; and, on the same principle, we must attribute to ourselves something more on this account, that when we embrace truth, we do so not of necessity, but freely.

XXXVIII. That error is a defect in our mode of acting, not in our nature; and that the faults of their subjects may be frequently attributed to other masters, but never to God.

It is true, that as often as we err, there is some defect in our mode of action or in the use of our liberty, but not in our nature, because this is always the same, whether our judgments be true or false. And although God could have given to us such perspicacity of intellect that we should never have erred, we have, notwithstanding, no right to demand this of him; for, although with us he who was able to prevent evil and did not is held guilty of it, God is not in the same way to be reckoned responsible for our errors because he had the power to prevent them, inasmuch as the dominion which some men possess over others has been instituted for the purpose of enabling them to hinder those under them from doing evil, whereas the dominion which God exercises over the universe is perfectly absolute and free. For this reason we ought to thank him for the goods he

has given us, and not complain that he has not blessed us with all which we know it was in his power to impart.

XXXIX. That the liberty of our will is self-evident.

Finally, it is so manifest that we possess a free will, capable of giving or withholding its assent, that this truth must be reckoned among the first and most common notions which are born with us. This, indeed, has already very clearly appeared, for when essaying to doubt of all things we went so far as to suppose even that he who created us employed his limitless power in deceiving us in every way, we were conscious nevertheless of being free to abstain from believing what was not in every respect certain and undoubted. But that of which we are unable to doubt at such a time is as self-evident and clear as anything we can ever know.

XL. That it is likewise certain that God has foreordained all things. But because what we have already discovered of God, gives us the assurance that his power is so immense that we would sin in thinking ourselves capable of ever doing anything which he had not ordained beforehand, we should soon be embarrassed in great difficulties if we undertook to harmonise the pre-ordination of God with the freedom of our will, and endeavoured to comprehend both truths at once.

XLI. How the freedom of our will may be reconciled with the Divine pre-ordination.

But, in place of this, we will be free from these embarrassments if we recollect that our mind is limited, while the power of God, by which he not only knew from all eternity what is or can be, but also willed and pre-ordained it, is infinite. It thus happens that we possess sufficient intelligence to know clearly and distinctly that this power is in God, but not enough to comprehend how he leaves the free actions of men indeterminate; and, on the other hand, we have such consciousness of the liberty and indifference which exists in ourselves, that there is nothing we more clearly or perfectly comprehend [so that the omnipotence of God ought not to keep us from believing it]. For it would be absurd to doubt of that of which we are fully conscious, and which we experience as existing in ourselves, because we do not comprehend another matter which, from its very nature, we know to be incomprehensible.

XLII. How, although we never will to err, it is nevertheless by our will that we do err.

But now since we know that all our errors depend upon our will, and as no one wishes to deceive himself, it may seem wonderful that there is any-error in our judgments at all. It is necessary to remark, however, that there is a great difference between willing to be deceived, and willing to yield assent to opinions in which it happens that error is found. For though there is no one who expressly wishes to fall into error, we will yet hardly find any one who is not ready to assent to things in which, un-

known to himself, error lurks; and it even frequently happens that it is the desire itself of following after truth that leads those not fully aware of the order in which it ought to be sought for, to pass judgment on matters of which they have no adequate knowledge, and thus to fall into error.

XLIII. That we shall never err if we give our assent only to what we clearly and distinctly perceive.

But it is certain we will never admit falsity for truth, so long as we judge only of that which we clearly and distinctly perceive: because, as God is no deceiver, the faculty of knowledge which he has given us cannot be fallacious, nor, for the same reason, the faculty of will, when we do not extend it beyond the objects we clearly know. And even although this truth could not be established by reasoning, the minds of all have been so impressed by nature as spontaneously to assent to whatever is clearly perceived, and to experience an impossibility to doubt of its truth.

XLIV. That we uniformly judge improperly when we assent to what we do not clearly perceive, although our judgment may chance to be true; and that it is frequently our memory which deceives us by leading us to believe that certain things were formerly sufficiently understood by us.

It is likewise certain that, when we approve of any reason which we do not apprehend, we are either deceived, or, if we stumble on the truth, it is only by chance, and thus we can never possess the assurance that we are not in error. I confess it seldom happens that we judge of a thing when we have observed we do not apprehend it, because it is a dictate of the natural light never to judge of what we do not know. But we most frequently err in this, that we presume upon a past knowledge of much to which we give our assent, as to something treasured up in the memory, and perfectly known to us; whereas, in truth, we have no such knowledge.

XLV. What constitutes clear and distinct perception.

There are indeed a great many persons who, through their whole lifetime, never perceive anything in a way necessary for judging of it properly; for the knowledge upon which we can establish a certain and indubitable judgment must be not only clear, but also distinct. I call that clear which is present and manifest to the mind giving attention to it, just as we are said clearly to see objects when, being present to the eye looking on, they stimulate it with sufficient force, and it is disposed to regard them; but the distinct is that which is so precise and different from all other objects as to comprehend in itself only what is clear.

XLVI. It is shown, from the example of pain, that a perception may be clear without being distinct, but that it cannot be distinct unless it is clear.

For example, when any one feels intense pain, the knowledge which he has of this pain is very clear, but it is not always distinct; for men usually confound it with the obscure judgment they form regarding its nature, and think that there is in the suffering part something similar to the sensation of pain of which they are alone conscious. And thus perception may be clear without being distinct, but it can never be distinct without likewise being clear.

XLVII. That, to correct the prejudices of our early years, we must consider what is clear in each of our simple notions.

And, indeed, in our early years, the mind was so immersed in the body, that, although it perceived many things with sufficient clearness, it yet knew nothing distinctly; and since even at that time we exercised our judgment in many matters, numerous prejudices were thus contracted, which, by the majority, are never afterwards laid aside. But that we may now be in a position to get rid of these, I will here briefly enumerate all the simple notions of which our thoughts are composed, and distinguish in each what is clear from what is obscure, or fitted to lead into error.

XLVIII. That all the objects of our knowledge are to be regarded either (1) as things or the affections of things: or (2) as eternal truths; with the enumeration of things.

Whatever objects fall under our knowledge we consider either as things or the affections of things, or as eternal truths possessing no existence beyond our thought. Of the first class the most general are substance. duration, order, number, and perhaps also some others, which notions apply to all the kinds of things. I do not, however, recognize more than two highest kinds of things; the first of intellectual things, or such as have the power of thinking, including mind or thinking substance and its properties; the second, of material things, embracing extended substance, or body and its properties. Perception, volition, and all modes as well of knowing as of willing, are related to thinking substance; on the other hand, to extended substance we refer magnitude, or extension in length, breadth, and depth, figure, motion, situation, divisibility of parts themselves, and the like. There are, however, besides these, certain things of which we have an internal experience that ought not to be referred either to the mind of itself, or to the body alone, but to the close and intimate union between them, as will hereafter be shown in its place. Of this class are the appetites of hunger and thirst, etc., and also the emotions or passions of the mind which are not exclusively mental affections, as the emotions of anger, joy, sadness, love, etc.; and, finally, all the sensations, as of pain, titillation, light and colours, sounds, smells, tastes, heat, hardness, and the other tactile qualities.

XLIX. That the eternal truths cannot be thus enumerated, but that this is not necessary.

What I have already enumerated we are to regard as things, or the qualities or modes of things. We now come to speak of eternal truths.

When we apprehend that it is impossible a thing can arise from nothing, this proposition, ex nihilo nihil fit, is not considered as somewhat existing, or as the mode of a thing, but as an eternal truth having its seat in our mind, and is called a common notion or axiom. Of this class are the following:—It is impossible the same thing can at once be and not be; what is done cannot be undone; he who thinks must exist while he thinks; and innumerable others, the whole of which it is indeed difficult to enumerate, but this is not necessary, since, if blinded by no prejudices, we cannot fail to know them when the occasion of thinking them occurs.

L. That these truths are clearly perceived, but not equally by all men, on account of prejudices.

And, indeed, with regard to these common notions, it is not to be doubted that they can be clearly and distinctly known, for otherwise they would not merit this appellation: as, in truth, some of them are not, with respect to all men, equally deserving of the name, because they are not equally admitted by all: not, however, from this reason, as I think, that the faculty of knowledge of one man extends farther than that of another, but rather because these common notions are opposed to the prejudices of some, who, on this account, are not able readily to embrace them, even although others, who are free from those prejudices, apprehend them with the greatest clearness.

LI. What substance is, and that the term is not applicable to God and the creatures in the same sense.

But with regard to what we consider as things or the modes of things, it is worth while to examine each of them by itself. By substance we can conceive nothing else than a thing which exists in such a way as to stand in need of nothing beyond itself in order to its existence. And, in truth, there can be conceived but one substance which is absolutely independent, and that is God. We perceive that all other things can exist only by help of the concourse of God. And, accordingly, the term substance does not apply to God and the creatures *univocally*, to adopt a term familiar in the schools; that is, no signification of this word can be distinctly understood which is common to God and them.

LII. That the term is applicable univocally to the mind and the body, and how substance itself is known.

Created substances, however, whether corporeal or thinking, may be conceived under this common concept; for these are things which, in order to their existence, stand in need of nothing but the concourse of God. But yet substance cannot be first discovered merely from its being a thing which exists independently, for existence by itself is not observed by us. We easily, however, discover substance itself from any attribute of it, by this common notion, that of nothing there are no attributes, properties, or qualities: for, from perceiving that some attribute is present, we infer that

some existing thing or substance to which it may be attributed is also of necessity present.

LIII. That of every substance there is one principal attribute, as thinking of the mind, extension of the body.

But, although any attribute is sufficient to lead us to the knowledge of substance, there is, however, one principal property of every substance, which constitutes its nature or essence, and upon which all the others depend. Thus, extension in length, breadth, and depth constitutes the nature of corporeal substance; and thought the nature of thinking substance. For every other thing that can be attributed to body, presupposes extension, and is only some mode of an extended thing; as all the properties we discover in the mind are only diverse modes of thinking. Thus, for example, we cannot conceive figure unless in something extended, nor motion unless in extended space, nor imagination, sensation, or will, unless in a thinking thing. But, on the other hand, we can conceive extension without figure or motion, and thought without imagination or sensation, and so of the others; as is clear to any one who attends to these matters.

LIV. How we may have clear and distinct notions of the substance which thinks, of that which is corporeal, and of God.

And thus we may easily have two clear and distinct notions or ideas, the one of created substance, which thinks, the other of corporeal substance, provided we carefully distinguish all the attributes of thought from those of extension. We may also have a clear and distinct idea of an uncreated and independent thinking substance, that is, of God, provided we do not suppose that this idea adequately represents to us all that is in God, and do not mix up with it anything fictitious, but attend simply to the characters that are comprised in the notion we have of him, and which we clearly know to belong to the nature of an absolutely perfect Being. For no one can deny that there is in us such an idea of God, without groundlessly supposing that there is no knowledge of God at all in the human mind.

LV. How duration, order, and number may be also distinctly conceived.

We will also have most distinct conceptions of duration, order, and number, if, in place of mixing up with our notions of them that which properly belongs to the concept of substance, we merely think that the duration of a thing is a mode under which we conceive this thing, in so far as it continues to exist; and, in like manner, that order and number are not in reality different from things disposed in order and numbered, but only modes under which we diversely consider these things.

LVI. What are modes, qualities, attributes.

And, indeed, we here understand by modes the same with what we elsewhere designate attributes or qualities. But when we consider sub-

stance as affected or varied by them, we use the term modes; when from this variation it may be denominated of such a kind, we adopt the term qualities [to designate the different modes which cause it to be so named]; and, finally, when we simply regard these modes as in the substance, we call them attributes. Accordingly, since God must be conceived as superior to change, it is not proper to say that there are modes or qualities in him, but simply attributes; and even in created things that which is found in them always in the same mode, as existence and duration in the thing which exists and endures, ought to be called attribute, and not mode or quality.

LVII. That some attributes exist in the things to which they are attributed, and others only in our thought; and what duration and time are.

Of these attributes or modes there are some which exist in the things themselves, and others that have only an existence in our thought; thus, for example, time, which we distinguish from duration taken in its generality, and call the measure of motion, is only a certain mode under which we think duration itself, for we do not indeed conceive the duration of things that are moved to be different from the duration of things that are not moved: as is evident from this, that if two bodies are in motion for an hour, the one moving quickly and the other slowly, we do not reckon more time in the one than in the other, although there may be much more motion in the one of the bodies than in the other. But that we may comprehend the duration of all things under a common measure, we compare their duration with that of the greatest and most regular motions that give rise to years and days, and which we call time; hence what is so designated is nothing superadded to duration, taken in its generality, but a mode of thinking.

LVIII. That number and all universals are only modes of thought.

In the same way number, when it is not considered as in created things, but merely in the abstract or in general, is only a mode of thinking; and the same is true of all those general ideas we call universals.

LIX. How universals are formed; and what are the five common, viz., genus, species, difference, property, and accident.

Universals arise merely from our making use of one and the same idea in thinking of all individual objects between which there subsists a certain likeness; and when we comprehend all the objects represented by this idea under one name, this term likewise becomes universal. For example, when we see two stones, and do not regard their nature farther than to remark that there are two of them, we form the idea of a certain number, which we call the binary; and when we afterwards see two birds or two trees, and merely take notice of them so far as to observe that there are two of them, we again take up the same idea as before, which is, ac-

cordingly, universal; and we likewise give to this number the same universal appellation of binary. In the same way, when we consider a figure of three sides, we form a certain idea, which we call the idea of a triangle, and we afterwards make use of it as the universal to represent to our mind all other figures of three sides. But when we remark more particularly that of figures of three sides, some have a right angle and others not, we form the universal idea of a right-angled triangle, which being related to the preceding as more general, may be called species; and the right angle is the universal difference by which right-angled triangles are distinguished from all others; and farther, because the square of the side which sustains the right angle is equal to the squares of the other two sides, and because this property belongs only to this species of triangles, we may call it the universal property of the species. Finally, if we suppose that of these triangles some are moved and others not, this will be their universal accident; and, accordingly, we commonly reckon five universals, viz., genus, species, difference, property, accident.

LX. Of distinctions; and first of the real.

But number in things themselves arises from the distinction there is between them: and distinction is threefold, viz., real, modal, and of reason. The real properly subsists between two or more substances; and it is sufficient to assure us that two substances are really mutually distinct. if only we are able clearly and distinctly to conceive the one of them without the other. For the knowledge we have of God renders it certain that he can effect all that of which we have a distinct idea: wherefore. since we have now, for example, the idea of an extended and corporeal substance, though we as yet do not know with certainty whether any such thing is really existent, nevertheless, merely because we have the idea of it, we may be assured that such may exist; and, if it really exists, that every part which we can determine by thought must be really distinct from the other parts of the same substance. In the same way, since every one is conscious that he thinks, and that he in thought can exclude from himself every other substance, whether thinking or extended, it is certain that each of us thus considered is really distinct from every other thinking and corporeal substance. And although we suppose that God united a body to a soul so closely that it was impossible to form a more intimate union, and thus made a composite whole, the two substances would remain really distinct, notwithstanding this union; for with whatever tie God connected them, he was not able to rid himself of the power he possessed of separating them, or of conserving the one apart from the other, and the things which God can separate or conserve separately are really distinct.

LXI. Of the modal distinction.

There are two kinds of modal distinctions, viz., that between the

mode properly so called and the substance of which it is a mode, and that between two modes of the same substance.

As for the distinction according to which the mode of one substance is different from another substance, or from the mode of another substance, as the motion of one body is different from another body or from the mind, or as motion is different from doubt, it seems to me that it should be called real rather than modal, because these modes cannot be clearly conceived apart from the really distinct substances of which they are the modes.

LXII. Of the distinction of reason.

Finally, the distinction of reason is that between a substance and some one of its attributes, without which it is impossible, however, we can have a distinct conception of the substance itself; or between two such attributes of a common substance, the one of which we essay to think without the other. This distinction is manifest from our inability to form a clear and distinct idea of such substance if we separate from it such attribute; or to have a clear perception of the one of two such attributes if we separate it from the other.

LXIII. How thought and extension may be distinctly known, as constituting, the one the nature of mind, the other that of body.

Thought and extension may be regarded as constituting the natures of intelligent and corporeal substance; and then they must not be otherwise conceived than as the thinking and extended substances themselves, that is, as mind and body, which in this way are conceived with the greatest clearness and distinctness. Moreover, we more easily conceive extended or thinking substance than substance by itself, or with the omission of its thinking or extension. For there is some difficulty in abstracting the notion of substance from the notions of thinking and extension, which, in truth, are only diverse in thought itself; and a concept is not more distinct because it comprehends fewer properties, but because we accurately distinguish what is comprehended in it from all other notions.

LXIV. How these may likewise be distinctly conceived as modes of substance.

Thought and extension may be also considered as modes of substance; in as far, namely, as the same mind may have many different thoughts, and the same body, with its size unchanged, may be extended in several diverse ways, at one time more in length and less in breadth or depth, and at another time more in breadth and less in length; and then they are modally distinguished from substance, and can be conceived not less clearly and distinctly, provided they be not regarded as substances or things separated from others, but simply as modes of things. For by regarding them as in the substances of which they are the modes, we

distinguish them from these substances, and take them for what in truth they are: whereas, on the other hand, if we wish to consider them apart from the substances in which they are, we should by this itself regard them as self-subsisting things, and thus confound the ideas of mode and substance.

LXV. How we may likewise know their modes.

In the same way we will best apprehend the diverse modes of thought, as intellection, imagination, recollection, volition, etc., and also the diverse modes of extension, or those that belong to extension, as all figures, the situation of parts and their motions, provided we consider them simply as modes of the things in which they are; and motion as far as it is concerned, provided we think merely of locomotion, without seeking to know the force that produces it, and which nevertheless I will essay to explain in its own place.

LXVI. How our sensations, affections, and appetites may be clearly known, although we are frequently wrong in our judgments regarding them.

There remain our sensations, affections, and appetites, of which we may also have a clear knowledge, if we take care to comprehend in the judgments we form of them only that which is precisely contained in our perception of them, and of which we are immediately conscious. There is, however, great difficulty in observing this, at least in respect of sensations; because we have all, without exception, from our youth judged that all the things we perceived by our senses had an existence beyond our thought, and that they were entirely similar to the sensations, that is, perceptions, we had of them. Thus when, for example, we saw a certain colour, we thought we saw something occupying a place out of us, and which was entirely similar to that idea of colour we were then conscious of; and from the habit of judging in this way, we seemed to see this so clearly and distinctly that we esteemed it (i.e. the externality of the colour) certain and indubitable.

LXVII. That we are frequently deceived in our judgments regarding pain itself.

The same prejudice has place in all our other sensations, even in those of titillation and pain. For though we are not in the habit of believing that there exist out of us objects that resemble titillation and pain, we do not nevertheless consider these sensations as in the mind alone, or in our perception, but as in the hand, or foot, or some other part of our body. There is no reason, however, to constrain us to believe that the pain, for example, which we feel, as it were, in the foot is something out of the mind existing in the foot, or that the light which we see, as it were, in the sun exists in the sun as it is in us. Both these beliefs are prejudices of our early years, as will clearly appear in the sequel.

LXVIII. How in these things what we clearly conceive is to be distinguished from that in which we may be deceived.

But that we may distinguish what is clear in our sensations from what is obscure, we ought most carefully to observe that we possess a clear and distinct knowledge of pain, colour, and other things of this sort, when we consider them simply as sensations or thoughts; but that, when they are judged to be certain things subsisting beyond our mind, we are wholly unable to form any conception of them. Indeed, when any one tells us that he sees colour in a body or feels pain in one of his limbs, this is exactly the same as if he said that he there saw or felt something of the nature of which he was entirely ignorant, or that he did not know what he saw or felt. For although, when less attentively examining his thoughts, a person may easily persuade himself that he has some knowledge of it, since he supposes that there is something resembling that sensation of colour or of pain of which he is conscious; yet, if he reflects on what the sensation of colour or pain represents to him as existing in a coloured body or in a wounded member, he will find that of such he has absolutely no knowledge.

LXIX. That magnitude, figure, etc., are known far differently from colour, pain, etc.

What we have said above will be more manifest, especially if we consider that size in the body perceived, figure, motion, the situation of parts, duration, number, and those other properties which, as we have already said, we clearly perceive in all bodies, are known by us in a way altogether different from that in which we know what colour is in the same body, or pain, smell, taste, or any other of those properties which I have said above must be referred to the senses. For although when we see a body we are not less assured of its existence from its appearing figured than from its appearing coloured, we yet know with far greater clearness its property of figure than its colour.

LXX. That we may judge of sensible things in two ways, by the one of which we avoid error, by the other fall into it.

It is thus manifest that to say we perceive colours in objects is in reality equivalent to saying we perceive something in objects and are yet ignorant of what it is, except as that which determines in us a certain highly vivid and clear sensation, which we call the sensation of colours. There is, however, very great diversity in the manner of judging: for so long as we simply judge that there is an unknown something in objects, so far are we from falling into error that, on the contrary, we thus rather provide against it, for we are less apt to judge rashly of a thing which we observe we do not know. But when we think we perceive colours in objects, although we are in reality ignorant of what we then denominate colour, and are unable to conceive any resemblance between the colour

we suppose to be in objects, and that of which we are conscious in sensation, yet because we do not observe this, or because there are in objects several properties, as size, figure, number, etc., which, as we clearly know, exist, or may exist in them as they are perceived by our senses or conceived by our understanding, we easily glide into the error of holding that what is called colour in objects is something entirely resembling the colour we perceive, and thereafter of supposing that we have a clear perception of what is in no way perceived by us.

LXXI. That the chief cause of our errors is to be found in the prejudices of our childhood.

And here we may notice the first and chief cause of our errors. In early life the mind was so closely bound to the body that it attended to nothing beyond the thoughts by which it perceived the objects that made impression on the body: nor as yet did it refer these thoughts to anything existing beyond itself, but simply felt pain when the body was hurt, or pleasure when anything beneficial to the body occurred, or if the body was so slightly affected that it was neither greatly benefited nor hurt, the mind experienced the sensations we call tastes, smells, sounds, heat, cold, light, colours, and the like, which in truth are representative of nothing existing out of our mind, and which vary according to the diversities of the parts and modes in which the body is affected. The mind at the same time also perceived magnitudes, figures, motions, and the like, which were not presented to it as sensations but as things of the modes of things existing, or at least capable of existing out of thought, although it did not yet observe this difference between these two kinds of perceptions. And afterwards when the machine of the body, which has been so fabricated by nature that it can of its own inherent power move itself in various ways, by turning itself at random on every side, followed after what was useful and avoided what was detrimental; the mind, which was closely connected with it, reflecting on the objects it pursued or avoided, remarked, for the first time, that they existed out of itself, and not only attributed to them magnitudes, figures, motions, and the like, which it apprehended either as things or as the modes of things, but, in addition, attributed to them tastes, odours, and the other ideas of that sort, the sensations of which were caused by itself; and as it only considered other objects in so far as they were useful to the body, in which it was immersed, it judged that there was greater or less reality in each object, according as the impressions it caused on the body were more or less powerful. Hence arose the belief that there was more substance or body in rocks and metals than in air or water, because the mind perceived in them more hardness and weight. Moreover, the air was thought to be merely nothing so long as we experienced no agitation

of it by the wind, or did not feel it hot or cold. And because the stars gave hardly more light than the slender flames of candles, we supposed that each star was but of this size. Again, since the mind did not observe that the earth moved on its axis, or that its superficies was curved like that of a globe, it was on that account more ready to judge the earth immovable and its surface flat. And our mind has been imbued from our infancy with a thousand other prejudices of the same sort, which afterwards in our youth we forgot we had accepted without sufficient examination, and admitted as possessed of the highest truth and clearness, as if they had been known by means of our senses, or implanted in us by nature.

LXXII. That the second cause of our errors is that we cannot forget these prejudices.

And although now in our mature years, when the mind, being no longer wholly subject to the body, is not in the habit of referring all things to it, but also seeks to discover the truth of things considered in themselves, we observe the falsehood of a great many of the judgments we had before formed; yet we experience a difficulty in expunging them from our memory, and, so long as they remain there, they give rise to various errors. Thus, for example, since from our earliest years we imagined the stars to be of very small size, we find it highly difficult to rid ourselves of this imagination, although assured by plain astronomical reasons that they are of the greatest,—so prevailing is the power of preconceived opinion.

LXXIII. The third cause is, that we become fatigued by attending to those objects which are not present to the senses; and that we are thus accustomed to judge of these not from present perception but from preconceived opinion.

Besides, our mind cannot attend to any object without at length experiencing some pain and fatigue; and of all objects it has the greatest difficulty in attending to those which are present neither to the senses nor to the imagination: whether for the reason that this is natural to it from its union with the body, or because in our early years, being occupied merely with perceptions and imaginations, it has become more familiar with, and acquired greater facility in thinking in those modes than in any other. Hence it also happens that many are unable to conceive any substance except what is imaginable and corporeal, and even sensible. For they are ignorant of the circumstance that those objects alone are imaginable which consist in extension, motion, and figure, while there are many others besides these that are intelligible; and they persuade themselves that nothing can subsist but body, and, finally, that there is no body which is not sensible. And since in truth we perceive no object such as it is by sense alone, as will hereafter be clearly shown, it thus

happens that the majority during life perceive nothing unless in a confused way.

LXXIV. The fourth source of our errors is, that we attach our thoughts to words which do not express them with accuracy.

Finally, since for the use of speech we attach all our conceptions to words by which to express them, and commit to memory our thoughts in connection with these terms, and as we afterwards find it more easy to recall the words than the things signified by them, we can scarcely conceive anything with such distinctness as to separate entirely what we conceive from the words that were selected to express it. On this account the majority attend to words rather than to things; and thus very frequently assent to terms without attaching to them any meaning, either because they think they once understood them, or imagine they received them from others by whom they were correctly understood. This, however, is not the place to treat of this matter in detail, seeing the nature of the human body has not yet been expounded, nor the existence even of body established; enough, nevertheless, appears to have been said to enable one to distinguish such of our conceptions as are clear and distinct from those that are obscure and confused.

LXXV. Summary of what must be observed in order to philosophise correctly.

Wherefore if we would philosophise in earnest, and give ourselves to the search after all the truths we are capable of knowing, we must, in the first place, lay aside our prejudices; in other words, we must take care scrupulously to withhold our assent from the opinions we have formerly admitted, until upon new examination we discover that they are true. We must, in the next place, make an orderly review of the notions we have in our minds, and hold as true all and only those which we will clearly and distinctly apprehend. In this way we will observe, first of all, that we exist in so far as it is our nature to think, and at the same time that there is a God upon whom we depend; and after considering his attributes we will be able to investigate the truth of all other things, since God is the cause of them. Besides the notions we have of God and of our mind, we will likewise find that we possess the knowledge of many propositions which are eternally true, as, for example, that nothing cannot be the cause of anything, etc. We will farther discover in our minds the knowledge of a corporeal or extended nature that may be moved, divided, etc., and also of certain sensations that affect us, as of pain, colours, tastes, etc., although we do not yet know the cause of our being so affected; and, comparing what we have now learned, by examining those things in their order, with our former confused knowledge of them, we will acquire the habit of forming clear and distinct conceptions of all the objects we are capable of knowing. In these few precepts seem to me to be comprised the most general and important principles of human knowledge.

LXXVI. That we ought to prefer the Divine authority to our perception: but that, apart from things revealed, we ought to assent to nothing that we do not clearly apprehend.

Above all, we must impress on our memory the infallible rule, that what God has revealed is incomparably more certain than anything else; and that we ought to submit our belief to the Divine authority rather than to our own judgment, even although perhaps the light of reason should, with the greatest clearness and evidence, appear to suggest to us something contrary to what is revealed. But in things regarding which there is no revelation, it is by no means consistent with the character of a philosopher to accept as true what he has not ascertained to be such, and to trust more to the senses, in other words, to the inconsiderate judgments of childhood than to the dictates of mature reason.

PART TWO: OF THE PRINCIPLES OF MATERIAL THINGS

I. THE GROUNDS on which the existence of material things may be known with certainty.

Although we are all sufficiently persuaded of the existence of material things, yet, since this was before called in question by us, and since we reckoned the persuasion of their existence as among the prejudices of our childhood, it is now necessary for us to investigate the grounds on which this truth may be known with certainty. In the first place, then, it cannot be doubted that every perception we have comes to us from some object different from our mind; for it is not in our power to cause ourselves to experience one perception rather than another, the perception being entirely dependent on the object which affects our senses. It may, indeed, be matter of inquiry whether that object be God, or something different from God; but because we perceive, or rather, stimulated by sense, clearly and distinctly apprehend, certain matter extended in length, breadth, and thickness, the various parts of which have different figures and motions, and give rise to the sensations we have of colours, smells, pain, etc., God would, without question, deserve to be regarded as a deceiver, if he directly and of himself presented to our mind the idea of this extended matter, or merely caused it to be presented to us by some object which possessed neither extension, figure, nor motion. For we clearly conceive this matter as entirely distinct from God, and from ourselves, or our mind; and appear even clearly to discern that the idea of it is formed in us on occasion of objects existing out of our minds, to

which it is in every respect similar. But since God cannot deceive us, for this is repugnant to his nature, as has been already remarked, we must unhesitatingly conclude that there exists a certain object extended in length, breadth, and thickness, and possessing all those properties which we clearly apprehend to belong to what is extended. And this extended substance is what we call body or matter.

II. How we likewise know that the human body is closely connected with the mind.

We ought also to conclude that a certain body is more closely united to our mind than any other, because we clearly observe that pain and other sensations affect us without our foreseeing them; and these, the mind is conscious, do not arise from itself alone, nor pertain to it, in so far as it is a thing which thinks, but only in so far as it is united to another thing extended and movable, which is called the human body. But this is not the place to treat in detail of this matter.

III. That the perceptions of the senses do not teach us what is in reality in things, but what is beneficial or hurtful to the composite whole of mind and body.

It will be sufficient to remark that the perceptions of the senses are merely to be referred to this intimate union of the human body and mind, and that they usually make us aware of what, in external objects, may be useful or adverse to this union, but do not present to us these objects as they are in themselves, unless occasionally and by accident. For, after this observation, we will without difficulty lay aside the prejudices of the senses, and will have recourse to our understanding alone on this question, by reflecting carefully on the ideas implanted in it by nature.

IV. That the nature of body consists not in weight, hardness, colour, and the like, but in extension alone.

In this way we will discern that the nature of matter or body, considered in general, does not consist in its being hard, or ponderous, or coloured, or that which affects our senses in any other way, but simply in its being a substance extended in length, breadth, and depth. For, with respect to hardness, we know nothing of it by sense farther than that the parts of hard bodies resist the motion of our hands on coming into contact with them; but if every time our hands moved towards any part, all the bodies in that place receded as quickly as our hands approached, we should never feel hardness; and yet we have no reason to believe that bodies which might thus recede would on this account lose that which makes them bodies. The nature of body does not, therefore, consist in hardness. In the same way, it may be shown that weight, colour, and all the other qualities of this sort, which are perceived in corporeal matter, may be taken from it, itself meanwhile remaining entire: it thus follows that the nature of body depends on none of these.

V. That the truth regarding the nature of body is obscured by the opinions respecting rarefaction and a vacuum with which we are pre-occupied.

There still remain two causes to prevent its being fully admitted that the true nature of body consists in extension alone. The first is the prevalent opinion, that most bodies admit of being so rarefied and condensed that, when rarefied, they have greater extension than when condensed; and some even have subtilised to such a degree as to make a distinction between the substance of body and its quantity, and between quantity itself and extension. The second cause is this, that where we conceive only extension in length, breadth, and depth, we are not in the habit of saying that body is there, but only space and further void space, which the generality believe to be a mere negation.

VI. In what way rarefaction takes place.

But with regard to rarefaction and condensation, whoever gives his attention to his own thoughts, and admits nothing of which he is not clearly conscious, will not suppose that there is anything in those processes further than a change of figure in the body rarefied or condensed: so that, in other words, rare bodies are those between the parts of which there are numerous distances filled with other bodies; and dense bodies, on the other hand, those whose parts approaching each other, either diminish these distances or take them wholly away, in the latter of which cases the body is rendered absolutely dense. The body, however, when condensed, has not, therefore, less extension than when the parts embrace a greater space, owing to their removal from each other, and their dispersion into branches. For we ought not to attribute to it the extension of the pores or distances which its parts do not occupy when it is rarefied, but to the other bodies that fill these interstices; just as when we see a sponge full of water or any other liquid, we do not suppose that each part of the sponge has on this account greater extension than when compressed and dry, but only that its pores are wider, and therefore that the body is diffused over a larger space.

VII. That rarefaction cannot be intelligibly explained unless in the way here proposed.

And indeed I am unable to discover the force of the reasons which have induced some to say that rarefaction is the result of the augmentation of the quantity of body, rather than to explain it on the principle exemplified in the case of a sponge. For although when air or water are rarefied we do not see any of the pores that are rendered large, or the new body that is added to occupy them, it is yet less agreeable to reason to suppose something that is unintelligible for the purpose of giving a verbal and merely apparent explanation of the rarefaction of bodies, than to conclude, because of their rarefaction, that there are pores or distances

between the parts which are increased in size, and filled with some new body. Nor ought we to refrain from assenting to this explanation, because we perceive this new body by none of our senses, for there is no reason which obliges us to believe that we should perceive by our senses all the bodies in existence. And we see that it is very easy to explain rarefaction in this manner, but impossible in any other; for, in fine, there would be, as appears to me, a manifest contradiction in supposing that any body was increased by a quantity or extension which it had not before, without the addition to it of a new extended substance, in other words, of another body, because it is impossible to conceive any addition of extension or quantity to a thing without supposing the addition of a substance having quantity or extension, as will more clearly appear from what follows.

VIII. That quantity and number differ only in thought from that which has quantity and is numbered.

For quantity differs from extended substance, and number from what is numbered, not in reality but merely in our thought; so that, for example, we may consider the whole nature of a corporeal substance which is comprised in a space of ten feet, although we do not attend to this measure of ten feet, for the obvious reason that the thing conceived is of the same nature in any part of that space as in the whole; and, on the other hand, we can conceive the number ten, as also a continuous quantity of ten feet, without thinking of this determinate substance, because the concept of the number ten is manifestly the same whether we consider a number of ten feet or ten of anything else; and we can conceive a continuous quantity of ten feet without thinking of this or that determinate substance, although we cannot conceive it without some extended substance of which it is the quantity. It is in reality, however, impossible that any, even the least part, of such quantity or extension, can be taken away, without the retrenchment at the same time of as much of the substance, nor, on the other hand, can we lessen the substance, without at the same time taking as much from the quantity or extension.

IX. That corporeal substance, when distinguished from its quantity, is confusedly conceived as something incorporeal.

Although perhaps some express themselves otherwise on this matter, I am nevertheless convinced that they do not think differently from what I have now said: for when they distinguish substance from extension or quantity, they either mean nothing by the word substance, or they form in their minds merely a confused idea of incorporeal substance, which they falsely attribute to corporeal, and leave to extension the true idea of this corporeal substance; which extension they call an accident, but with such impropriety as to make it easy to discover that their words are not in harmony with their thoughts.

X. What space or internal place is.

Space or internal place, and the corporeal substance which is comprised in it, are not different in reality, but merely in the mode in which they are wont to be conceived by us. For, in truth, the same extension in length, breadth, and depth, which constitutes space, constitutes body; and the difference between them lies only in this, that in body we consider extension as particular, and conceive it to change with the body; whereas in space we attribute to extension a generic unity, so that after taking from a certain space the body which occupied it, we do not suppose that we have at the same time removed the extension of the space, because it appears to us that the same extension remains there so long as it is of the same magnitude and figure, and preserves the same situation in respect to certain bodies around it, by means of which we determine this space.

XI. How space is not in reality different from corporeal substance. And indeed it will be easy to discern that it is the same extension which constitutes the nature of body as of space, and that these two things are mutually diverse only as the nature of the genus and species differs from that of the individual, provided we reflect on the idea we have of any body, taking a stone for example, and reject all that is not essential to the nature of body. In the first place, then, hardness may be rejected, because if the stone were liquefied or reduced to powder, it would no longer possess hardness, and yet would not cease to be a body; colour also may be thrown out of account, because we have frequently seen stones so transparent as to have no colour; again, we may reject weight, because we have the case of fire, which, though very light, is still a body; and, finally, we may reject cold, heat, and all the other qualities of this sort, either because they are not considered as in the stone, or because, with the change of these qualities, the stone is not supposed to have lost the nature of body. After this examination we will find that nothing remains in the idea of body, except that it is something extended in length, breadth, and depth; and this something is comprised in our idea of space, not only of that which is full of body, but even of what is called void space.

XII. How space differs from body in our mode of conceiving it.

There is, however, some difference between them in the mode of conception; for if we remove a stone from the space or place in which it was, we conceive that its extension also is taken away, because we regard this as particular, and inseparable from the stone itself: but meanwhile we suppose that the same extension of place in which this stone was remains, although the place of the stone be occupied by wood, water, air, or by any other body, or be even supposed vacant, because we now consider extension in general, and think that the same is common to stones, wood, water, air, and other bodies, and even to a vacuum itself, if there

is any such thing, provided it be of the same magnitude and figure as before, and preserve the same situation among the external bodies which determine this space.

XIII. What external place is.

The reason of which is, that the words place and space signify nothing really different from body which is said to be in place, but merely designate its magnitude, figure, and situation among other bodies. For it is necessary, in order to determine this situation, to regard certain other bodies which we consider as immovable; and, according as we look to different bodies, we may see that the same thing at the same time does and does not change place. And besides, if we suppose that the earth moves, and that it makes precisely as much way from west to east as a vessel from east to west, we will say that the person at the stern does not change his place, because this place will be determined by certain immovable points which we imagine to be in the heavens. But if at length we are persuaded that there are no points really immovable in the universe, as will hereafter be shown to be probable, we will thence conclude that nothing has a permanent place unless in so far as it is fixed by our thought.

XIV. Wherein place and space differ.

The terms place and space, however, differ in signification, because place more expressly designates situation than magnitude or figure, while, on the other hand, we think of the latter when we speak of space. For we frequently say that a thing succeeds to the place of another although it be not exactly of the same magnitude or figure; but we do not therefore admit that it occupies the same space as the other; and when the situation is changed we say that the place also is changed, although there are the same magnitude and figure as before: so that when we say that a thing is in a particular place, we mean merely that it is situated in a determinate way in respect of certain other objects; and when we add that it occupies such a space or place we understand besides that it is of such determinate magnitude and figure as exactly to fill this space.

XV. How external place is rightly taken for the superficies of the surrounding body.

And thus we never indeed distinguish space from extension in length, breadth, and depth; we sometimes, however, consider place as in the thing placed, and at other times as out of it. Internal place indeed differs in no way from space; but external place may be taken for the superficies that immediately surrounds the thing placed.

XVI. That a vacuum or space in which there is absolutely no body is repugnant to reason.

With regard to a vacuum, in the philosophical sense of the term, that is, a space in which there is no substance, it is evident that such does not exist, seeing the extension of space or internal place is not dif-

ferent from that of body. For since from this alone, that a body has extension in length, breadth, and depth, we have reason to conclude that it is a substance, it being absolutely contradictory that nothing should possess extension, we ought to form a similar inference regarding the space which is supposed void, viz., that since there is extension in it there is necessarily also substance.

XVII. That a vacuum in the ordinary use of the term does not exclude all body.

And, in truth, by the term vacuum in its common use, we do not mean a place or space in which there is absolutely nothing, but only a place in which there is none of those things we presume ought to be there. Thus, because a pitcher is made to hold water, it is said to be empty when it is merely filled with air; or if there are no fish in a fish-pond, we say there is nothing in it, although it be full of water; thus a vessel is said to be empty, when, in place of the merchandise which it was designed to carry, it is loaded with sand only, to enable it to resist the violence of the wind; and, finally, it is in the same sense that we say space is void when it contains nothing sensible, although it contain created and selfsubsisting matter; for we are not in the habit of considering the bodies near us, unless in so far as they cause in our organs of sense impressions strong enough to enable us to perceive them. And if, in place of keeping in mind what ought to be understood by these terms a vacuum and nothing, we afterwards suppose that in the space we called a vacuum, there is not only no sensible object, but no object at all, we will fall into the same error as if, because a pitcher in which there is nothing but air, is, in common speech, said to be empty, we were therefore to judge that the air contained in it is not a substance.

XVIII. How the prejudice of an absolute vacuum is to be corrected. We have almost all fallen into this error from the earliest age, for, observing that there is no necessary connection between a vessel and the body it contains, we thought that God at least could take from a vessel the body which occupied it, without it being necessary that any other should be put in the place of the one removed. But that we may be able now to correct this false opinion, it is necessary to remark that there is in truth no connection between the vessel and the particular body which it contains, but that there is an absolutely necessary connection between the concave figure of the vessel and the extension considered generally which must be comprised in this cavity; so that it is not more contradictory to conceive a mountain without a valley than such a cavity without the extension it contains, or this extension apart from an extended substance, for, as we have often said, of nothing there can be no extension. And accordingly, if it be asked what would happen were God to remove from a vessel all the body contained in it, without permitting another

body to occupy its place, the answer must be that the sides of the vessel would thus come into proximity with each other. For two bodies must touch each other when there is nothing between them, and it is manifestly contradictory for two bodies to be apart, in other words, that there should be a distance between them, and this distance yet be nothing; for all distance is a mode of extension, and cannot therefore exist without an extended substance.

XIX. That this confirms what was said of rarefaction.

After we have thus remarked that the nature of corporeal substance consists only in its being an extended thing, and that its extension is not different from that which we attribute to space, however empty, it is easy to discover the impossibility of any one of its parts in any way whatsoever occupying more space at one time than at another, and thus of being otherwise rarefied than in the way explained above; and it is easy to perceive also that there cannot be more matter or body in a vessel when it is filled with lead or gold, or any other body however heavy and hard, than when it but contains air and is supposed to be empty: for the quantity of the parts of which a body is composed does not depend on their weight or hardness, but only on the extension, which is always equal in the same vase.

XX. That from this the non-existence of atoms may likewise be demonstrated.

We likewise discover that there cannot exist any atoms or parts of matter that are of their own nature indivisible. For however small we suppose these parts to be, yet because they are necessarily extended, we are always able in thought to divide any one of them into two or more smaller parts, and may accordingly admit their divisibility. For there is nothing we can divide in thought which we do not thereby recognize to be divisible; and, therefore, were we to judge it indivisible our judgment would not be in harmony with the knowledge we have of the thing; and although we should even suppose that God had reduced any particle of matter to a smallness so extreme that it did not admit of being further divided, it would nevertheless be improperly styled indivisible, for though God had rendered the particle so small that it was not in the power of any creature to divide it, he could not however deprive himself of the ability to do so, since it is absolutely impossible for him to lessen his own omnipotence, as was before observed. Wherefore, absolutely speaking, the smallest extended particle is always divisible, since it is such of its very nature.

XXI. It is thus also demonstrated that the extension of the world is indefinite.

We further discover that this world, or the whole of corporeal substance, is extended without limit, for wherever we fix a limit, we still not only imagine beyond it spaces indefinitely extended, but perceive these to be truly imaginable, in other words, to be in reality such as we imagine them; so that they contain in them corporeal substance indefinitely extended, for, as has been already shown at length, the idea of extension which we conceive in any space whatever is plainly identical with the idea of corporeal substance.

XXII. It also follows that the matter of the heavens and earth is the same, and that there cannot be a plurality of worlds.

And it may also be easily inferred from all this that the earth and heavens are made of the same matter; and that even although there were an infinity of worlds, they would all be composed of this matter; from which it follows that a plurality of worlds is impossible, because we clearly conceive that the matter whose nature consists only in its being an extended substance, already wholly occupies all the imaginable spaces where these other worlds could alone be, and we cannot find in ourselves the idea of any other matter.

XXIII. That all the variety of matter, or the diversity of its forms, depends on motion.

There is therefore but one kind of matter in the whole universe, and this we know only by its being extended. All the properties we distinctly perceive to belong to it are reducible to its capacity of being divided and moved according to its parts; and accordingly it is capable of all those affections which we perceive can arise from the motion of its parts. For the partition of matter in thought makes no change in it; but all variation of it, or diversity of form, depends on motion. The philosophers even seem universally to have observed this, for they said that nature was the principle of motion and rest, and by nature they understood that by which all corporeal things become such as they are found in experience.

XXIV. What motion is, taking the term in its common use.

But motion, in the ordinary sense of the term, is nothing more than the action by which a body passes from one place to another. And just as we have remarked above that the same thing may be said to change and not to change place at the same time, so also we may say that the same thing is at the same time moved and not moved. Thus, for example, a person seated in a vessel which is setting sail, thinks he is in motion if he look to the shore that he has left, and consider it as fixed; but not if he regard the ship itself, among the parts of which he preserves always the same situation. Moreover, because we are accustomed to suppose that there is no motion without action, and that in rest there is the cessation of action, the person thus seated is more properly said to be at rest than in motion, seeing he is not conscious of being in action.

XXV. What motion is properly so called.

But if, instead of occupying ourselves with that which has no founda-

tion, unless in ordinary usage, we desire to know what ought to be understood by motion according to the truth of the thing, we may say, in order to give it a determinate nature, that it is the transporting of one part of matter or of one body from the vicinity of those bodies that are in immediate contact with it, or which we regard as at rest, to the vicinity of other bodies. By a body as a part of matter, I understand all that which is transferred together, although it be perhaps composed of several parts, which in themselves have other motions; and I say that it is the transporting and not the force or action which transports, with the view of showing that motion is always in the movable thing, not in that which moves; for it seems to me that we are not accustomed to distinguish these two things with sufficient accuracy. Farther, I understand that it is a mode of the movable thing, and not a substance, just as figure is a property of the thing figured, and repose of that which is at rest.

PART THREE: OF THE VISIBLE WORLD

I. That we cannot think too highly of the works of God.

Having now ascertained certain principles of material things, which were sought, not by the prejudices of the senses, but by the light of reason, and which thus possess so great evidence that we cannot doubt of their truth, it remains for us to consider whether from these alone we can deduce the explication of all the phenomena of nature. We will commence with those phenomena that are of the greatest generality, and upon which the others depend, as, for example, with the general structure of this whole visible world. But in order to our philosophising aright regarding this, two things are first of all to be observed. The first is, that we should ever bear in mind the infinity of the power and goodness of God, that we may not fear falling into error by imagining his works to be too great, beautiful, and perfect, but that we may, on the contrary, take care lest, by supposing limits to them of which we have no certain knowledge, we appear to think less highly than we ought of the power of God.

II. That we ought to beware lest, in our presumption, we imagine that the ends which God proposed to himself in the creation of the world are understood by us.

The second is, that we should beware of presuming too highly of ourselves, as it seems we should do if we supposed certain limits to the world, without being assured of their existence either by natural reasons or by divine revelation, as if the power of our thought extended beyond what God has in reality made; but likewise still more if we persuaded ourselves that all things were created by God for us only, or if we merely supposed that we could comprehend by the power of our intellect the ends which God proposed to himself in creating the universe.

III. In what sense it may be said that all things were created for the sake of man.

For although, as far as regards morals, it may be a pious thought to believe that God made all things for us, seeing we may thus be incited to greater gratitude and love toward him; and although it is even in some sense true, because there is no created thing of which we cannot make some use, if it be only that of exercising our mind in considering it, and honouring God on account of it, it is yet by no means probable that all things were created for us in this way that God had no other end in their creation; and this supposition would be plainly ridiculous and inept in physical reasoning, for we do not doubt but that many things exist, or formerly existed and have now ceased to be, which were never seen or known by man, and were never of use to him.

PART FOUR: OF THE EARTH

I. Of what is to be borrowed from disquisitions on animals and man to advance the knowledge of material objects.

I should add nothing farther to this the fourth part of the Principles of Philosophy, did I purpose carrying out my original design of writing a fifth and sixth part, the one treating of things possessed of life, that is, animals and plants, and the other of man. But because I have not yet acquired sufficient knowledge of all the matters of which I should desire to treat in these two last parts, and do not know whether I ever shall have sufficient leisure to finish them, I will here subjoin a few things regarding the objects of our senses, that I may not, for the sake of the latter, delay too long the publication of the former parts, or of what may be desiderated in them, which I might have reserved for explanation in those others: for I have hitherto described this earth, and generally the whole visible world, as if it were merely a machine in which there was nothing at all to consider except the figures and motions of its parts, whereas our senses present to us many other things, for example colours, smells, sounds, and the like, of which, if I did not speak at all, it would be thought I had omitted the explication of the majority of the objects that are in nature.

II. What perception is, and how we perceive.

We must know, therefore, that although the human soul is united to the whole body, it has, nevertheless, its principal seat in the brain, where alone it not only understands and imagines, but also perceives; and this by the medium of the nerves, which are extended like threads from the brain to all the other members, with which they are so connected that we can hardly touch any one of them without moving the extremities of some of the nerves spread over it; and this motion passes to the other extremities of those nerves which are collected in the brain round the seat of the soul, as I have already explained with sufficient minuteness in the fourth chapter of the *Dioptrics*. But the movements which are thus excited in the brain by the nerves, variously affect the soul or mind, which is intimately conjoined with the brain, according to the diversity of the motions themselves. And the diverse affections of the mind or thoughts that immediately arise from these motions, are called perceptions of the senses, or, as we commonly speak, sensations.

III. Of the distinction of the senses; and, first, of the internal, that is, of the affections of the mind and the natural appetites.

The varieties of these sensations depend, firstly, on the diversity of the nerves themselves, and, secondly, on the movements that are made in each nerve. We have not, however, as many different senses as there are nerves. We can distinguish but seven principal classes of nerves, of which two belong to the internal, and the other five to the external senses. The nerves which extend to the stomach, the esophagus, the fauces, and the other internal parts that are subservient to our natural wants, constitute one of our internal senses. This is called the natural appetite. The other internal sense, which embraces all the emotions of the mind or passions, and affections, as joy, sadness, love, hate, and the like, depends upon the nerves which extend to the heart and the parts about the heart, and are exceedingly small; for, by way of example, when the blood happens to be pure and well tempered, so that it dilates in the heart more readily and strongly than usual, this so enlarges and moves the small nerves scattered around the orifices, that there is thence a corresponding movement in the brain, which affects the mind with a certain natural feeling of joy; and as often as these same nerves are moved in the same way, although this is by other causes, they excite in our mind the same feeling. Thus, the imagination of the enjoyment of a good does not contain in itself the feeling of joy, but it causes the animal spirits to pass from the brain to the muscles in which these nerves are inserted; and thus dilating the orifices of the heart, it also causes these small nerves to move in the way appointed by nature to afford the sensation of joy. Thus, when we receive news, the mind first of all judges of it, and if the news be good, it rejoices with that intellectual joy which is independent of any emotion of the body, and which the Stoics did not deny to their wise man [although they supposed him exempt from all passion]. But as soon as this joy passes from the understanding to the imagination, the spirits flow from the brain to the muscles that are about the heart, and there excite the motion of the small nerves, by means of which another motion is caused in the brain, which

affects the mind with the sensation of animal joy. On the same principle, when the blood is so thick that it flows but sparingly into the ventricles of the heart, and is not there sufficiently dilated, it excites in the same nerves a motion quite different from the preceding, which, communicated to the brain, gives to the mind the sensation of sadness, although the mind itself is perhaps ignorant of the cause of its sadness. And all the other causes which move these nerves in the same way may also give to the mind the same sensation. But the other movements of the same nerves produce other effects, as the feelings of love, hate, fear, anger, etc., as far as they are merely affections or passions of the mind; in other words, as far as they are confused thoughts which the mind has not from itself alone, but from its being closely joined to the body, from which it receives impressions; for there is the widest difference between these passions and the distinct thoughts which we have of what ought to be loved, or chosen, or shunned, etc. The natural appetites, as hunger, thirst, and the others, are likewise sensations excited in the mind by means of the nerves of the stomach, fauces, and other parts, and are entirely different from the will which we have to eat and drink; but, because this will or appetition almost always accompanies them, they are therefore named appetites.

IV. Of the external senses; and first of touch.

We commonly reckon the external senses five in number, because there are as many different kinds of objects which move the nerves and their organs, and an equal number of kinds of confused thoughts excited in the soul by these motions. In the first place, the nerves terminating in the skin of the whole body can be touched through this medium by any terrene objects whatever, and moved by these wholes, in one way by their hardness, in another by their gravity, in a third by their heat, in a fourth by their humidity, etc.—and in as many diverse modes as they are either moved or hindered from their ordinary motion, to that extent are diverse sensations excited in the mind, from which a corresponding number of tactile qualities derive their appellations. Besides this, when these nerves are moved a little more powerfully than usual, but not nevertheless to the degree by which our body is in any way hurt, there thus arises a sensation of titillation, which is naturally agreeable to the mind, because it testifies to it of the powers of the body with which it is joined. But if this action be strong enough to hurt our body in any way, this gives to our mind the sensation of pain. And we thus see why corporeal pleasure and pain, although sensations of quite an opposite character, arise nevertheless from causes nearly alike.

V. Of taste.

In the second place, the other nerves scattered over the tongue and the parts in its vicinity are diversely moved by the particles of the same bodies, separated from each other and floating in the saliva in the mouth, and thus cause sensations of diverse tastes according to the diversity of figure in these particles.

VI. Of smell.

Thirdly, two nerves also or appendages of the brain, for they do not go beyond the limits of the skull, are moved by the particles of terrestrial bodies, separated and flying in the air, not indeed by all particles indifferently, but by those only that are sufficiently subtle and penetrating to enter the pores of the bone we call the spongy, when drawn into the nostrils, and thus to reach the nerves. From the different motions of these particles arise the sensations of the different smells.

VII. Of hearing.

Fourthly, there are two nerves within the ears, so attached to three small bones that are mutually sustaining, and the first of which rests on the small membrane that covers the cavity we call the tympanum of the ear, that all the diverse vibrations which the surrounding air communicates to this membrane, are transmitted to the mind by these nerves, and these vibrations give rise, according to their diversity, to the sensations of the different sounds.

VIII. Of sight.

Finally, the extremities of the optic nerves, composing the coat in the eyes called the retina, are not moved by the air nor by any terrestrial object, but only by the globules of the second element, whence we have the sense of light and colours: as I have already at sufficient length explained in the *Dioptrics* and treatise of *Meteors*.

IX. That the soul perceives only in so far as it is in the brain.

It is clearly established, however, that the soul does not perceive in so far as it is in each member of the body, but only in so far as it is in the brain, where the nerves by their movements convey to it the diverse actions of the external objects that touch the parts of the body in which they are inserted. For, in the first place, there are various maladies, which, though they affect the brain alone, yet bring disorder upon, or deprive us altogether of the use of, our senses, just as sleep, which affects the brain only, and yet takes from us daily during a great part of our time the faculty of perception, which afterwards in our waking state is restored to us. The second proof is, that though there be no disease in the brain, it is nevertheless sufficient to take away sensation from the part of the body where the nerves terminate, if only the movement of one of the nerves that extend from the brain to these members be obstructed in any part of the distance that is between the two. And the last proof is, that we sometimes feel pain as if in certain of our members, the cause of which, however, is not in these members where it is felt, but somewhere nearer the brain, through which the nerves pass that give to the mind the sensation of it.

X. That the nature of the mind is such that from the motion alone of body the various sensations can be excited in it.

In the next place, it can be proved that our mind is of such a nature that the motions of the body alone are sufficient to excite in it all sorts of thoughts, without it being necessary that these should in any way resemble the motions which give rise to them, and especially that these motions can excite in it those confused thoughts called sensations. For we see that words, whether uttered by the voice or merely written, excite in our minds all kinds of thoughts and emotions. On the same paper, with the same pen and ink, by merely moving the point of the pen over the paper in a particular way, we can trace letters that will raise in the minds of our readers the thoughts of combats, tempests, or the furies, and the passions of indignation and sorrow; in place of which, if the pen be moved in another way hardly different from the former, this slight change will cause thoughts widely different from the above, such as those of repose, peace, pleasantness, and the quite opposite passions of love and joy. Some one will perhaps object that writing and speech do not immediately excite in the mind any passions, or imaginations of things different from the letters and sounds, but afford simply the knowledge of these, on occasion of which the mind, understanding the signification of the words, afterwards excites in itself the imaginations and passions that correspond to the words. But what will be said of the sensations of pain and titillation? The motion merely of a sword cutting a part of our skin causes pain. And it is certain that this sensation of pain is not less different from the motion that causes it, or from that of the part of our body which the sword cuts, than are the sensations we have of colour, sound, odour, or taste. On this ground we may conclude that our mind is of such a nature that the motions alone of certain bodies can also easily excite in it all the other sensations. as the motion of a sword excites in it the sensation of pain.

XI. That by our senses we know nothing of external objects beyond their figure, magnitude, and motion.

Besides, we observe no such difference between the nerves as to lead us to judge that one set of them convey to the brain from the organs of the external senses anything different from another, or that anything at all reaches the brain besides the local motion of the nerves themselves. And we see that local motion alone causes in us not only the sensation of titillation and of pain, but also of light and sounds. For if we receive a blow on the eye of sufficient force to cause the vibration of the stroke to reach the retina, we see numerous sparks of fire, which, nevertheless, are not out of our eye; and when we stop our ear with our finger, we hear a humming sound, the cause of which can only proceed from the agitation of the air that is shut up within it. Finally, we frequently observe that heat and the other sensible qualities, as far as they are in objects, and also

the forms of those bodies that are purely material, as, for example, the forms of fire, are produced in them by the motion of certain other bodies, and that these in their turn likewise produce other motions in other bodies. And we can easily conceive how the motion of one body may be caused by that of another, and diversified by the size, figure, and situation of its parts, but we are wholly unable to conceive how these same things can produce something else of a nature entirely different from themselves, as, for example, those substantial forms and real qualities which many philosophers suppose to be in bodies; nor likewise can we conceive how these qualities or forms possess force to cause motions in other bodies. But since we know, from the nature of our soul, that the diverse motions of body are sufficient to produce in it all the sensations which it has, and since we learn from experience that several of its sensations are in reality caused by such motions, while we do not discover that anything besides these motions ever passes from the organs of the external senses to the brain, we have reason to conclude that we in no way likewise apprehend that in external objects, which we call light, colour, smell, taste, sound, heat or cold, and the other tactile qualities, or that which we call their substantial forms, unless as the various dispositions of these objects which have the power of moving our nerves in various ways.

XII. That there is no phenomenon of nature whose explanation has been omitted in this treatise.

And thus it may be gathered, from an enumeration that is easily made, that there is no phenomenon of nature whose explanation has been omitted in this treatise; for beyond what is perceived by the senses, there is nothing that can be considered a phenomenon of nature. But leaving out of account motion, magnitude, figure, which I have explained as they exist in body, we perceive nothing out of us by our senses except light, colours, smells, tastes, sounds, and the tactile qualities; and these I have recently shown to be nothing more, at least so far as they are known to us, than certain dispositions of the objects, consisting in magnitude, figure, and motion.

XIII. That this treatise contains no principles which are not universally received; and that this philosophy is not new, but of all others the most ancient and common.

But I am desirous also that it should be observed that, though I have here endeavoured to give an explanation of the whole nature of material things, I have nevertheless made use of no principle which was not received and approved by Aristotle, and by the other philosophers of all ages; so that this philosophy, so far from being new, is of all others the most ancient and common: for I have in truth merely considered the figure, motion, and magnitude of bodies, and examined what must follow from their mutual concourse on the principles of mechanics, which are

confirmed by certain and daily experience. But no one ever doubted that bodies are moved, and that they are of various sizes and figures, according to the diversity of which their motions also vary, and that from mutual collision those somewhat greater than others are divided into many smaller, and thus change figure. We have experience of the truth of this, not merely by a single sense, but by several, as touch, sight, and hearing: we also distinctly imagine and understand it. This cannot be said of any of the other things that fall under our senses, as colours, sounds, and the like; for each of these affects but one of our senses, and merely impresses upon our imagination a confused image of itself, affording our understanding no distinct knowledge of what it is.

XIV. That sensible bodies are composed of insensible particles.

But I allow many particles in each body that are perceived by none of our senses, and this will not perhaps be approved of by those who take the senses for the measure of the knowable. | We greatly wrong human reason, however, as appears to me, if we suppose that it does not go beyond the eye-sight]; for no one can doubt that there are bodies so small as not to be perceptible by any of our senses, provided he only consider what is each moment added to those bodies that are being increased little by little, and what is taken from those that are diminished in the same way. A tree increases daily, and it is impossible to conceive how it becomes greater than it was before, unless we at the same time conceive that some body is added to it. But who ever observed by the senses those small bodies that are in one day added to a tree while growing? Among the philosophers at least, those who hold that quantity is indefinitely divisible, ought to admit that in the division the parts may become so small as to be wholly imperceptible. And indeed it ought not to be a matter of surprise that we are unable to perceive very minute bodies; for the nerves that must be moved by objects to cause perception are not themselves very minute, but are like small cords, being composed of a quantity of smaller fibres, and thus the most minute bodies are not capable of moving them. Nor do I think that any one who makes use of his reason will deny that we philosophise with much greater truth when we judge of what takes place in those small bodies which are imperceptible from their minuteness only, after the analogy of what we see occurring in those we do perceive, than when we give an explanation of the same things by inventing I know not what novelties, that have no relation to the things we actually perceive.

XV. That the philosophy of Democritus is not less different from ours than from the common.

But it may be said that Democritus also supposed certain corpuscles that were of various figures, sizes, and motions, from the heaping together and mutual concourse of which all sensible bodies arose; and, nevertheless,

his mode of philosophising is commonly rejected by all. To this I reply that the philosophy of Democritus was never rejected by any one because he allowed the existence of bodies smaller than those we perceive, and attributed to them diverse sizes, figures, and motions, for no one can doubt that there are in reality such, as we have already shown; but it was rejected, in the first place, because he supposed that these corpuscles were indivisible, on which ground I also reject it; in the second place, because he imagined there was a vacuum about them, which I show to be impossible; thirdly, because he attributed gravity to these bodies, of which I deny the existence in any body, in so far as a body is considered by itself, because it is a quality that depends on the relations of situation and motion which several bodies bear to each other; and, finally, because he has not explained in particular how all things arose from the concourse of corpuscles alone, or, if he gave this explanation with regard to a few of them, his whole reasoning was far from being coherent. This, at least, is the verdict we must give regarding his philosophy, if we may judge of his opinions from what has been handed down to us in writing. I leave it to others to determine whether the philosophy I profess possesses a valid coherency.

XVI. How we may arrive at the knowledge of the figures and motions of the insensible particles of bodies.

But, since I assign determinate figures, magnitudes, and motions to the insensible particles of bodies, as if I had seen them, whereas I admit that they do not fall under the senses, some one will perhaps demand how I have come by my knowledge of them. Thereupon, taking as my ground of inference the simplest and best known of the principles that have been implanted in our minds by nature, I considered the chief differences that could possibly subsist between the magnitudes, and figures, and situations of bodies insensible on account of their smallness alone, and what sensible effects could be produced by their various modes of coming into contact; and afterwards, when I found like effects in the bodies that we perceive by our senses, I judged that they could have been thus produced, especially since no other mode of explaining them could be devised. And in this matter the example of several bodies made by art was of great service to me: for I recognise no difference between these and natural bodies beyond this, that the effects of machines depend for the most part on the agency of certain instruments, which, as they must bear some proportion to the hands of those who make them, are always so large that their figures and motions can be seen; in place of which, the effects of natural bodies almost always depend upon certain organs so minute as to escape our senses. And it is certain that all the rules of mechanics belong also to physics, of which it is a part or species: for it is not less natural for a clock, made of the requisite number of wheels, to mark the hours, than

for a tree, which has sprung from this or that seed, to produce the fruit peculiar to it. Accordingly, just as those who are familiar with automata, when they are informed of the use of a machine, and see some of its parts, easily infer from these the way in which the others, that are not seen by them, are made; so from considering the sensible effects and parts of natural bodies, I have essayed to determine the character of their causes and insensible parts.

XVII. That, touching the things which our senses do not perceive, it is sufficient to explain how they can be.

But here some one will perhaps reply, that although I have supposed causes which could produce all natural objects, we ought not on this account to conclude that they were produced by these causes; for, just as the same artisan can make two clocks, which, though they both equally well indicate the time, and are not different in outward appearance, have nevertheless nothing resembling in the composition of their wheels; so doubtless the Supreme Maker of things has an infinity of diverse means at his disposal, by each of which he could have made all the things of this world to appear as we see them, without it being possible for the human mind to know which of all these means he chose to employ. I most freely concede this: and I believe that I have done all that was required if the causes I have assigned are such that their effects accurately correspond to all the phenomena of nature, without determining whether it is by these or by others that they are actually produced. And it will be sufficient for the use of life to know the causes thus imagined, for medicine, mechanics, and in general all the arts to which the knowledge of physics is of service, have for their end only those effects that are sensible, and that are accordingly to be reckoned among the phenomena of nature. And lest it should be supposed that Aristotle did, or professed to do, anything more than this, it ought to be remembered that he himself expressly says, at the commencement of the seventh chapter of the first book of the Meteorologics, that, with regard to things which are not manifest to the senses, he thinks to adduce sufficient reasons and demonstrations of them, if he only shows that they may be such as he explains them.

XVIII. That nevertheless there is a moral certainty that all the things of this world are such as has been here shown they may be.

But nevertheless, that I may not wrong the truth by supposing it less certain than it is, I will here distinguish two kinds of certitude. The first is called moral, that is, a certainty sufficient for the conduct of life, though, if we look to the absolute power of God, what is morally certain may be false.

XIX. That we possess even more than a moral certainty of it.

Besides, there are some, even among natural, things which we judge to be absolutely certain. This certainty is founded on the metaphysical ground, that, as God is supremely good and the source of all truth, the faculty of distinguishing truth from error which he gave us, cannot be fallacious so long as we use it aright, and distinctly perceive anything by it. Of this character are the demonstrations of mathematics, the knowledge that material things exist, and the clear reasonings that are formed regarding them. The results I have given in this treatise will perhaps be admitted to a place in the class of truths that are absolutely certain, if it be considered that they are deduced in a continuous series from the first and most elementary principles of human knowledge; especially if it be sufficiently understood that we can perceive no external objects unless some local motion be caused by them in our nerves, and that such motion cannot be caused by the fixed stars, owing to their great distance from us, unless a motion be also produced in them and in the whole heavens lying between them and us: for these points being admitted, all the others, at least the more general doctrines which I have advanced regarding the world or earth, will appear to be almost the only possible explanations of the phenomena they present.

XX. That, however, I submit all my opinions to the authority of the church.

Nevertheless, lest I should presume too far, I affirm nothing, but submit all these my opinions to the authority of the church and the judgment of the more sage; and I desire no one to believe anything I may have said, unless he is constrained to admit it by the force and evidence of reason.

ETHICS Proved in Geometrical Order

BARUCH SPINOZA

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BARUCH SPINOZA

1632-1677

BARUCH SPINOZA, born into an orthodox Jewish family November 24, 1632, was a Dutch philosopher of Spanish ancestry. His parents were members of a community of Jewish emigrants who had fled from Spain and Portugal to escape religious persecution. Both Spinoza's grandfather and father were leaders among the Jews of Amsterdam. The grandfather was the recognized head of his community in 1628; and the father, Michael Espinoza, was the warden of the synagogue between 1630 and 1650.

This ancestral background and early environment gave to the young philosopher two characteristics which dominated his later thinking. The first characteristic was a thorough knowledge of, and a deep respect for, religion. Young Baruch's education was in the best Jewish tradition. His parents were of comfortable means and able to give the boy a Biblical and Talmudic training under the most noted rabbis in Amsterdam. The other characteristic born of the boy's ancestral heritage and early experience was an abiding love of freedom.

It was this love of freedom that caused him much suffering and misunderstanding. His opposition to the antiquated beliefs of the orthodox synagogue brought about his expulsion from the Jewish fold.

His longing for a broader understanding led him to study with Van den Enden, a physician who was generally believed to be a freethinker. As his knowledge widened, he withdrew more and more from the turmoil of the world to the solitude of his study. He moved to an attic in the Ouwerkerk suburb of Amsterdam, changed his name from Baruch to Benedict, and took up the polishing of lenses as a means of livelihood, and the pursuit of philosophy as the business of his life.

As the trend of Spinoza's philosophy began to take a definite form, his love for clarity and his passion for freedom became more and more pronounced. He refused to impose his religious point of view upon others, and would not attempt to shake their faith even though it was not his own faith.

In 1661 he moved to Rijnsburg, a small town near Leyden, where he started to formulate his great work, the Ethics. Shutting himself in his room "like a silkworm in his cocoon," he rarely went out except for a walk or to buy his simple fare of milk and corn meal and an occasional handful of raisins. His chief relaxation was to watch the "fussing and the fighting" of the spiders as they spun out their webs in his workroom whilst he was spinning out the thread of his philosophy.

It was a new and daring philosophy, and it aroused much concern among the religious fanatics of the day. One attempt had been made to assassinate Spinoza, and a great many persons in high position believed him to be "an instrument of Satan" who ought to be put where he belonged. Several attempts to publish the *Ethics* were frustrated through the fanaticism of his opponents. This opposition only brought a smile of pity to his lips. He was utterly indifferent to abuse, just as he was utterly indifferent to applause. On one occasion he refused a call to a professorial chair at the University of Heidelberg. Dedicated to freedom in thinking and in teaching, he feared that he would be too seriously restricted in presenting his ideas at Heidelberg.

Never a strong man, Spinoza finally succumbed to a disease of the lungs and died on February 21, 1677—his Ethics still unpublished. Thus ended, at forty-five years of age, the life of one of the greatest of modern philosophers. He was hated by those who feared freedom and loved by those who recognized its true meaning. To the first group he was always an enigma. The pastor Colerue, his most faithful biographer, who despised and feared him intensely but who carefully collected all the items available about his life, failed to understand how a freethinker "could lead so beautiful a life and die so quiet a death."

The philosophy of Spinoza is presented in the form of a treatise on geometry. Beginning with definitions, he lays down a number of axioms (self-evident truths), and then develops his argument through a number of theorems (propositions to be proved by a progressive chain of reasoning).

The general scope of his philosophy embraces three fundamental problems:

1-The structure of the World.

2—The identity of God.

3—The nature of Man.

The world, concludes Spinoza, is infinite. It has no beginning and no ending in space. Let us extend the horizon of our mental vision as far as we possibly can, and we shall still be unable to conceive of "nothingness" beyond the boundaries of space. Space, then, is beginningless, endless, boundless.

Also, declares Spinoza, the world is eternal. It has no beginning and no ending in time. We cannot imagine anything before time or after time. Just like space, time is all-pervading, everlasting, complete.

And so this world never and nowhere began, and never and nowhere will end. It simply is—everywhere and everlastingly it exists.

So much, then, for the structure of the world. And now, what about the identity of God? To this question Spinoza gives a unique and startling answer. God, asserts Spinoza, is identical with the world. He calls this doctrine *Pantheism*, which means that God is in everything and that everything is in God. The visible universe is His body, and the energy (or the harmony) that moves it is His mind.

And what about Man in this scheme of things? The body of Man, of every individual man, is part of God's body; and the mind of Man, of every individual man, is part of God's mind. Each of us, maintains Spinoza, is but a small part of God; but—and here is a message of great hope for us all—each of us is an equally important part. Even the so-called failures in life are essential notes in the symphony of creation. Let no one therefore despair. No life has ever been in vain. From God we come—to God we return. All humanity is one body and one soul. We live in one world. If we hurt a single individual, we hurt all mankind. In striking against any man, we strike against God. We are more than brothers of a single human family. We are related members of a single divine body and a single divine mind.

ETHICS

Proved in Geometrical Order

FIRST PART: CONCERNING GOD

DEFINITIONS

- I. I UNDERSTAND that to be CAUSE OF ITSELF whose essence involves existence and whose nature cannot be conceived unless existing.
- II. That thing is said to be FINITE IN ITS KIND which can be limited by another thing of the same kind.
- III. I understand Substance to be that which is in itself and is conceived through itself: I mean that, the conception of which does not depend on the conception of another thing from which it must be formed.
- IV. An ATTRIBUTE I understand to be that which the intellect perceives as constituting the essence of a substance.
- V. By Mode I understand the Modifications of a substance or that which is in something else through which it may be conceived.
- VI. God I understand to be a being absolutely infinite, that is, a substance consisting of infinite attributes, each of which expresses eternal and infinite essence.
- VII. That thing is said to be FREE which exists by the mere necessity of its own nature and is determined in its actions by itself alone. That thing is said to be Necessary, or rather Compelled, when it is determined in its existence and actions by something else in a certain fixed ratio.
- VIII. I understand ETERNITY to be existence itself, in so far as it is conceived to follow necessarily from the definition of an eternal thing.

AXIOMS

- I. All things which are, are in themselves or in other things.
- II. That which cannot be conceived through another thing must be conceived through itself.

- III. From a given determined cause an effect follows of necessity, and on the other hand, if no determined cause is granted, it is impossible that an effect should follow.
- IV. The knowledge of effect depends on the knowledge of cause, and involves the same.
- V. Things which have nothing in common reciprocally cannot be comprehended reciprocally through each other, or, the conception of the one does not involve the conception of the other.
 - VI. A true idea should agree with its ideal, i.e., what it conceives.
- VII. The essence of that which can be conceived as not existing does not involve existence.

PROPOSITIONS

PROP. I. A substance is prior in its nature to its modifications.

Proof.—This is obvious from Def. 3 and 5.

Prop. II. Two substances, having different attributes, have nothing in common between them.

Proof.—This also is obvious from Def. 3. For each of them must be in itself and through itself be conceived, or the conception of one of them does not involve the conception of the other.

Prop. III. Of two things having nothing in common between them, one cannot be the cause of the other.

Proof.—If they have nothing in common reciprocally, therefore they cannot be known through each other, and therefore one cannot be the cause of the other. *O.e.d.*

PROP. IV. Two or three distinct things are distinguished one from the other either by the difference of the attributes of the substances or by the difference of their modifications.

Proof.—All things that are, are either in themselves or in other things, that is, beyond the intellect nothing is granted save substances and their modifications. Nothing therefore is granted beyond the intellect, through which several things may be distinguished one from the other except substances, or what is the same thing, their attributes or modifications. Q.e.d.

PROP. V. In the nature of things, two or more things may not be granted having the same nature or attribute.

Proof.—If several distinct substances are given, they must be distinguished one from the other either by the difference of their attributes or their modifications. If, then, they are to be distinguished by the difference of their attributes, two or more cannot be granted having the same attribute. But if they are to be distinguished by the difference of their

modifications, since a substance is prior in its nature to its modifications, therefore let the modifications be laid aside and let the substance itself be considered in itself, that is, truly considered, and it could not then be distinguished from another, that is, two or more substances cannot have the same nature or attribute. Q.e.d.

Prop. VI. One substance cannot be produced by another.

Proof.—In the nature of things two substances cannot be granted with the same attribute, that is, which have anything in common, and accordingly one of them cannot be the cause of the other or one cannot be produced by the other. *Q.e.d.*

Corollary.—Hence it follows that a substance cannot be produced from anything else. For in the nature of things nothing is given save substances and their modifications, as is obvious from Ax. 1 and Def. 3 and 5: and it cannot be produced from another substance. Therefore a substance cannot in any way be produced from anything else. Q.e.d.

Prop. VII. Existence appertains to the nature of substance.

Proof.—A substance cannot be produced from anything else: it will therefore be its own cause, that is, its essence necessarily involves existence, or existence appertains to the nature of it. Q.e.d.

Prop. VIII. All substance is necessarily infinite.

Proof.—No two or more substances can have the same attribute, and it appertains to the nature of substance that it should exist. It must therefore exist either finitely or infinitely. But not finitely. For it would then be limited by some other substance of the same nature which also of necessity must exist: and then two substances would be granted having the same attribute, which is absurd. It will exist, therefore, infinitely. Q.e.d.

Prop. IX. The more reality or being a thing has, the more attributes will it have.

Proof.—This is obvious from Def. 4.

Prop. X. Each attribute of the one substance must be conceived through itself.

Proof.—An attribute is that which the intellect perceives of a substance as constituting its essence, therefore it must be conceived through itself. Q.e.d.

Prop. XI. God or a substance consisting of infinite attributes, each of which expresses eternal and infinite essence, necessarily exists.

Proof.—If you deny it, conceive, if it be possible, that God does not exist. Then his essence does not involve existence. But this is absurd. Therefore God necessarily exists. Q.e.d.

Prop. XII. No attribute of a substance can be truly conceived, from which it would follow that substance can be divided into parts.

Proof.—The parts into which substance so conceived may be divided will either retain the nature of substance or not. In the first case, then each part must be infinite and its own cause, and must possess different attributes; and so from one substance several can be made, which is absurd. Again, the parts would have nothing in common with the whole, and the whole could exist and be conceived without the parts which go to make it, which no one will doubt to be absurd. But in the second case, when the parts do not retain the nature of substance, then, when a substance is divided into equal parts, it will lose the nature of substance and will cease to be, which is absurd.

PROP. XIII. Substance absolutely infinite is indivisible.

Proof.—If it is divisible, the parts into which it is divided will either retain the nature of substance or will not. In the first case, several substances would be given having the same nature, which is absurd. In the second case, a substance absolutely infinite could cease to be, which is also absurd.

Corollary.—From this it follows that no substance, and consequently no corporeal substance, in so far as it is substance, can be divided into parts.

PROP. XIV. Except God no substance can be granted or conceived.

Proof.—As God is a being absolutely infinite, to whom no attribute expressing the essence of substance can be denied, and as he necessarily exists, if any other substance than God be given, it must be explained by means of some attribute of God, and thus two substances would exist possessing the same attribute, which is absurd; and so no other substance than God can be granted, and consequently not even be conceived. For if it can be conceived it must necessarily be conceived as existing, and this by the first part of this proof is absurd. Therefore except God no substance can be granted or conceived. Q.e.d.

Corollary I.—Hence it distinctly follows that (1) God is one alone, i.e., there is none like him, or in the nature of things only one substance can be granted, and that is absolutely infinite.

Corollary II.—It follows, in the second place, that extension and thought are either attributes of God or modifications of attributes of God.

Prop. XV. Whatever is, is in God, and nothing can exist or be conceived without God.

Proof.—Save God no substance is granted or can be conceived, that is, a thing which is in itself and through itself is conceived. But modifications cannot exist or be conceived without substance, wherefore these can only

exist in divine nature, and through that alone be conceived. But nothing is granted save substances and their modifications. Therefore nothing can exist or be conceived without God. Q.e.d.

Prop. XVI. Infinite things in infinite modes must necessarily follow from the necessity of divine nature.

Proof.—This proposition must be manifest to every one who will but consider this, that from a given definition of everything the intellect gathers certain properties, which in truth necessarily follow from the definition, and so the more reality the definition of a thing expresses, i.e., the more reality the essence of a definite thing involves, the more properties the intellect will gather. But as divine nature has absolutely infinite attributes, each of which expresses infinite essence in its kind, infinite things in infinite modes must necessarily follow its necessity. Q.e.d.

Corollary I.—Hence it follows that God is the effecting cause of all things which can be perceived by infinite intellect.

Corollary II.—Hence it follows that God is the cause through himself, and not indeed by accident.

Corollary III.—Hence it follows that God is absolutely the first cause.

Prop. XVII. God acts merely according to his own laws, and is compelled by no one.

Proof.—That infinite things must follow from the mere necessity of divine nature, or what is the same thing, by the mere laws of divine nature, we have just shown, and we have shown that nothing can be conceived without God, but that everything exists in God. Therefore nothing outside God can exist by which he could be determined or compelled in his actions; and therefore God acts merely according to the laws of his nature, and is compelled by no one. Q.e.d.

Corollary I.—Hence it follows that no cause can be given except the perfection of God's nature which extrinsically or intrinsically incites him to action.

Corollary II.—Hence it follows that God alone is a free cause. For God alone exists from the mere necessity of his own nature, and by the mere necessity of his nature he acts. And therefore he is the only free cause. Q.e.d.

Prop. XVIII. God is the indwelling and not the transient cause of all things.

Proof.—All things that are, are in God, and through God must be conceived, and therefore God is the cause of all things which are in him: which is the first point. Again, beyond God no substance, that is, a thing which outside God is in itself, can be granted: which was the second point. Therefore God is the indwelling and not the transient cause of all things. O.e.d.

Prop. XIX. God and all the attributes of God are eternal.

Proof.—God is a substance, which necessarily exists, that is, to whose nature existence appertains, or from whose definition existence itself follows: accordingly it is eternal. Again, by the attributes of God must be understood that which expresses the essence of divine substance, that is, that which appertains to substance: that itself, I say, must involve the attributes themselves. But eternity appertains to the nature of substance. Therefore each of the attributes must involve eternity, and therefore they are all eternal. Q.e.d.

PROP. XX. God's existence and his essence are one and the same thing.

Proof.—God and all his attributes are eternal, that is, each of his attributes expresses existence. Therefore the same attributes of God, which explain the eternal essence of God, explain at the same time his existence, that is, whatever forms the essence of God, forms also his existence: therefore the essence and existence of God are one and the same thing. Q.e.d.

Corollary I.—Hence it follows that the existence of God, like his essence, is an eternal truth.

Corollary II.—Hence it follows that God and all his attributes are immutable. For if they were changed with regard to existence, they must also be changed with regard to essence, that is, falsehood would be made from truth, which is absurd.

Prop. XXI. All things which follow from the absolute nature of any attribute of God must exist for ever and infinitely, or must exist eternally and infinitely through that same attribute.

Proof.—Conceive, if it can happen, that anything in any attribute of God following from its absolute nature is finite and has a fixed existence or duration, e.g., the idea of God in thought. But thought, since it is supposed an attribute of God, is necessarily infinite in its nature. In so far as it has the idea of God, it is supposed to be finite. But it cannot be conceived finite unless it is limited by thought itself; but it cannot be limited by thought in so far as it forms the idea of God, for then it would be finite: so it must be limited by thought in so far as it does not form the idea of God, and this idea nevertheless must exist necessarily. A thought is therefore granted which does not form an idea of God, and therefore from its nature, in so far as it is an absolute thought, the idea of God does not necessarily follow: thought is then conceived as forming and not forming the idea of God, which is contrary to the hypothesis. So if the idea of God in thought or anything in any attribute of God follows from the necessity of the absolute nature of that attribute, it must of necessity be infinite: which is the first point.

Again, that which follows from the necessity of the nature of any

attribute cannot have a fixed duration. If you deny this, let something which follows from the necessity of the nature of any attribute be supposed to be granted in any attribute of God, e.g., the idea of God in thought, and let it be supposed either not to have existed at some past time, or to cease to exist in some future time. But since thought is supposed to be an attribute of God, it must of necessity exist, and that immutably. Thence it follows that outside the limits of the duration of the idea of God, thought must exist without the idea of God: and this is contrary to the hypothesis, for it is supposed that the idea of God necessarily follows from the given thought. Therefore the idea of God in thought or anything that follows of necessity from the absolute nature of any attribute of God cannot have a fixed duration, but through the attribute itself is eternal: which was the second point. Note that this can be asserted of anything which in any attribute of God follows of necessity from the absolute nature of God.

Prop. XXII. Whatever follows from an attribute of God, in so far as it is modified by such a modification as exists of necessity and infinitely through the same, must also exist of necessity and infinitely.

Proof.—The proof of this proposition proceeds in the same manner as the proof of the last proposition.

Prop. XXIII. Every mode which of necessity and infinitely exists must of necessity have followed either from the absolute nature of some attribute of God, or from some attribute modified by a modification which exists of necessity and infinitely.

Proof.—Now mode is in something else through which it must be conceived, that is, it is in God alone, and can only be conceived through God. If, therefore, mode be conceived to exist of necessity and to be infinite, its existence and infinity must be concluded or perceived through some attribute of God, in so far as this attribute is conceived to express infinity and necessity of existence, or eternity, that is, as far as it is considered absolutely. Mode, therefore, which of necessity and infinitely exists, must have followed from the absolute nature of some attribute of God, and that either immediately or by means of some modification which follows from the absolute nature of the attribute, that is, which necessarily and infinitely exists. Q.e.d.

Prop. XXIV. The essence of things produced by God does not involve existence.

Proof.—This is clear from Def. 1. For that whose nature involves existence is its own cause, and exists merely by the necessity of its own nature.

Corollary.—Hence it follows that God is not only the cause that all

things begin to exist, but also that they continue to exist, or God is the cause of the being of things. For whether things exist or whether they do not, however often we consider their essence, we will find it to involve neither existence nor duration; and their essence cannot be the cause either of their existence or their duration, but only God, to whose nature alone existence appertains.

Prop. XXV. God is not only the effecting cause of the existence of things, but also of their essence.

Proof.—If you deny it, then let God be not the cause of the essence of things: therefore the essence of things can be conceived without God. But this is absurd. Therefore God is the cause of the essence of things. Q.e.d.

Corollary.—Particular things are nothing else than modifications of attributes of God, or modes by which attributes of God are expressed in a certain and determined manner.

PROP. XXVI. A thing which is determined for the performing of anything was so determined necessarily by God, and a thing which is not determined by God cannot determine of itself to do anything.

Proof.—That through which things are said to be determined for performing anything must necessarily be something positive: and therefore God, by the necessity of his nature, is the effecting cause of the essence and existence of this: which was the first point. From which clearly follows that which was proposed in the second place. For if a thing which is not determined by God could determine itself, the first part of this proof would be false: which is absurd, as we have shown.

Prop. XXVII. A thing which is determined by God for the performing of anything cannot render itself undetermined.

Proof.—This is obvious from the third axiom.

Prop. XXVIII. Every individual thing, or whatever thing that is finite and has a determined existence, cannot exist nor be determined for action unless it is determined for action and existence by another cause which is also finite and has a determined existence; and again, this cause also cannot exist nor be determined for action unless it be determined for existence and action by another cause which also is finite and has a determined existence: and so on to infinity.

Proof.—Whatever is determined for existence or action is so determined by God. But that which is finite and has a determined existence cannot be produced from the absolute nature of any attribute of God: for anything that follows from the absolute nature of any attribute of God must be infinite and eternal. It must have followed, therefore, either from God or some attribute of his, in so far as it is considered as modified in

some mode: for save substance and modes nothing is granted, and modes are nothing else than modifications of attributes of God. But it also cannot have followed from God or any attribute of his, in so far as it is modified by some modification which is eternal and infinite. It follows, then, that it must have been determined for existence or action by God or some attribute of his, in so far as it is modified by a modification which is finite and has a determined existence: which was the first point. Then again, this cause or mode must also have been determined by another cause which also is finite and has a determined existence; and again, the latter must have been determined by another: and so on to infinity. O.e.d.

Prop. XXIX. In the nature of things nothing contingent is granted, but all things are determined by the necessity of divine nature for existing and working in a certain way.

Proof.—Whatever is, is in God. But God cannot be called a contingent thing: for he exists of necessity and not contingently. Again, the modes of divine nature do not follow from it contingently, but of necessity, and that either in so far as divine nature be considered absolutely or as determined for certain action. Now God is the cause of these modes, not only in so far as they simply exist, but also in so far as they are considered as determined for the working of anything. For if they are not determined by God, it is impossible, not contingent indeed, that they should determine themselves; and on the other hand, if they are determined by God, it is impossible and in no wise contingent for them to render themselves undetermined. Wherefore all things are determined by the necessity of divine nature, not only for existing, but also for existing and working after a certain manner, and nothing contingent is granted. Q.e.d.

Prop. XXX. Intellect, finite or infinite in actuality, must comprehend the attributes of God and the modifications of God and nothing else.

Proof.—A true idea must agree with its ideal, that is, that which is contained in the intellect objectively must of necessity be granted in nature. But in nature, only one substance can be granted, and that is God, and only such modifications can be granted as are in God and cannot exist or be conceived without God. Therefore, intellect finite or infinite in actuality must comprehend the attributes and modifications of God and nothing else. Q.e.d.

Prop. XXXI. The intellect in actuality, whether it be finite or infinite, as will, desire, love, etc., must be referred not to active, but passive nature.

Proof.—Now by intellect we do not understand absolute thought, but only a certain mode of thinking which differs from other modes, such as desire and love, etc., and therefore must be conceived through absolute thought; moreover, it must be so conceived through some attribute of God

which expresses eternal and infinite essence of thought, that without it, it can neither exist nor be conceived. On this account, like the other modes of thinking, the intellect must be referred not to active but passive nature. Q.e.d.

Prof. XXXII. Will can only be called a necessary cause, not a free one. *Proof.*—Will, like intellect, is only a certain mode of thinking, and therefore any single volition cannot exist or be determined for performing anything unless it be determined by some other cause, and this one again by another, and so on to infinity. Now if will be supposed infinite, it must then be determined for existence and action by God, in so far, not as he is an infinite substance, but as he has an attribute expressing infinite and eternal essence of thought. So in whatever way it be conceived, whether as finite or infinite, it requires a cause by which it is determined for existence or action: and therefore it cannot be said to be a free cause, but only a necessary one. *Q.e.d.*

Corollary I.—Hence it follows that God does not act from freedom of will.

Corollary II.—Hence it follows again that will and intellect hold the same place in the nature of God as motion and rest, and that, absolutely, as with all natural things which must be determined by God in a certain way for existence and action. For will, like all other things, needs a cause by which it is determined in a certain way for existence or action. And although from a given will or intellect infinite things follow, yet it cannot be said on that account that God acts from freedom of will any more than it can be said that, as infinite things follow from motion and rest, God acts from freedom of motion and rest. Wherefore will does not appertain to the nature of God any more than the rest of the things of nature, but holds the same place in God's nature as motion and rest, and all other things which we have shown to follow from the necessity of divine nature, and to be determined by it for existence and action in a certain way.

Prop. XXXIII. Things could not have been produced by God in any other manner or order than that in which they were produced.

Proof.—All things must have followed of necessity from a given nature of God, and they were determined for existence or action in a certain way by the necessity of divine nature. And so if things could have been of another nature or determined in another manner for action so that the order of nature were different, therefore, also, the nature of God could be different than it is now: then another nature of God must exist, and consequently two or more Gods could be granted, and this is absurd. Wherefore things could not have been produced in any other way or order, etc. O.e.d.

Prop. XXXIV. The power of God is the same as his essence.

Proof.—It follows from the mere necessity of the essence of God that God is his own cause, and the cause of all things. Therefore the power of God, by which he and all things are and act, is the same as his essence. Q.e.d.

Prop. XXXV. Whatever we conceive to be in the power of God necessarily exists.

Proof.—Now whatever is in the power of God must be so comprehended in his essence that it follows necessarily from it, and so it necessarily exists. Q.e.d.

Prop. XXXVI. Nothing exists from whose nature some effect does not follow.

Proof.—Whatever exists expresses in a certain and determined manner either the nature or essence of God, that is, whatever exists expresses in a certain and determined way the power of God, which is the cause of all things, and therefore from it some effect must follow. Q.e.d.

SECOND PART: CONCERNING THE NATURE AND ORIGIN OF THE MIND

DEFINITIONS

- I. By Body I understand that mode which expresses in a certain determined manner the essence of God in so far as he is considered as an extended thing.
- II. I say that appertains to the essence of a thing which, when granted, necessarily involves the granting of the thing, and which, when removed, necessarily involves the removal of the thing; or that without which the thing, or on the other hand, which without the thing can neither exist nor be conceived.
- III. By IDEA I understand a conception of the mind which the mind forms by reason of its being a thinking thing.
- IV. By an ADEQUATE IDEA I understand an idea which in so far as it is considered without respect to the object, has all the properties or intrinsic marks of a true idea.
 - V. Duration is indefinite continuation of existing.
- VI. REALITY and PERFECTION I understand to be one and the same thing.
- VII. By Individual Things I understand things which are finite and have a determined existence; but if several of them so concur in one

action that they all are at the same time the cause of one effect, I consider them all thus far as one individual thing.

AXIOMS

- I. The essence of man does not involve necessary existence, that is, in the order of nature it can equally happen that this or that man exists as that he does not exist.
 - II. Man thinks.
- III. The modes of thinking, such as love, desire, or any other name by which the modifications of the mind are designated, are not granted unless an idea in the same individual is granted of the thing loved, desired, etc. But the idea can be granted although no other mode of thinking be granted.
 - IV. We feel that a certain body is affected in many ways.
- V. We neither feel nor perceive any individual things save bodies and modes of thinking. For Postulates, see after Prop. 13.

PROPOSITIONS

Prop. I. Thought is an attribute of God, or God is a thinking thing. Proof.—Individual thoughts or this and that thought are modes which express in a certain and determined manner the nature of God. The attribute whose conception all individual thoughts involve and through which they are conceived, belongs to God. Thought, therefore, is one of the infinite attributes of God which express the eternal and infinite essence of God, or God is a thinking thing. Q.e.d.

Prop. II. Extension is an attribute of God, or God is an extended thing. *Proof.*—This proof proceeds in the same manner as that of the previous proposition.

Prop. III. In God there is granted not only the idea of his essence, but also the idea of all the things which follow necessarily from his essence.

Proof.—God can think infinite things in infinite modes, or he can form an idea of his essence and of all things which follow from it. Now all that is in the power of God necessarily exists. Therefore such an idea is granted, and that only in God. *O.e.d.*

Prop. IV. The idea of God from which infinite things in infinite modes follow can only be one.

Proof.—Infinite intellect comprehends nothing save the attributes

and modifications of God. God is one. Therefore the idea of God from which infinite things in infinite modes follow can only be one. Q.e.d.

Prop. V. The formal being of ideas acknowledges God as its cause only in so far as he is considered as a thinking thing, and not in so far as he is revealed in some other attribute: that is, the ideas, not only of the attributes of God, but also of individual things, do not acknowledge their ideals or the objects perceived as their effecting cause, but God himself in so far as he is a thinking thing.

Proof.—This is obvious from Prop. 3 of this part. For there we concluded that God can form an idea of his essence and of all things which follow therefrom necessarily, and that from this alone that he is a think ing thing, and not from the fact that he is the object of his idea. Wherefore the formal being of ideas acknowledges God for its cause in so far as he is a thinking thing. But this can be shown in another manner. The formal being of ideas is a mode of thinking, that is, a mode which expresses in a certain manner the nature of God in so far as he is a thinking thing, and therefore involves the conception of no other attribute of God, and consequently is the effect of no other attribute or thought. Therefore the formal being of ideas acknowledges God as its cause in so far as he is a thinking thing, etc. Q.e.d.

Prop. VI. The modes of any attribute of God have God for their cause only in so far as he is considered through that attribute, and not in so far as he is considered through any other attribute.

Proof.—Each attribute is conceived through itself without the aid of another. Wherefore the modes of each attribute involve the conception of their attribute and not that of another; and so the modes of any attribute of God have God for their cause only in so far as he is considered through that attribute, and not in so far as he is considered through any other attribute. O.e.d.

Corollary.—Hence it follows that the formal being of things which are not modes of thinking does not follow from divine nature because it knows things prior to it; but things conceived follow and are concluded from their attributes in the same manner and by the same necessity as we have shown ideas to follow from their attribute of thought.

Prop. VII. The order and connection of ideas is the same as the order and connection of things.

Proof.—This is clear from Ax. 4, Part I. For the idea of everything that is caused depends on the knowledge of the cause of which it is an effect.

Corollary.—Hence it follows that God's power of thinking is equal to his actual power of acting: that is, whatever follows formally from the

infinite nature of God, follows also invariably objectively from the idea of God in the same order and connection.

Note.—Before we proceed any further, let us call to mind what we have already shown above: that whatever can be perceived by infinite intellect as constituting the essence of substance, invariably appertains to one substance alone; and consequently thinking substance and extended substance are one and the same thing, which is now comprehended through this and now through that attribute. For example, a circle existing in nature and the idea of an existing circle which is also in God is one and the same thing, though explained through different attributes.

Prop. VIII. The ideas of individual things or modes which do not exist must be comprehended in the infinite idea of God in the same way as the formal essences of individual things or modes are contained in the attributes of God.

Proof.—This proposition is clear from the preceding note.

Corollary.—Hence it follows that as long as individual things do not exist save in so far as they are comprehended in the attributes of God, their objective being or ideas do not exist save in so far as the infinite idea of God exists; and when individual things are said to exist not only in so far as they are comprehended in the attributes of God, but also in so far as they are said to last, their ideas also involve existence, through which they are said to last.

Prop. IX. The idea of an individual thing actually existing has God for its cause, not in so far as he is infinite, but in so far as he is considered as affected by the idea of another individual thing actually existing of which also God is the cause, in so far as he is affected by another third idea, and so on to infinity.

Proof.—The idea of an individual thing actually existing is an individual mode of thinking and distinct from all others; and therefore has God, in so far only as he is a thinking thing, for its cause. But not in so far as he is a thing thinking absolutely, but in so far as he is considered as affected by another mode of thinking, and again he is the cause of this in so far as he is affected by a third, and so on to infinity. And the order and connection of ideas is the same as the order and connection of causes. Therefore the cause of an individual thing is either another idea or God in so far as he is considered as affected by the other idea: and of this idea God is the cause in so far as he is affected by another idea, and so on to infinity. Q.e.d.

Corollary.—The knowledge of whatever happens in the individual object of any idea has its knowledge in God, but only in so far as he has the idea of the object.

Proof.—Whatever happens in the object of any idea has its idea in God, not in so far as he is infinite, but only in so far as he is considered as affected by another idea of an individual thing, but the order and connection of ideas is the same as the order and connection of things. Therefore the knowledge of that which happens in any individual object is in God in so far only as he has the idea of the object, O.e.d.

Prop. X. The being of substance does not appertain to the essence of man, or, again, substance does not constitute the form of man.

Proof.—The being of substance involves necessary existence. If therefore the being of substance appertains to the essence of man, substance being granted, man also must necessarily be granted, and consequently man must necessarily exist, which is absurd. Therefore, etc. *Q.e.d.*

Corollary.—Hence it follows that the essence of man is constituted by certain modifications of attributes of God. For the being of substance does not appertain to the essence of man. The latter is therefore something that is in God and which cannot exist or be conceived without God, whether it be a modification or a mode that expresses the nature of God in a certain determined manner.

PROP. XI. The first part which constitutes the actual being of the human mind is nothing else than the idea of an individual thing actually existing.

Proof.—The essence of man is constituted by certain modes of attributes of God; that is, by certain modes of thinking, of all which the idea is prior in nature, and this idea being granted the remaining modes must be in the same individual. And therefore the idea is the first part that constitutes the being of the human mind, but not the idea of a thing not existing: for then that very idea cannot be said to exist. It must therefore be the idea of a thing actually existing. But not of a thing infinite. For an infinite thing must always necessarily exist. But this is absurd. Therefore the first part which constitutes the actual being of the human mind is the idea of an individual thing actually existing. Q.e.d.

Corollary.—Hence it follows that the human mind is a part of the infinite intellect of God, and thus when we say that the human mind perceives this or that, we say nothing else than that God, not in so far as he is infinite, but in so far as he is explained through the nature of the human mind, or in so far as he constitutes the essence of the human mind, has this or that idea: and when we say that God has this or that idea not only in so far as he constitutes the nature of the human mind, but also in so far simultaneously with the human mind as he has also the idea of another thing, then we say that the human mind perceives the thing only in part or inadequately.

Prop. XII. Whatever happens in the object of the idea constituting the human mind must be perceived by the human mind, or the idea of that thing must necessarily be found in the human mind: that is, if the object of the idea constituting the human mind be the body, nothing can happen in that body which is not perceived by the mind.

Proof.—Now whatever happens in the object of any idea, the knowledge of it is necessarily granted in God in so far as he is considered as affected by the idea of that object, that is, in so far as he constitutes the mind of anything. Therefore whatever happens in the object of an idea constituting the human mind, knowledge of it must be granted in God in so far as he constitutes the nature of the human mind, that is, the knowledge of this thing will be necessarily in the mind or the mind will perceive it. Q.e.d.

Prop. XIII. The object of the idea constituting the human mind is the body, or a certain mode of extension actually existing and nothing else.

Proof.—Now if the body is not the object of the human mind, the ideas of the modifications of the body would not be in God in so far as he constitutes our mind or the mind of some other thing, that is, the ideas of the modifications of the body would not be in our mind. But we have ideas of the modifications of the body. Therefore the object of the idea constituting the human mind is the body, and that actually existing. Further, if there were still another object of the mind besides the body, then since nothing can exist from which some effect does not follow, therefore necessarily there would be found in our mind an idea the effect of that object. But no idea of this is found. Therefore the object of our mind is the existing body and nothing else. Q.e.d.

Corollary.—Hence it follows that man consists of mind and body, and that the human body exists according as we feel it.

At this point I must premise a few statements concerning the nature of bodies.

Axiom I. All bodies are either moving or stationary.

Axiom II. Each body is moved now slowly now more fast.

LEMMA I. Bodies are reciprocally distinguished with respect to motion or rest, quickness or slowness, and not with respect to substance.

Proof.—The first part of this proposition I suppose to be clear of itself. But that bodies should not be distinguished one from the other with respect to substance, is obvious both from Prop. 5 and Prop. 8, Part I.

LEMMA II. All bodies agree in certain respects.

Proof.—All bodies agree in this, that they involve the conception of one and the same attribute: and again, that they may be moved more quickly or more slowly or be absolutely in motion or absolutely stationary.

LEMMA III. A body in motion or at rest must be determined for motion or rest by some other body, which, likewise, was determined for motion or rest by some other body, and this by a third, and so on to infinity.

Proof.—Bodies are individual things, which are distinguished reciprocally with respect to motion or rest: and, therefore, each must necessarily be determined for motion or rest by some other individual thing, that is, by another body, which also is either in motion or at rest. But this one also, by the same reason, cannot be in motion or at rest unless it was determined for motion or rest by another body, and that again by another, and so on to infinity. *Q.e.d.*

Corollary.—Hence it follows that a moving body continues in motion until it is determined for rest by another body; and that a body at rest continues so until it is determined by another body for motion. This is self-evident. For if I suppose a given body A to be at rest and pay not attention to other moving bodies, I can say nothing concerning the body A save that it is at rest. And if it afterwards comes about that the body A moves, it clearly could not have been brought into motion by the fact that it was at rest: for from this it could only follow that it should remain at rest. If, on the other hand, the body A be supposed in motion, as long as we only have regard to the body A we can assert nothing concerning it save that it is in motion. And if it subsequently comes to pass that the body A comes to rest, it also clearly cannot have evolved from the motion which it had: for from this nothing else can follow than that A should be moved. It therefore comes to pass from something that was not in A, that is, from an external cause, that it was determined for rest.

Axiom I. All modes in which any body is affected by another follow alike from the nature of the body affected and the body affecting: so that one and the same body may be moved in various ways according to the variety of the natures of the moving bodies, and, on the other hand, various bodies may be moved in various manners by one and the same body.

Axiom II. When a moving body impinges another body at rest which cannot move, it recoils in order to continue to move: and the angle of the line of recoiling motion with the plane of the body at rest which it impinged will be equal to the angle which the line of the motion of incidence made with the same plane.

Thus far we have been speaking of the most simple bodies, which are distinguished reciprocally merely by motion or rest, by swiftness or slowness: now we pass on to compound bodies.

Definition.—When a number of bodies of the same or different size are driven so together that they remain united one with the other, or if they are moved with the same or different rapidity so that they communicate their motions one to another in a certain ratio, those bodies are

called reciprocally united bodies, and we say that they all form one body or individual, which is distinguished from the rest by this union of the bodies.

Axiom III. According as the parts of an individual or compound body are united on a greater or less surface so the greater is the difficulty or facility with which they are forced to change their position and, consequently, the greater the difficulty or facility with which it is brought about that they assume another form. And hence those bodies whose parts are united over a large surface I shall call hard, and those whose parts are united over a small surface are called soft, and those whose parts are in motion among each other are called fluid.

LEMMA IV. If from a body or individual which is composed of several bodies certain ones are removed, and at the same time the same number of bodies of the same nature succeed to their place, the individual will retain its nature as before without any change of its form.

Proof.—Now bodies are not distinguished with respect to substance. But that which constitutes the form of an individual consists of a union of bodies. But this union, although the change of bodies continue, is retained: the individual will therefore retain as before its nature both with respect to substance and mode. Q.e.d.

LEMMA V. If the parts composing an individual become larger or smaller, but in such proportion that they preserve between themselves with respect to motion and rest the same ratio as before, the individual will retain its nature as before without any change of form.

Proof.—This is the same as that of the previous lemma.

LEMMA VI. If certain bodies composing an individual are forced to change their motion which they had in one direction into another, but in such a manner that they can continue their motion and preserve one with the other the same ratio with respect to motion and rest as before, the individual will retain its nature without any change of form.

Proof.—This is self-evident. For it is supposed to retain all that which in its definition we said constituted its form.

LEMMA VII. Moreover, the individual thus composed retains its nature whether as a whole it be moved or remain at rest, whether it be moved in this or that direction, provided that each part retains its motion and communicates it as before to the other parts.

Proof.—This is clear from its definition, which see before.

POSTULATES

I. The human body is composed of many individuals (of different nature), each one of which is also composed of many parts.

II. The individuals of which the human body is composed are some fluid, some soft, and some hard.

III. The individuals composing the human body, and consequently the human body itself, are affected in many ways by external bodies.

IV. The human body needs for its preservation many other bodies from which it is, so to speak, regenerated.

V. When the fluid part of the human body is so determined by an external body that it impinges frequently on another part which is soft, it changes its surface and imprints such marks on it as the traces of an external impelling body.

VI. The human body can move external bodies in many ways, and dispose them in many ways.

Prop. XIV. The human mind is apt to perceive many things, and more so according as its body can be disposed in more ways.

Proof.—Now the human body is affected by external bodies in many ways and disposed to affect external bodies in many ways. But the human mind must perceive all things which happen in the human body. Therefore the human mind is apt to perceive many things, and more so, etc. Q.e.d.

Prop. XV. The idea which constitutes the formal being of the human mind is not simple, but composed of many ideas.

Proof.—The idea which constitutes the formal being of the human mind is the idea of the body, which is composed of many individuals, each composed of many parts. But the idea of each individual composing the body is necessarily granted in God. Therefore the idea of the human body is composed of the many ideas of the component parts. Q.e.d.

Prop. XVI. The idea of every mode in which the human body is affected by external bodies must involve the nature of the human body and at the same time the nature of the external body.

Proof.—All modes in which any body is affected follow from the nature of the body affected, and at the same time from the nature of the affecting body. Wherefore the idea of them must involve necessarily the nature of each body. Therefore the idea of each mode in which the human body is affected by an external body involves the nature of the human body and that of the external body. Q.e.d.

Corollary 1.—Hence it follows in the first place that the human mind can perceive the nature of many bodies at the same time as the nature of its own body.

Corollary II.—It follows in the second place that the ideas which we have of external bodies indicate rather the disposition of our body than the nature of the external bodies.

PROP. XVII. If the human body is affected in a mode which involves the nature of any external body, the human mind regards that external body as actually existing, or as present to itself until the body is affected by a modification which cuts off the existence or presence of that body.

Proof.—This is clear. For as long as the human body is thus affected, so long does the human mind regard this modification of the body; that is, it has the idea of the mode actually existing, and the idea involves the nature of the external body, that is, it has an idea which does not cut off the existence or presence of the nature of the external, but imposes it. Therefore the mind regards the external body as actually existing or present, until it is affected, etc. Q.e.d.

Corollary.—The mind can regard external bodies by which the human body was once affected, although they do not exist, nor are present, as if they were present.

Proof.—When external bodies so determine the fluid parts of the human body that they often impinge the soft parts, they change the surface of them. Whence it comes about that they are reflected thence in a different manner than before, and as afterwards they impinge on new surfaces by their spontaneous movement, they are reflected in the same manner as if they were driven towards those surfaces by external bodies, and consequently while they continue to be reflected they will affect the human body in the same manner, and the human mind will again think of external bodies, that is, the human mind will regard the external body as present, and that as long as the fluid parts of the human body impinge the same surfaces by their spontaneous motion. Wherefore although the external bodies by which the human body was once affected no longer exist, the mind nevertheless regards them as present as often as this action of the body is repeated. Q.e.d.

Prop. XVIII. If the human body has once been affected at the same time by two or more bodies, when the mind afterwards remembers any one of them it will straightway remember the others.

Proof.—The mind imagines any body for this reason, that the human body is affected and disposed by impressions of an external body in the same way as it is affected when certain parts of it are affected by the same external body. But the body was then so disposed that the mind imagined two bodies at once. Therefore it will imagine two bodies at the same time, and the mind when it imagines one of them will also straightway recall the other. Q.e.d.

PROP. XIX. The human mind has no knowledge of the human body, nor does it know it to exist save through ideas of modifications by which the body is affected.

Proof.—The human mind is the very idea or knowledge of the human body, which is in God in so far as he is considered as affected by another idea of an individual thing: or because the human body needs many bodies from which it is continuously regenerated, so to speak, and the order and connection of ideas is the same as the order and connection of causes this idea will be in God in so far as he is considered as affected by the ideas of several individual things. God, therefore, has the idea of the human body, or has a knowledge of the human body, in so far as he is considered as affected by many other ideas and not in so far as he constitutes the nature of the human mind, that is, the human mind has no knowledge of the human body. But the ideas of the modifications of the human body are in God, in so far as he constitutes the nature of the human mind, or the human mind perceives those modifications, and consequently the human body itself, and that as actually existing. The human mind, therefore, perceives only thus far the human body. Q.e.d.

Prop. XX. The idea or knowledge of the human mind is granted in God and follows in God, and is referred to him in the same manner as the idea or knowledge of the human body.

Proof.—Thought is an attribute of God, and therefore the idea of this and of all its modifications, and consequently of the human mind, must necessarily be granted in God. Now this idea or knowledge of the human mind is not granted in God in so far as he is infinite, but in so far as he is affected by another idea of an individual thing. But the order and connection of ideas is the same as the order and connection of causes. It follows, therefore, that this idea or knowledge of the human mind is in God and is referred to God in the same manner as the knowledge or idea of the human body. Q.e.d.

Prop. XXI. This idea of the mind is united to the mind in the same manner as the mind is united to the body.

Proof.—That the mind is united to the body we have shown from the fact that the body is the object of the mind; and therefore by that same reason the idea of the mind is united to its object, that is, the mind itself, in the same manner as the mind is united to the body. Q.e.d.

Prop. XXII. The human mind perceives not only the modifications of the body, but also the ideas of these modifications.

Proof.—The ideas of the ideas of modifications follow in God in the same way and are referred to him in the same way as the ideas of modification. But the ideas of modifications of the body are in the human mind, that is, in God in so far as he constitutes the essence of the human mind. Therefore, the ideas of these ideas are in God, in so far as he has the knowledge or idea of the human mind, that is, in the human mind itself,

which therefore perceives not only the modifications of the human body but also the ideas of them. Q.e.d.

PROP. XXIII. The mind has no knowledge of itself save in so far as it perceives the ideas of the modifications of the body.

Proof.—The idea or knowledge of the mind follows in God, and is referred to him in the same manner as the idea or knowledge of the body. But since the human mind does not know the human body, that is, since the knowledge of the human body is not referred to God in so far as he constitutes the nature of the human mind, therefore neither is the knowledge of the mind referred to God in so far as he constitutes the essence of the human mind, and therefore the human mind thus far has no knowledge of itself. Then again the ideas of modifications by which the body is affected involve the nature of the human body itself, that is, they agree with the nature of the mind. Wherefore the knowledge of these ideas necessarily involves the knowledge of the mind. But the knowledge of these ideas is in the human mind itself. Therefore the human mind has only thus far a knowledge of itself. Q.e.d.

Prop. XXIV. The human mind does not involve an adequate knowledge of the component parts of the human body.

Proof.—The parts composing the human body do not appertain to the essence of that body save in so far as they reciprocally communicate their motions in a certain ratio, and not in so far as they may be considered as individuals without relation to the human body. For the parts of the human body are individuals very complex, the parts of which can be taken away from the human body without harm to the nature or form of it, and can communicate their motions to other bodies in another ratio. And therefore the idea or knowledge of each part will be in God in so far as he is considered as affected by another idea of an individual thing which is prior in the order of nature to that part. This also can be said of any part of the individual component of the human body, and therefore the knowledge of each component part of the human body is in God in so far as he is affected by many ideas of things, and not in so far as he has only the idea of the human body, that is, the idea which constitutes the nature of the human mind. And therefore the human mind does not involve an adequate knowledge of the component parts of the human body. O.e.d.

Prop. XXV. The idea of each modification of the human body does not involve an adequate knowledge of the external body.

Proof.—We have shown that the idea of the modification of the human body involves the nature of the external body in so far as the external body determines the human body in a certain way. But in so

far as the external body is an individual which has no reference to the human body, its idea or knowledge is in God in so far as God is considered as affected by the idea of the other thing which is by nature prior to the external body. Therefore adequate knowledge of the external body is not in God in so far as he has the idea of the modification of the human body, or the idea of the modification of the human body does not involve adequate knowledge of the external body. Q.e.d.

Prop. XXVI. The human mind perceives no external body as actually existing save through ideas of modifications of its body.

Proof.—If the human body is affected in no way by any external body, then neither is the idea of the human body, that is, the human mind, affected in any wise by the idea of the existence of the external body, or, in other words, it does not perceive in any way the existence of that external body. But in so far as the human body is affected in any way by any external body, thus far it perceives the external body. Q.e.d.

Corollary.—In so far as the human mind imagines an external body, thus far it has no adequate knowledge of it.

Proof.—When the human mind regards external bodies through the ideas of the modifications of its own body, we say it imagines: nor can the human mind in any other way imagine external bodies as actually existing. And therefore in so far as the mind imagines external bodies, it has no adequate knowledge of them. Q.e.d.

Prop. XXVII. The idea of each modification of the human body does not involve adequate knowledge of the human body itself.

Proof.—Any idea of each modification of the human body involves the nature of the human body in so far as the human body itself is considered to be affected in a certain manner. But in so far as the human body is an individual which can be affected in many other ways, the idea of the modification, etc.

Prop. XXVIII. The ideas of the modifications of the human body, in so far as they are referred to the human mind alone, are not clear and distinct but confused.

Proof.—The ideas of the modifications of the human body involve both the nature of the external bodies and that of the human body itself: and not only must they involve the nature of the human body, but also that of its parts. For modifications are modes in which parts of the human body, and consequently the whole body, is affected. But adequate knowledge of external bodies, as also of the parts composing the human body, is not in God in so far as he is considered as affected by the human mind, but in so far as he is considered as affected by other ideas. These ideas

of modifications, in so far as they have reference to the human mind alone, are like consequences without premises, that is, confused ideas. Q.e.d.

Prop. XXIX. The idea of the idea of each modification of the human mind does not involve adequate knowledge of the human mind.

Proof.—The idea of a modification of the human body does not involve adequate knowledge of the body itself, or, in other words, does not express its nature adequately, that is, it does not agree adequately with the nature of the mind. And therefore the idea of this idea does not adequately express the nature of the human mind, or does not involve adequate knowledge of it. Q.e.d.

Corollary.—Hence it follows that the human mind, whenever it perceives a thing in the common order of nature, has no adequate knowledge of itself, nor of its body, nor of external bodies, but only a confused and mutilated knowledge thereof. For the mind knows not itself save in so far as it perceives ideas of modifications of the body. But it does not perceive its body save through the ideas of modifications, through which also it only perceives external bodies. And therefore in so far as it has these ideas it has no adequate knowledge of itself, nor of its body, nor of external bodies, but only a confused and mutilated one. Q.e.d.

Prop. XXX. We can have only a very inadequate knowledge of the duration of our body.

Proof.—The duration of our body does not depend on its essence, nor even on the absolute nature of God; but it is determined for existence and action by certain causes, which are in their turn determined for existing and acting in a certain determined ratio by other causes, and these by others, and so on to infinity. Therefore the duration of our body depends on the common order of nature and the disposition of things. But there is in God an adequate knowledge of the reason why things are disposed in any particular way, in so far as he has ideas of all things, and not in so far as he has only a knowledge of the human body. Wherefore the knowledge of the duration of our body is very inadequate in God in so far as he is considered as constituting only the nature of the human mind, that is, this knowledge is very inadequate in our mind. Q.e.d.

Prop. XXXI. We can only have a very inadequate knowledge of individual things which are outside us.

Proof.—Each individual thing, such as the human body, must be determined for existence or action in a certain manner by another individual thing: and this again by another, and so on to infinity. But as we have shown in the previous proposition that we can only have a very inadequate knowledge of the duration of our body, owing to this common property

of individual things, so this must also be concluded concerning the duration of individual things, i.e., that we can only have a very inadequate knowledge thereof. Q.e.d.

Corollary.—Hence it follows that all individual things are contingent and corruptible. For we can have no adequate knowledge concerning their duration, and this is what must be understood by the contingency of things and their liability to corruption. For, save this, nothing is granted to be contingent.

Prop. XXXII. All ideas, in so far as they have reference to God, are true.

Proof.—Now all ideas which are in God must entirely agree with their ideals: and therefore they are true. Q.e.d.

Prop. XXXIII. There is nothing positive in ideas, wherefore they could be called false.

Proof.—If you deny this, conceive, if possible, a positive mode of thinking which would constitute the form of error or falsity. This mode of thinking cannot be in God, and outside God it cannot exist or be conceived. Therefore there is nothing positive in ideas, wherefore they could be called false. *Q.e.d.*

Prop. XXXIV. Every idea in us which is absolute, or adequate and perfect, is true.

Proof.—When we say that an adequate and perfect idea is granted in us, we say nothing else than that there is granted in God an adequate and perfect idea in so far as he constitutes the essence of our mind, and consequently we say nothing else than that such an idea is true. Q.e.d.

Prop. XXXV. Falsity consists in privation of knowledge which is involved by inadequate or mutilated and confused ideas.

Proof.—Nothing positive is granted in ideas which could constitute their form of falsity. But falsity cannot consist in mere privation, nor in mere ignorance: for ignorance and error are two different things. Wherefore it consists in the privation of knowledge which is involved by inadequate knowledge or inadequate or confused ideas. Q.e.d.

Prop. XXXVI. Inadequate and confused ideas follow from the same necessity as adequate or clear and distinct ideas.

Proof.—All ideas are in God, and in so far as they have reference to God, they are true and adequate; and therefore none are inadequate or confused save in so far as they have reference to the individual mind of any one. And therefore all ideas, both adequate and inadequate, follow together from the same necessity. Q.e.d.

Prop. XXXVII. That which is common to all, and that which is equally in a part and in the whole, do not constitute the essence of an individual thing.

Proof.—If you deny this, conceive, if it can be, that it does constitute the essence of an individual thing, namely, the essence of B. Then it cannot be conceived nor exist without B. And this is contrary to the hypothesis. Therefore it does not appertain to the essence of B, nor can it constitute the essence of any other individual thing. Q.e.d.

Prop. XXXVIII. Those things which are common to all, and which are equally in a part and in the whole, can only be conceived as adequate.

Proof.—Let A be anything that is common to all bodies, and which is equally in one part of any body and in the whole. Then I say that A can only be conceived as adequate. For its idea will necessarily be adequate in God both in so far as he has the idea of the human body, and in so far as he has ideas of its modifications, which involve in part both the nature of the human body and that of external bodies, that is, this idea will necessarily be adequate in God in so far as he constitutes the human mind, or in so far as he has ideas which are in the human mind. Therefore the mind necessarily adequately perceives A, and that both in so far as it perceives itself and its own or an external body: nor can A be conceived in any other manner. Q.e.d.

Corollary.—Hence it follows that certain ideas or notions are granted common to all men. For all bodies agree in certain things which must adequately or clearly and distinctly be perceived by all.

Prop. XXXIX. That which is common to and a property of the human body, and certain external bodies by which the human body is used to be affected, and which is equally in the part and whole of these, has an adequate idea in the mind.

Proof.—Let A be that which is common to and a property of the human body and certain external bodies, and which is equally in the human body and in the external bodies, and which also is equally in a part and in the whole of each external body. There will be in God an adequate idea of A, both in so far as he has the idea of the human body, and in so far as he has ideas of the given external bodies. Then let it be granted that the human body is affected by an external one through that which it has in common with it, namely, A. The idea of this modification involves the property A: and therefore the idea of this modification, in so far as it involves the property A, will be adequate in God in so far as he is affected by the idea of the human body, that is, in so far as he constitutes the nature of the human mind. And therefore this idea is also adequate in the human mind. Q.e.d.

Corollary.—Hence it follows that the mind is the more apt to per-

ceive many things adequately, the more its body has things in common with other bodies.

Prop. XL. Whatever ideas follow in the mind from ideas which are adequate in the mind, are also adequate.

Proof.—This is clear. For when we say that in the mind ideas follow from other ideas which are adequate in the mind, we say nothing else than that an idea is granted in the divine intellect itself whose cause is God, not in so far as he is infinite nor in so far as he is affected by the ideas of many individual things, but in so far only as he constitutes the essence of the human mind.

Note.—From all that has been said above it is now clearly apparent that we perceive many things and form universal notions, first, from individual things represented to our intellect mutilated, confused, and without order, and therefore we are wont to call such perceptions knowledge from vague or casual experience; second, from signs, e.g., from the fact that we remember certain things through having read or heard certain words and form certain ideas of them similar to those through which we imagine things. Both of these ways of regarding things I shall call hereafter knowledge of the first kind, opinion, or imagination. Third, from the fact that we have common notions and adequate ideas of the properties of things. And I shall call this reason and knowledge of the second kind. Besides these two kinds of knowledge there is a third, as I shall show in what follows, which we shall call intuition.

Prop. XLI. Knowledge of the first kind is the only cause of falsity; knowledge of the second and third kinds is necessarily true.

Proof.—We said in the preceding note that all those ideas which are inadequate and confused appertain to knowledge of the first kind: and therefore this knowledge is the only cause of falsity. Then as for knowledge of the second and third kinds, we said that those ideas which are adequate appertained to it; therefore it is necessarily true. **Q.e.d.**

Prop. XLII. Knowledge of the second and third kinds and not of the first kind teaches us to distinguish the true from the false.

Proof.—This proposition is clear of itself. For he who would distinguish the true from the false must have an adequate idea of what is true and false, that is, must know the true and false by the second and third kinds of knowledge.

Prop. XLIII. He who has a true idea, knows at that same time that he has a true idea, nor can he doubt concerning the truth of the thing.

Proof.—A true idea in us is that which is adequate in God in so far as he is explained through the nature of the human mind. Let us suppose, then, that there is in God, in so far as he is explained through the nature

of the human mind, an adequate idea A. The idea of this idea must necessarily be granted in God, and it refers to God in the same manner as the idea A. But the idea A is supposed to refer to God in so far as he is explained through the nature of the human mind: therefore also the idea of the idea A must refer to God in the same manner, that is, the adequate idea of the idea A will be in the same mind as has the adequate idea A: and therefore he who has an adequate idea or who knows a thing truly must at the same time have an adequate idea of his knowledge or a true knowledge, that is, he must at the same time be certain. Q.e.d.

Prop. XLIV. It is not the nature of reason to regard things as contingent but necessary.

Proof.—It is the nature of reason to perceive things truly, namely, as they are in themselves, that is, not as contingent but necessary. Q.e.d.

Corollary 1.—Hence it follows that it depends solely on the imagination that we consider things whether in respect to the past or future as contingent.

Corollary II.—It is the nature of reason to perceive things under a certain species of eternity.

Proof.—It is the nature of reason to regard things not as contingent, but as necessary. It perceives this necessity of things truly, that is, as it is in itself. But this necessity of things is the necessity itself of the eternal nature of God. Therefore it is the nature of reason to regard things under this species of eternity. Add to this that the bases of reason are the notions which explain these things which are common to all, and which explain the essence of no individual thing: and which therefore must be conceived without any relation of time, but under a certain species of eternity. Q.e.d.

Prop. XLV. Every idea of every body or individual thing actually existing necessarily involves the eternal and infinite essence of God.

Proof.—The idea of an individual thing actually existing necessarily involves both the essence of that thing and its existence. But individual things cannot be conceived without God: and forasmuch as they have God for a cause in so far as he is considered under the attribute, of which these things are modes, their ideas must necessarily involve the conception of their attribute, that is, they must involve the eternal and infinite essence of God. Q.e.d.

Prop. XLVI. The knowledge of the eternal and infinite essence of God which each idea involves is adequate and perfect.

Proof.—The proof of the previous proposition is of universal application, and whether the thing be considered as a part or a whole, its idea, whether it be of the part or whole, involves the eternal and infinite essence of God. Wherefore that which gives knowledge of the eternal and infinite essence of God is common to all, and equally in part as in whole, and therefore this knowledge will be adequate. Q.e.d.

Prop. XLVII. The human mind has an adequate knowledge of the eternal and infinite essence of God.

Proof.—The human mind has ideas from which it perceives itself and its body and external bodies as actually existing; and therefore it has an adequate knowledge of the eternal and infinite essence of God. Q.e.d.

Prop. XLVIII. There is in no mind absolute or free will, but the mind is determined for willing this or that by a cause which is determined in its turn by another cause, and this one again by another, and so on to infinity.

Proof.—The mind is a fixed and determined mode of thinking, and therefore cannot be the free cause of its actions, or it cannot have the absolute faculty of willing and unwilling: but for willing this or that it must be determined by a cause which is determined by another, and this again by another, etc. Q.e.d.

PROP. XLIX. There is in the mind no volition or affirmation and negation save that which the idea, in so far as it is an idea, involves.

Proof.—There is not in the mind an absolute faculty of willing and unwilling, but only individual volitions such as this or that affirmation and this or that negation. Let us conceive then any individual volition, namely, the mode of thinking, whereby the mind affirms that the three angles of a triangle are equal to two right angles. This affirmation involves the conception or idea of the triangle, that is, without the idea of the triangle it cannot be conceived. It is the same when I say that A involves the conception of B, as when I say that A cannot be conceived without B. Then this affirmation cannot be without the idea of the triangle. Therefore this affirmation cannot exist or be conceived without the idea of the triangle. Moreover, this idea of the triangle must involve the same affirmation, namely, that its three angles are equal to two right angles. Wherefore, vice versa also, this idea of the triangle cannot exist or be conceived without this affirmation: and therefore this affirmation appertains to the essence of the idea of a triangle, nor is anything else than that. And what we have said of this volition can be said of any other volition, namely, that it is nothing but an idea. Q.e.d.

Corollary.—Will and intellect are one and the same thing.

Proof.—Will and intellect are nothing but individual volitions and ideas. But an individual volition and idea are one and the same thing. Therefore will and intellect are one and the same thing. O.e.d.

THIRD PART: CONCERNING THE ORIGIN AND NATURE OF THE EMOTIONS

DEFINITIONS

- I. I CALL THAT an ADEQUATE CAUSE whose effect can clearly and distinctly be perceived through it. I call that one INADEQUATE or PARTIAL whose effect cannot be perceived through itself.
- II. I say that we act or are active when something takes place within us or outside of us whose adequate cause we are, that is, when from our nature anything follows in us or outside us which can be clearly and distinctly understood through that alone. On the other hand, I say we suffer or are passive when something takes place in us or follows from our nature of which we are only the partial cause.
- III. By Emotion I understand the modifications of the body by which the power of action in the body is increased or diminished, aided or restrained, and at the same time the ideas of these modifications.

Explanation.—Thus if we can be the adequate cause of these modifications, then by the emotion I understand an Action, if otherwise a Passion.

POSTULATES

- I. The human body can be affected in many ways whereby its power of acting is increased or diminished, and again in others which neither increase nor diminish its power of action.
- JI. The human body can suffer many changes and yet retain the impressions or traces of objects, and consequently the same images of things.

PROPOSITIONS

Prop. I. Our mind acts certain things and suffers others: namely, in so far as it has adequate ideas, thus far it necessarily acts certain things, and in so far as it has inadequate ideas, thus far it necessarily suffers certain things.

Proof.—The ideas of every human mind are some adequate and some mutilated and confused. But the ideas which are adequate in the mind of any one are adequate in God in so far as he constitutes the essence of that mind, and those again which are inadequate in the mind of any one are also in God, but adequate, not in so far as he contains in himself the

essence of the given mind, but in so far as he contains the minds of other things at the same time. Again, from any given idea some effect must necessarily follow, and of this effect God is the adequate cause, not in so far as he is infinite, but in so far as he is considered as affected by that given idea. But of that effect of which God is the cause, in so far as he is affected by an idea which is adequate in the mind of some one, that same mind is the adequate cause. Therefore our mind, in so far as it has adequate ideas, necessarily acts certain things: which was the first point. Then whatever follows from an idea which is adequate in God, not in so far as he has in himself the mind of one man only, but in so far as he has in himself the minds of other things at the same time with the mind of this man, of that effect the mind of that man is not the adequate but merely the partial cause. And so the mind, in so far as it has inadequate ideas, necessarily suffers certain things: which was the second point. Therefore our mind, etc. O.e.d.

Corollary.—Hence it follows that the mind is more or less subject to passions according as it has more or less inadequate ideas, and, on the other hand, to more action the more adequate ideas it has.

Prop. II. The body cannot determine the mind to think, nor the mind the body to remain in motion, or at rest, or in any other state.

Proof.—All modes of thinking have God for their cause, in so far as he is a thinking thing and not in so far as he is explained through another attribute. Therefore that which determines the mind to think is a mode of thinking and not of extension, that is, it is not a body: which was the first point. Again, the motion and rest of a body must arise from another body, which also was determined for motion or rest by another body, and absolutely everything which arises in a body must have arisen from God in so far as he is considered as affected by some mode of extension and not some mode of thinking, that is, it cannot arise from the mind which is a mode of thinking: which is the second point. Therefore the body cannot, etc. Q.e.d.

Prop. III. The actions of the mind arise from adequate ideas alone, but passions depend on inadequate ideas alone.

Proof.—The first thing which constitutes the essence of the mind is nothing else than the idea of the body actually existing, which is composed of many other bodies of which certain are adequate and certain inadequate. Therefore whatever follows from the nature of the mind, and of which the mind is the proximate cause through which it must be understood, must necessarily follow from an idea adequate or inadequate. But in so far as the mind has inadequate ideas, thus far it is necessarily passive. Therefore the actions of the mind follow from adequate ideas alone, and the mind is passive therefore merely because it has inadequate ideas. Q.e.d.

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Prop. IV. Nothing can be destroyed save by an external cause.

Proof.—This proposition is self-evident. For the definition of anything affirms its essence and does not deny it: or it imposes the essence of the thing and does not take it away. And so while we regard the thing alone, and not the external causes, we can find nothing in it which can destroy it. Q.e.d.

Prop. V. Things are contrary by nature, that is, they cannot exist in the same subject in so far as one can destroy the other.

Proof.—If they could agree one with the other, or exist at the same time in the same subject, then something could be found in the subject which could destroy it, which is absurd. Therefore a thing, etc. Q.e.d.

Prop. VI. Everything in so far as it is in itself endeavours to persist in its own being.

Proof.—Individual things are modes in which the attributes of God are expressed in a certain determined manner, that is, they are things which express in a certain determined manner the power of God whereby he is and acts. Nor can a thing have anything within itself whereby it can be destroyed, or which takes its existence from it; but on the other hand, it is opposed to everything that could take its existence away. Therefore as much as it can, and is within itself, it endeavours to persist in its being. Q.e.d.

Prop. VII. The endeavour wherewith a thing endeavours to persist in its being is nothing else than the actual essence of that thing.

Proof.—From the given essence of a thing certain things necessarily follow, nor can things do anything else than that which follows necessarily from their determined nature. Wherefore the power or endeavour of anything by which it does, or endeavours to do, anything, either alone or with others, that is, the power or endeavour by which it endeavours to persist in its own being, is nothing else than the given or actual essence of that given thing. O.e.d.

Prop. VIII. The endeavour wherewith a thing endeavours to persist in its own being involves no finite time but an indefinite time.

Proof.—If it involves a limited time which must determine the duration of the thing, then it would follow from the power alone by which the thing exists, that the thing after that limited time could exist no longer, but must be destroyed. But this is absurd. Therefore the endeavour wherewith a thing endeavours to exist involves no definite time; but on the other hand, since it is destroyed by no external cause, by the same power by which it now exists it will continue to exist for ever: therefore this endeavour involves no definite time. O.e.d.

Prop. IX. The mind, in so far as it has both clear and distinct and confused ideas, endeavours to persist in its being for an indefinite period, and is conscious of this its endeavour.

Proof.—The essence of the mind is constituted of adequate and inadequate ideas, and therefore, inasmuch as it has the first or the second, it endeavours to persist in its being, and that for an indefinite period. But since the mind is necessarily conscious of the modifications of its body through ideas, therefore the mind is conscious of its endeavour. Q.e.d.

Prop. X. The idea which cuts off the existence of our body cannot be given in our mind, but is contrary thereto.

Proof.—Whatever can destroy our body cannot be granted in the same. Therefore the idea of this thing cannot be granted in God in so far as he has the idea of our body, that is, the idea of this thing cannot be given in our mind; but on the other hand, since the first thing which forms the essence of the mind is the idea of the body actually existing, the first and principal endeavour of our mind is to affirm the existence of our body. And therefore the idea which denies the existence of our body is opposed to the mind, etc. Q.e.d.

Prop. XI. Whatever increases or diminishes, helps or hinders the power of action of our body, the idea thereof increases or diminishes, helps or hinders the power of thinking of our mind.

Proof.—This proposition is clear from Prop. 7, Part II, or even from Prop. 14, Part II.

Prop. XII. The mind, as much as it can, endeavours to imagine those things which increase or help its power of acting.

Proof.—As long as the human body is affected in a mode which involves the nature of any external body, so long the human mind regards the same body as present; and consequently, as long as the human mind regards any external body as present, that is, as long as it imagines, so long the human mind is affected in a mode which involves the nature of the external body. And therefore as long as the mind imagines those things which increase or help the power of acting of our body, so long the body is affected in modes which increase or help its power of acting, and consequently so long the power of thinking in the mind is increased or helped. And therefore the mind as much as it can endeavours to imagine those things. Q.e.d.

Prop. XIII. When the mind imagines things which diminish or hinder the power of acting of the body, it endeavours as much as it can to remember things which will cut off their existence.

Proof.—As long as the mind imagines any such thing, so long the power of the mind and body is diminished or hindered, and, nevertheless,

it will imagine it until the mind recalls some other thing which cuts off its present existence, that is, the power of the mind and body is decreased or diminished until the mind imagines some other thing which cuts off its existence, which, therefore, the mind as much as possible endeavours to imagine or recall. Q.e.d.

Corollary.—Hence it follows that the mind is averse to imagining those things which diminish or hinder its power and that of the body.

Prop. XIV. If the mind were once affected at the same time by two emotions, when afterwards it is affected by one of them it will be also affected by the other.

Proof.—If the human body was affected once by two bodies at the same time, when the mind afterwards imagines one of them it will immediately recall the other. But the imaginations of our mind indicate rather the modifications of our body than the nature of external bodies. Therefore if the body, and consequently the mind, was once affected by two emotions, when afterwards it may be affected by one it will also be affected by the other. Q.e.d.

Prop. XV. Anything can accidentally be the cause of pleasure, pain, or desire.

Proof.—Let us suppose the mind simultaneously affected by two emotions, by one which neither increases nor diminishes its power of acting, and the other which increases or diminishes it. It is clear from the previous proposition that when the mind is afterwards affected by that one through its true cause which neither increases nor diminishes through itself the power of thinking, it will be affected at the same time by the other which increases or diminishes its power of thought, that is, it will be affected by pleasure or pain; and therefore the former, not through itself, but accidentally, will be the cause of pleasure or pain. And in this way it may easily be shown that that thing could accidentally be the cause of desire. Q.e.d.

Corollary.—From the fact alone that we have regarded something with the emotion of pleasure or pain, though it were not the effecting cause, we can love or hate that thing.

Proof.—From this alone it comes to pass that the mind, after imagining the said thing, is affected by the emotion of pleasure or pain, that is, that the power of the mind or body is increased or diminished: and consequently that the mind is desirous of, or averse to, imagining it, that is, that it loves or hates it. *Q.e.d.*

Prop. XVI. From the fact alone that we imagine anything which has something similar to an object which is wont to affect the mind with pleasure or pain, although that in which the thing is similar to the object

be not the effecting cause of those emotions, nevertheless we shall hate or love it accordingly.

Proof.—We have regarded that which is similar to the object in the object itself with the emotion of pleasure or pain; and therefore when the mind is affected with its image, at the same time it is also affected with this or that emotion, and consequently a thing which we see to have this will be accidentally the cause of pleasure or pain. And therefore, although that in which it is similar to the object is not the effecting cause of these emotions, we nevertheless will love or hate it. Q.e.d..

Prop. XVII. If we imagine a thing which is wont to affect us with the emotion of sadness to have something similar to another thing which equally affects us with the emotion of pleasure, we will hate and love that thing at the same time.

Proof.—This thing is through itself a cause of pain, and in so far as we imagine with that emotion we hate it; and in so far as we imagine it to have something similar to another thing which is wont to affect equally with an emotion of pleasure, we love it equally with an impulse of love. And therefore we hate and love it at the same time. Q.e.d.

Prop. XVIII. A man is affected with the same emotion of pleasure or pain from the image of a thing past or future as from the image of a thing present.

Proof.—As often as a man is affected by the image of anything, he regards the thing as present, although it may not exist, nor will he regard it as past or future save in so far as its image is connected with the image of time past or future. Wherefore the image of the thing considered in itself is the same whether it refers to time present, past, or future, that is, the disposition of the body or emotion is the same whether the image of the thing be present, past, or future. And so the emotion of pleasure or pain is the same whether the image of the thing be present, past, or future. Q.e.d.

Prop. XIX. He will be saddened who imagines that which he loves to be destroyed: if he imagines it to be preserved he is rejoiced.

Proof.—The mind, in so far as it can, tries to imagine those things which increase or help the power of acting of the body, that is, those things which it loves. But the imagination is aided by those things which impose existence on a thing, and, on the other hand, hindered by those which cut off existence from a thing. Therefore the images of things which impose the existence of a thing that is loved, help the endeavour of the mind wherewith it endeavours to imagine the thing that is loved, that is, they affect the mind with pleasure; and, on the other hand, those things which cut off the existence of a thing that is loved, hinder that endeavour

of the mind, that is, they affect the mind with pain. And so he will be saddened who imagines that which he loves to be destroyed, etc. Q.e.d.

PROP. XX. He will be rejoiced who imagines what he hates to be destroyed.

Proof.—The mind endeavours to imagine those things which cut off the existence of other things by which the body's power of acting is diminished or hindered, that is, it endeavours to imagine those things which cut off the existence of such things as it hates. And therefore the image of a thing which cuts off the existence of that which the mind hates, helps that endeavour of the mind, that is, affects the mind with joy. And so he will be rejoiced who imagines the destruction of that which he hates. Q.e.d.

Prop. XXI. He who imagines that which he loves to be affected by pleasure or pain, will also be affected by pleasure or pain: and these will be greater or less in the lover according as they are greater or less in the thing loved.

Proof.—The images of things which impose existence on the thing loved, help the mental endeavour by which it tries to imagine the thing loved. But pleasure imposes existence on the thing feeling pleasure, and the more so according as the emotion of pleasure is greater, for it is a transition to a greater state of perfection. Therefore the image of pleasure in the thing loved helps the mental effort of the lover, that is, it affects the lover with pleasure, and the more so according as this emotion was greater in the thing loved: which was the first point. Then in so far as a thing is affected with pain, thus far it is destroyed, the more so according to the greatness of the affecting pain: and therefore he that imagines what he loves to be affected with pain will also be affected with pain, and the more so according as the emotion was great in the object loved. O.e.?.

Prop. XXII. If we imagine anything to affect with pleasure what we love, we are affected with love towards it: and, on the other hand, if we imagine anything to affect it with pain, we are affected with hatred towards it.

Proof.—He who affects a thing we love with pleasure or pain, likewise affects us with pleasure or pain, that is, if we imagine that the object loved is affected with pleasure or pain. But this pleasure or pain is supposed to be given in us accompanied by the idea of an external cause. Therefore, if we imagine anything to affect what we love with pleasure or pain, we are affected with love or hatred towards it. Q.e.d.

Prop. XXIII. He will be rejoiced who imagines that which he hates to be affected with pain; if, on the other hand, he imagines it to be affected with pleasure, he will be saddened: and these emotions will be greater or less according as the contrary emotions were greater or less in the things hated.

Proof.—In so far as a hateful thing is affected with pain, thus far it is destroyed, and the more so according as it is affected with more pain. Who, therefore, imagines a thing that he hates to be affected with pain, is inversely affected with pleasure, and the more so according as he imagines the thing hated to be affected with greater pain: which was the first point. Again, pleasure imposes existence of the thing affected with pleasure, and the more so according as more pleasure is conceived. If any one then imagines that which he hates to be affected with pleasure, this imagination will hinder his effort of pleasure, that is, he who hates will be affected with pain, etc. Q.e.d.

PROP. XXIV. If we imagine any one to affect a thing we hate with pleasure, we are affected with hatred towards that person. If, on the other hand, we imagine him to affect it with pain, we are affected with love towards him.

Proof.—This proposition is proved in the same manner as Prop. 22, Part III, which see.

Prop. XXV. We endeavour to affirm, concerning ourselves or what we love, everything that we imagine to affect what we love or ourselves with pleasure; and, on the other hand, we endeavour to deny, concerning ourselves and the object loved, everything that we imagine to affect us or the object loved with pain.

Proof.—What we imagine to affect a loved thing with pleasure or pain affects us also with pleasure or pain. But the mind endeavours to imagine as much as it can those things that affect us with pleasure, that is, to regard it as present; and, on the other hand, to cut off the existence of those things which affect us with pain. Therefore we endeavour to affirm, concerning ourselves or the thing loved, what we imagine will affect us or the thing loved with pleasure, and contrariwise. Q.e.d.

Prop. XXVI. We endeavour to affirm, concerning a thing that we hate, that which we imagine will affect it with pain, and, on the contrary, to deny all that which we imagine will affect it with pleasure.

Proof.—This proposition follows from Prop. 23, as the last one follows Prop. 21.

Prop. XXVII. By the fact that we imagine a thing which is like ourselves, and which we have not regarded with any emotion to be affected with any emotion, we also are affected with a like emotion.

Proof.—The images of things are modifications of the human body

the ideas of which represent to us external bodies as present, that is, the ideas of which involve the nature of our body and at the same time the nature of the external body as present. If, therefore, the nature of an external body is similar to that of our own, then the idea of the external body which we imagine will involve a modification of our body similar to the modification of an external body: and consequently if we imagine any one similar to ourselves to be affected with any emotion, this imagination will express a modification of our body similar to that emotion. And therefore from the fact that we imagine a thing similar to ourselves to be affected with any emotion, we are affected in company with it by that emotion. And if we hate a thing similar to ourselves, we shall to that extent be affected with it by a contrary emotion, not a similar one. Q.e.d.

Corollary I.—If we imagine any one, whom we have regarded hitherto with no emotion whatever, to affect a thing similar to ourselves with pleasure, we are affected with pleasure towards that person. If, on the other hand, we imagine him to affect it with pain, we are affected with hatred towards him.

Proof.—This is shown from the previous Prop. in the same manner as Prop. 22 from Prop. 21.

Corollary II.—We cannot hate a thing which we pity because its misery affects us with pain.

Proof.—For if we could hate it, then we should be rejoiced at its pain, which is contrary to the hypothesis.

Corollary III.—We endeavour as much as we are able to liberate a thing we pity from its misery.

Proof.—That which affects a thing we pity with pain, affects us also with a similar pain; and therefore we endeavour to recollect everything that can take away its existence or which would destroy it, that is, we desire to destroy it or we are determined for its destruction; and therefore we endeavour to liberate it from its misery. Q.e.d.

Prop. XXVIII. We endeavour to promote the being of everything that we imagine conducive to pleasure; but what we find repugnant or conducive to pain we endeavour to remove or destroy.

Proof.—We endeavour to imagine as much as possible what we imagine to be conducive to pleasure, that is, we endeavour as much as possible to regard it as present or actually existing. But the mind's endeavour or its power of thinking is equal and simultaneous in nature with the body's endeavour or power in acting; therefore we endeavour absolutely to bring about its existence, or we desire and strive for it: which was the first point. Again, if that which we think to be the cause of pain, that is, that which we hate, we imagine to be destroyed, we are rejoiced; and therefore we endeavour to destroy or remove it from us, lest we should

regard it as present: which was the second point. Therefore everything that is conducive to pleasure, etc. Q.e.d.

PROP. XXIX. We also shall endeavour to do everything which we imagine men (let it be understood in this and the following propositions that we mean men for whom we have no particular emotion) to regard with pleasure, and, on the other hand, we shall be averse to doing what we imagine men to turn away from.

Proof.—From the fact that we shall love and hate the same thing as we imagine men to love or hate, we are rejoiced or saddened at the presence of that thing; and therefore we endeavour to do everything which we imagine men to love or to regard with pleasure. Q.e.d.

Prop. XXX. If any one has done anything which he imagines to affect others with pleasure, he will be affected with pleasure accompanied by the idea of himself as the cause, or he will regard himself with pleasure. On the other hand, if he has done anything which he imagines to affect the others with pain, he regards himself then with pain.

Proof.—He who imagines that he has affected others with pleasure or pain is himself affected with pleasure or pain. But as a man is conscious of himself through modifications by which he is determined for action, whoever has done anything which he imagines to affect others with pleasure, will be affected with pleasure accompanied by the idea of himself as the cause, or he will regard himself with pleasure, and, on the other hand, the contrary follows. O.e.d.

PROP. XXXI. If we imagine any one to love, desire, or hate anything which we ourselves love, hate, or desire, by that very fact we shall love, hate, or desire it the more. But, on the other hand, if we imagine that what we love is avoided by some one, then we undergo a wavering of the mind.

Proof.—From the very fact that we imagine any one to love anything, we shall also love it ourselves. But we suppose ourselves to love it without this; there is then brought to play a new cause of love whereby our emotion is fostered: and therefore that which we love we shall love with more emotion. Again, from the fact that we imagine any one to turn away from anything, we also shall turn away from it. But if we suppose that we love it at the same time, then at the same time we shall love and turn away from a thing, or we shall undergo a wavering of the mind. Q.e.d.

Corollary.—Hence, and from Prop. 28, Part III, it follows that every one endeavours as much as he can to cause every one to love what he himself loves, and to hate what he himself hates: as in the words of the poet, "As lovers let us hope and fear alike: of iron is he who loves what the other leaves."

Prop. XXXII. If we imagine any one to enjoy anything which only one can possess, we shall endeavour to bring it to pass that he does not possess it.

Proof.—From the fact alone that we imagine any one to enjoy anything, we shall love that thing and desire to enjoy it. But (by the hypothesis) we imagine there to be an obstacle to this pleasure inasmuch as another may possess it: we shall therefore endeavour to bring it to pass that another should not possess it. Q.e.d.

Prop. XXXIII. When we love a thing similar to ourselves, we endeavour as much as possible to bring it about that it also should love us.

Proof.—We endeavour to imagine a thing that we love as much as we can above all others. If, therefore, the thing is similar to us, we shall endeavour to affect it with joy above the rest, or we shall endeavour as much as possible to bring it about that the thing loved should be affected with pleasure accompanied by the idea of ourselves, that is, that it should love us. Q.e.d.

PROP. XXXIV. The greater the emotion with which we imagine a thing loved to be affected towards us, the greater will be our vain-glory.

Proof.—We endeavour as much as we can to make the thing loved love us in return, that is, to bring it about that the thing loved should be affected with pleasure accompanied with the idea of ourselves. And so the more pleasure with which we imagine the thing loved to be affected on our account, the more this endeavour is assisted, that is, the more we are affected with pleasure. But when we are pleased with the fact that we affect another thing similar to ourselves with pleasure, then we regard ourselves with pleasure. Therefore the greater the pleasure with which we imagine the thing loved to be affected on our account, the greater the pleasure with which we regard ourselves, or the more self-complacent or vain we become. O.e.d.

Prop. XXXV. If any one imagines that the thing loved is joined to another than himself with the same or a faster bond of love than that which binds it to him, he will be affected with hatred towards the object loved, and envy towards the other.

Proof.—The greater the love towards himself with which the thing loved is affected, the greater his self-complacency, that is, the greater his pleasure; and therefore he will endeavour to imagine as much as possible the thing loved to be bound to him in the tightest bond of love, and this endeavour or appetite will increase if he imagines any one else to desire the same thing for himself. But this endeavour or appetite is supposed to be hindered by the image of the thing loved, accompanied by the image of him whom the thing loved has joined to itself. Therefore he will be af-

fected with pain accompanied by the idea of the thing loved as the cause, and at the same time the image of the other, that is, he will be affected with hatred towards the object loved, and at the same time towards the other, which by reason that he enjoys the object loved, he will envy. Q.e.d.

PROP. XXXVI. He who recollects a thing which he once enjoyed, desires to possess it under the same circumstances as those with which he first enjoyed it.

Proof.—Whatever a man sees in conjunction with a thing which has delighted him will be accidentally to him a cause of pleasure, and therefore he will desire to possess it at the same time as the thing which delights him, or he will desire to possess the thing under the same circumstances as when he first enjoyed it. Q.e.d.

Corollary.—A lover will accordingly be saddened if he finds one of those attendant circumstances to be wanting.

Proof.—Now in so far as he finds one circumstance wanting, thus far he imagines something which cuts off its existence. But as he is assumed as a lover to be desirous of that one thing or circumstance, therefore in so far as he imagines it to be wanting he is saddened. Q.e.d.

Prop. XXXVII. The desire which arises by reason of sadness, joy, hatred, or love, is greater according as the emotion is greater.

Proof.—Sadness diminishes or hinders a man's power of action, that is, it diminishes or hinders the endeavour with which a man endeavours to persist in his being, and therefore it is contrary to this endeavour, and whatever the power of a man affected by pain is, is directed to remove that pain. But the greater the pain the greater it must be opposed to the man's power of acting. Therefore the greater the pain the more will the man endeavour by his power of acting to remove it, that is, the more desire or appetite with which he will endeavour to remove it. Again, since pleasure increases or helps a man's power of acting, it can easily be shown in that way that a man affected with pleasure desires nothing else than to preserve that pleasure, and that with the greater desire according as the pleasure is greater. Then since love and hatred are the emotions of pleasure and pain, it follows in the same manner that the endeavour, appetite, or desire which arises by reason of love or hatred will be greater according to the love or hatred. Q.e.d.

PROP. XXXVIII. If any one begins to hate a thing loved so that his love for it is clearly laid aside, he will bear greater hatred towards it on that very account than if he had never loved it, and the more so according as his former love was greater.

Proof.—Now if any one begins to hate a thing, more of his appetites are hindered than if he had not loved it. For love is a pleasure which man,

as much as he can, endeavours to preserve by regarding the thing loved as present, and affecting it with pleasure as much as he can; his endeavour is greater according as his love is greater, and so is his endeavour to bring it to pass that the thing loved should love him in return. But these endeavours are hindered by hatred towards the thing loved. Therefore the lover will be affected with sadness on this account, and the more so according as his love was greater, that is, besides the pain whose cause is hatred there is also another cause, namely, that he loved the thing; and consequently he will regard the thing loved with a greater emotion of pain, that is, he will regard it with more hatred than if he had never loved it, and the more so according as his former love was greater. Q.e.d.

Prop. XXXIX. He who hates any one will endeavour to do him harm unless he fears to receive a greater harm from him; and, on the other hand, he who loves some one will by the same law endeavour to do him good.

Proof.—To hate any one is the same as to imagine him the cause of pain, and therefore he who hates anything will endeavour to remove or destroy it. But if thence he fears something more painful, or, what is the same thing, something worse, and thinks that he can avoid it by not inflicting that evil which he intended on the person he hates, he will desire to abstain from inflicting that evil, and that with a greater endeavour than that with which he intended to inflict the evil which hitherto prevailed. The second part of the proof proceeds in the same manner as this. Therefore he who hates, etc. O.e.d.

Prop. XL. He who imagines himself to be hated by another, and believes that he has given the other no cause for hatred, will hate that person in return.

Proof.—He who imagines any one to be affected with hatred will also be affected with hatred, that is, with sadness accompanied with the idea of an external cause. But he (according to the hypothesis) imagines no cause of this pain save the person who hates him. Therefore from the fact that he imagines himself to be hated by any one, he will be affected with pain accompanied with the idea of the person who hates him, or he will hate that person. Q.e.d.

Corollary I.—He that imagines that one whom he loves hates him, is a prey to the conflicting passions of love and hatred; for in so far as he imagines himself to be hated by any one, he is determined also to hate him. But he loves him nevertheless. Therefore he is a prey to the conflicting passions of love and hatred.

Corollary II.—If any one imagines that an ill has been inflicted on him by a person to whom he bore no good or evil before, he immediately will endeavour to repay that evil to the person in question.

Proof.—He who imagines any one to be affected with hatred towards

himself will hate that person in turn, and he will endeavour to remember everything that can affect him with pain, and will endeavour, moreover, to inflict this injury on the person. But (by the hypothesis) the first evil he recalls is that one done to himself. Therefore he immediately endeavours to inflict that one in return. Q.e.d.

Prop. XLI. If any one imagines himself to be loved by some one else, and does not believe that he has given any cause for this love, he shall love that person in return.

Proof.—The proof of this proposition proceeds in the same manner as that of the previous one.

Corollary.—He who imagines he is loved by one whom he hates is a prey to the conflicting emotions of hatred and love. This is shown in the same way as was the corollary of the previous proposition.

Prop. XLII. He who confers a benefit on any one, if moved by love, or by the hope of honour, will be saddened if he sees that the benefit is received with ingratitude.

Proof.—He who loves something similar to himself endeavours as much as possible to bring it about that he is loved in turn by that thing. Therefore he who confers a benefit on any one through love, does so with the desire which holds him to be loved in return, that is, by the hope of honour or of pleasure: and therefore he will endeavour as much as possible to imagine this cause of honour, or regard it as actually existing. But he imagines something else that cuts off the cause of its existence. Therefore by that very fact he will be saddened. Q.e.d.

Prop. XLIII. Hatred is increased by reciprocal hatred, and, on the other hand, can be destroyed by love.

Proof.—He who imagines that one whom he hates is affected with hatred towards him will feel to arise in himself a new hatred, while the first hatred still remains. But if, on the contrary, he imagines that one whom he hates is affected with love towards him, in so far as he imagines this he will regard himself with pleasure, and will endeavour to please the object of his hatred, that is, he will endeavour not to hate him and not to affect him with pain: and this endeavour will be greater or less according to the emotion from which it arises. And so if it be greater than that one which arose from hatred, and through which he endeavoured to affect the thing which he hated with pain, it will prevail and will remove hatred from the mind. O.e.d.

Prop. XLIV. Hatred which is entirely conquered by love passes into love, and love on that account is greater than if it had not been preceded by hatred.

Proof.—The proof proceeds in the same manner as that of Prop. 38,

Part III. For he who begins to love a thing which he hated, or which he was wont to regard with pain, by the very fact that he loves will rejoice; and to this pleasure which love involves is added that which arises from the fact that the endeavour to remove pain which hatred involves is aided, accompanied by the idea of him whom he hated as cause.

PROP. XLV. If one imagines that any one similar to himself is affected with hatred towards another thing similar to himself whom he himself loves, then he will hate the first of these two.

Proof.—The thing loved has reciprocal hatred towards him who hates it. And therefore the lover who imagines that any one hates the thing he loves, by that very fact imagines the thing beloved to be affected by hatred, that is, by pain: and consequently he will be saddened, and that accompanied by the idea of him who hates the thing beloved as a cause, that is, he will hate that person. Q.e.d.

Prop. XLVI. If any one has been affected with pleasure or pain by another person of a class or nation different to his own, and that accompanied by the idea of that person under the general name of that class or nation as the cause of the pleasure or pain, he will love or hate not only that person, but all of that class or nation.

Proof.—The proof of this is clear from Prop. 16, Part III.

Prop. XLVII. Joy which arises from the fact that we imagine a thing which we hate to be destroyed or affected by some evil never arises without some pain in us.

Proof.—This is clear from Prop. 27, Part III. For in so far as we imagine a thing similar to ourselves to be affected with pain we are saddened.

PROP. XLVIII. Love and hatred, for example, towards Peter, are destroyed, if the pain which the latter involves, and the pleasure which the former involves, are connected to the idea of another thing as a cause; and each of them will be diminished in so far as we imagine Peter not to be the only cause of either.

Proof.—This is obvious from the mere definition of love and hatred. For pleasure is called love towards Peter, and pain hatred towards him merely on this account, that he is regarded as the cause of this or that effect. When this then is either wholly or partly removed, the emotion towards Peter is either wholly or partly removed. Q.e.d.

PROP. XLIX. Love or hatred towards a thing which we imagine to be free must be greater than the love or hatred towards a necessary thing, provided both are subject to the same cause.

Proof.-A thing which we imagine to be free must be perceived

through itself without any others. If, therefore, we imagine it to be the cause of the aforesaid pleasure or pain, by that very fact we shall love or hate it, and that with the greatest love or hatred that can arise from the given emotion. But if we imagine the thing which is the cause of the given effect to be necessary, then we shall imagine it not alone, but together with other things, to be the cause of the given effect: and therefore our love or hatred towards it will be less. O.e.d.

Prop. L. Anything can be accidentally the cause of hope or fear.

Proof.—This proposition is shown in the same way as Prop. 15,
Part III.

Prop. LI. Different men can be affected by one and the same object in different manners, and one and the same man can be affected by one and the same object in different ways at different times.

Proof.—The human body is affected by external bodies in many ways. Therefore two men can be affected in different ways at the same time, and therefore they can be affected in various ways by one and the same object. Again, the human body can be affected now in this mode and now in that, and consequently it can be affected by one and the same object at different times in different ways. Q.e.d.

Prop. LII. We cannot regard an object which we have seen before together with some others, or which we imagine to have nothing that is not common to many, as long as one which we imagine to have something singular about it.

Proof.—As soon as we imagine the object which we have seen with others, we immediately recall the others, and thus from regarding one we immediately pass to the regarding of another. And this is the case with an object which we imagine to have nothing that is not common to many. For we suppose by that very fact that we are regarding in it nothing that we have not seen with the others. But when we suppose that we imagine something singular in any object, something that we have never seen before, we say nothing else than that the mind, while it regards that object, has nothing else in itself to the regarding of which it may pass to the regarding of something else. And therefore it is determined for the regarding of that alone. Therefore we cannot regard, etc. Q.e.d.

PROP. LIII. When the mind regards itself and its power of acting it is rejoiced, and the more so, the more distinctly it imagines itself and its power of acting.

Proof.—Man does not know himself save through the modifications of his body, and the ideas of these modifications. Therefore when it happens that the mind can regard itself, it is assumed by that very fact

to pass to a greater state of perfection, that is, to be affected with pleasure, and the more so according as it can imagine itself and its power of acting more distinctly. Q.e.d.

Corollary.—This pleasure is more and more fostered the more a man imagines himself to be praised by others. For the more he imagines himself to be praised by others, the greater, by that very fact, the pleasure with which he imagines others to be affected, and that accompanied by the idea of himself as cause. And therefore the greater will be the joy accompanied by an idea of himself with which he is affected. Q.e.d.

Prop. LIV. The mind endeavours to imagine those things only which impose its power of action on it.

Proof.—The endeavour or power of the mind is the same as the essence of the mind. But the essence of the mind only affirms that which the mind is and can do; and not that which it is not and cannot do. And therefore it endeavours to imagine only that which affirms or imposes its power of acting. Q.e.d.

Prop. LV. When the mind imagines its want of power it is saddened by that fact.

Proof.—The essence of the mind affirms only that which the mind is and can do, or it is the nature of the mind only to imagine those things which impose its power of acting (previous Prop.). When therefore we say that the mind, while regarding itself, imagines its weakness, we say nothing else than that, while the mind endeavours to imagine something which imposes its power of acting, that endeavour is hindered or that it is saddened. O.e.d.

Corollary I.—This pain or sadness is fostered more and more if one imagines himself to be reviled by others, which can be proved in the same manner as the Coroll., Prop. 53, Part III.

Corollary II.—No one envies the virtue of any one save his equal. Proof.—Envy is hatred itself or sadness, that is, a modification by which a man's power of acting or endeavour is hindered. But man endeavours or desires to do nothing save what can follow from his given nature. Therefore man desires to attribute to himself no power of acting or (what is the same thing) no virtue which is proper to another nature and alien to his own. And therefore his desire cannot be hindered nor he himself saddened by the fact that he regards some virtue in some one dissimilar to himself, and consequently he cannot envy him; but he can envy his equal, who is supposed to be of the same nature as himself. Q.e.d.

Prop. LVI. There are as many species of pleasure, pain, desire, and consequently any emotion which is composed of these, such as wavering of the mind, or which is derived from these, such as love, fear, hope, hate, etc., as there are species of objects by which we are affected.

Proof.—Pleasure and pain, and consequently the emotions which are composed of or derived from these, are passions; we also are passive in so far as we have inadequate ideas, and in so far as we have them alone are we passive, that is, we are only necessarily passive in so far as we imagine, or in so far as we are affected by an emotion which involves the nature of our body and the nature of an external body. The nature, therefore, of each passion must so be explained necessarily that the nature of the object by which we are affected may be expressed. The pleasure which arises from the object, e.g., A, involves the nature of the object A, and the pleasure which arises from the object B involves the nature of that object B: and therefore these two pleasures are of different nature because they arise from causes of different nature. Thus also the emotion of sadness which arises from one object is different in nature from the sadness which arises from another cause, which also must be understood of love, hate, hope, fear, wavering of the mind, etc.: and therefore there are as many species of pleasure, pain, love, etc., as there are species of objects by which we are affected. But desire is the essence or nature of every one in so far as it is conceived as determined from any given disposition of the person to do anything. Therefore, according as each one is affected by external causes with this or that kind of pleasure, pain, love, hatred, that is, according as his nature is constituted in this or that manner, so will his desire be this or that, and the nature of one desire necessarily different to the nature of another as much as the emotions from which each one has arisen differ one from the other. Therefore there are as many species of desires as there are species of pleasure, pain, love, etc., and consequently as there are species of objects by which we are affected. O.e.d.

Prop. LVII. Any emotion of every individual differs from the emotion of another only in so far as the essence of one differs from the essence of another.

Proof.—All emotions have reference to desire, pleasure, or pain, as the definitions which we gave of them show. But desire is the nature and essence of everything: therefore the desire of one individual differs from the desire of another only inasmuch as the essence of one differs from the essence or nature of the other. Pleasure and pain are passions by which the power or endeavour of every person to persist in his own being is increased or diminished, aided or hindered. But by endeavour to persist in its being, in so far as it refers to the mind and body at the same time, we understand appetite and desire; therefore pleasure and pain are desire itself, or appetite, in so far as it is increased or diminished

by external causes, helped or hindered, that is, they are the nature of every one. And therefore the pleasure or pain of one person differs only from the pleasure or pain of another in so far as the nature or essence of one differs from the nature or essence of another: and consequently any emotion of an individual, etc. O.e.d.

Prop. LVIII. Besides pleasure and desire, which are passions, there are other emotions of pleasure and pain which refer to us in so far as we are active.

Proof.—When the mind conceives itself and its power of acting, it rejoices. But the mind necessarily regards itself when it conceives a true or adequate idea. But the mind conceives certain adequate ideas. Therefore it will also rejoice in so far as it conceives adequate ideas, that is, in so far as it is active. Again, the mind endeavours to persist in its being in so far as it has both clear and distinct ideas and confused ones. But by endeavour we understand desire. Therefore desire also has reference to us in so far as we understand, or in so far as we are active. Q.e.d.

Prop. LIX. Among all the emotions which have reference to the mind, in so far as it is active, there are none which have not reference to pleasure or desire.

Proof.—All emotions have reference to pleasure, pain, or desire, as the definitions which we gave of them show. But we understand by pain that the mind's power of thinking is diminished or hindered, and therefore the mind in so far as it is saddened has its power of understanding, that is, its power of acting, diminished or hindered. And therefore no emotions of pain can be referred to the mind in so far as it is active, but only emotions of pleasure or desire which thus far have reference to the mind. Q.e.d.

FOURTH PART: ON HUMAN SERVITUDE, OR THE STRENGTH OF THE EMOTIONS

DEFINITIONS

I. By Good I understand that which we certainly know to be useful to us.

II. But by BAD I understand that which we certainly know will prevent us from partaking any good.

III. I call individual things Contingent in so far as while we regard their essence alone, we find nothing which imposes their existence necessarily, or which necessarily excludes it.

IV. I call the same individual things Possible in so far as while we

regard the causes by which they must be produced, we know not whether they are determined to produce them.

V. In the following propositions I shall understand by CONTRARY EMOTIONS those which draw a man in different directions, although they may be of the same kind, as luxury and avarice, which are species of love, and are contrary not by nature but by accident.

VI. What I understand by emotion towards a thing future, present, or past, I have explained.

But it is the place here to note that we can only distinctly imagine distance of time, like that of space, up to a certain limit, that is, just as those things which are beyond two hundred paces from us, or whose distance from the place where we are exceeds that which we can distinctly imagine, we are wont to imagine equally distant from us and as if they were in the same plane, so also those objects whose time of existing we imagine to be distant from the present by a longer interval than that which we are accustomed to imagine, we imagine all to be equally distant from the present, and refer them all to one moment of time.

VII. By End, with which in view we do anything, I understand a desire.

VIII. By VIRTUE and Power I understand the same thing, that is, virtue, in so far as it has reference to man, is his essence or nature in so far as he has the power of effecting something which can only be understood by the laws of that nature.

Axiom. There is no individual thing in nature than which there is none more powerful or stronger; but whatever is given, there is also something stronger given by which that given thing can be destroyed.

PROPOSITIONS

Prop. I. Nothing positive, which a false idea has, is removed from the presence of what is true in so far as it is true.

Proof.—Falsity consists solely of the privation of knowledge which is involved by inadequate ideas. Nor do these have anything positive, by reason of which they are called false; but on the contrary, in so far as they have reference to God, they are true. If, therefore, that which is positive, possessed by a false idea, were removed from the presence of what is true in so far as it is true, then a true idea would be removed from itself, which is absurd. Therefore nothing positive, etc. Q.e.d.

Prop. II. We are passive in so far as we are a part of nature which cannot be conceived through itself without others.

Proof.—We are said to be passive when something takes place in us

of which we are only the partial cause, that is, something which cannot be deduced solely from the laws of our nature. We are passive, therefore, in so far as we are part of nature which cannot be conceived through itself without other parts. Q.e.d.

Prop. III. The force with which man persists in existing is limited, and is far surpassed by the power of external causes.

Proof.—This is clear from the axiom of this part. For with a given man there is given something, say A, stronger than he, and given A, there is given something, say B, stronger than A, and so on to infinity. And therefore the power of man is limited by the power of some other thing, and infinitely surpassed by the power of external causes. Q.e.d.

Prop. IV. It cannot happen that a man should not be a part of nature, and that he should be able not to suffer changes, save those which can be understood through his nature alone, and of which he is the adequate cause.

Proof.—The power with which individual things, and consequently man, preserve their being is the very power of God or nature, not in so far as he is infinite, but in so far as he can be explained through actual human essence. Therefore the power of man, in so far as it is explained through its actual essence, is a part of the infinite power of God or nature, that is, of his essence: which was the first point. Again, if it can come to pass that a man can suffer no changes save those that can be understood through the nature alone of that man, it would follow that he cannot perish, and that he will live of necessity for ever. But this must follow from a cause whose power is finite or infinite, namely, from the mere power of man, that he would be able to remove changes which arise from external causes from him, or from the infinite power of nature by which all individual things are so directed that man can suffer no other changes than those which serve for his preservation. But the first point is absurd. Therefore, if it could come to pass that man should suffer no changes save those that can be understood through the mere nature of man himself, and consequently, as we have already shown, that he should exist for ever, this would have to follow from the infinite power of God. Consequently the order of the whole of nature would have to be deduced in so far as it is considered under the attributes of thought and extension from the necessity of divine nature, in so far as it is considered as affected by the idea of some man. And therefore it would follow that man was infinite, which is absurd. It cannot therefore happen that a man should suffer no changes save those of which he is the adequate cause. Q.e.d.

Corollary.—Hence it follows that man is always necessarily liable to passions, that he always follows the common order of nature and obeys

it, and that he accommodates himself to it as much as the nature of things demands.

Prop. V. The force and increase of any passion, and its persistence in existing, are not defined by the power whereby we endeavour to persist in existing, but by the power of an external cause compared with our own.

Proof.—The essence of passion cannot be explained merely through our essence, that is, the power of passion cannot be defined by the power with which we endeavour to persist in our being; but it must necessarily be defined by the power of some external cause compared with our own. Q.e.d.

Prop. VI. The force of any passion or emotion can so surpass the rest of the actions or the power of a man that the emotion adheres obstinately to him.

Proof.—The force and increase of any passion, and its persistence in existing, is defined by the power of an external cause compared with ours: and therefore it can surpass a man's power, etc. Q.e.d.

Prop. VII. An emotion can neither be hindered nor removed save by a contrary emotion and one stronger in checking emotion.

Proof.—An emotion, in so far as it has reference to the mind, is an idea wherewith the mind affirms a greater or less force of existing of its body than before. When, therefore, the mind is assailed by any emotion, the body is affected at the same time by a modification whereby its power of acting is either increased or diminished. Now this modification of the body receives from its cause the force for persisting in its being, which therefore can neither be restrained nor removed save by a bodily cause which affects the body with a modification contrary to that one and stronger than it. And therefore the mind is affected by the idea of a modification stronger and contrary to the previous one, that is, the mind will be affected with an emotion stronger and contrary to the former which cuts off the existence of or takes away the former: and thus the emotion can neither be checked nor removed save by a contrary and stronger emotion. Q.e.d.

Corollary.—An emotion, in so far as it has reference to the mind, can neither be hindered nor destroyed save through the idea of a contrary modification of the body and one stronger than the modification which we suffer. For the emotion which we suffer cannot be checked or removed save by an emotion stronger than it and contrary to it, that is, save through the idea of a modification of the body stronger than and contrary to the modification which we suffer.

Prop. VIII. The knowledge of good or evil is nothing else than the emotion of pleasure or pain, in so far as we are conscious of it.

Proof.—We call that good or evil which is useful or the contrary for our preservation, that is, which increases or diminishes, helps or hinders our power of acting. And so, in so far as we perceive anything to affect us with pleasure or pain, we call it good or evil; and therefore the knowledge of good or evil is nothing else than the idea of pleasure or pain which follows necessarily from the emotion of pleasure or pain. But this idea is united to the emotion in the same manner as the mind is united to the body, that is, this idea is not distinguished in truth from that emotion or from the idea of the modification of the body save in conception alone. Therefore this knowledge of good and evil is nothing else than emotion itself, in so far as we are conscious of it. Q.e.d.

Prop. IX. An emotion whose cause we imagine to be with us at the present is stronger than if we did not imagine it to be present.

Proof.—Imagination is the idea wherewith the mind regards a thing as present which nevertheless indicates rather the disposition of the human body than the nature of the external body. Imagination is therefore an emotion in so far as it indicates the disposition of the body. But imagination is more intense as long as we imagine nothing which cuts off the present existence of the external object. Therefore an emotion also, whose cause we imagine to be with us in the present, is more intense or stronger than if we did not imagine it to be present with us. Q.e.d.

Corollary.—The image of a thing future or past, that is, of a thing which we regard with reference to time future or past, to the exclusion of time present, is, under similar conditions, weaker than the image of a thing present, and consequently the emotion towards a thing future or past is, cateris paribus, less intense than the emotion towards a thing present.

Prop. X. Towards a future thing which we imagine to be close at hand we are more intensely affected than if we imagine the time of its existing to be further distant from the present; and by the recollection of a thing which we imagine to have passed not long ago we are more intensely affected also than if we imagine it to have passed long ago.

Proof.—For in so far as we imagine a thing to be close at hand or just to have past, we imagine that which will exclude the presence of the thing less than if we imagine its future time of existing to be further away from the present, or if it had passed away long ago: therefore we shall be affected towards it more intensely. Q.e.d.

PROP. XI. The emotion towards a thing which we imagine to be necessary is more intense, *cæteris paribus*, than towards a thing possible, contingent, or not necessary.

Proof.—In so far as we imagine anything to be necessary we affirm its existence, and on the contrary, we deny the existence of a thing in so far as we imagine it not necessary: and accordingly the emotion towards a thing necessary is more intense, cæteris paribus, than towards a thing not necessary. Q.e.d.

Prop. XII. The emotion towards a thing which we know to be nonexistent at the present time, and which we imagine possible, is more intense, cæteris paribus, than that towards a thing contingent.

Proof.—In so far as we imagine the thing as contingent, we are affected by no image of another thing which imposes its existence on it; but, on the other hand, we imagine certain things cut off its present existence. But in so far as we imagine the thing to be possible in the future, we imagine certain things which impose existence on it, that is, which foster hope or fear: and therefore emotion towards a thing possible is more intense. Q.e.d.

Corollary.—Emotion towards a thing which we know to be nonexistent in the present, and which we imagine as contingent, is far more mild than if we imagine the thing to be present with us.

Proof.—Emotion towards a thing which we imagine to exist in the present is more intense than if we imagined it as future, and it is far more intense if we imagine the future time not to be far distant from the present. Therefore the emotion towards a thing whose time of existing we imagine to be far distant from the present is far more mild than if we imagine it as present, and nevertheless is more intense than if we imagined that thing as contingent. Therefore the emotion towards a thing contingent is far more mild than if we imagined the thing to be with us at the present. O.e.d.

Prop. XIII. Emotion towards a thing contingent, which we know does not exist in the present, is far more mild, cæteris paribus, than emotion towards a thing past.

Proof.—In so far as we imagine a thing as contingent, we are affected by the image of no other thing which imposes the existence of that thing; but, on the contrary, we imagine certain things which cut off its present existence. But in so far as we imagine it with reference to time past, we are supposed to imagine something which restores it to memory, or which excites the image of the thing, and thus far accordingly it brings it to pass that we regard it as if it were present. And therefore emotion towards a thing contingent, which we know does not exist in the present, is more mild, cateris paribus, than emotion towards a thing past. O.e.d.

Prop. XIV. A true knowledge of good and evil cannot restrain any emotion in so far as the knowledge is true, but only in so far as it is considered as an emotion.

Proof.—An emotion is an idea whereby the mind affirms a greater or less force of existing of its body, and therefore it has nothing positive which can be removed by the presence of what is true; and consequently a true knowledge of good and evil, in so far as it is true, cannot restrain any emotion. But in so far as it is an emotion, if it is stronger for restraining emotion, thus far only it can hinder or restrain an emotion. Q.e.d.

PROP. XV. Desire which arises from a true knowledge of good and evil can be destroyed or checked by many other desires which arise from emotions by which we are assailed.

Proof.—From a true knowledge of good and evil, in so far as this is an emotion, there necessarily arises desire, which is the greater according as the emotion from which it arises is greater. But inasmuch as this desire arises from the fact that we truly understand something, it follows also that it is within us in so far as we are active. And therefore it must be understood through our essence alone, and consequently its force and increase must only be defined by human power. Again, the desires which arise from the emotions by which we are assailed are greater according as the emotions are the more intense; and therefore their force and increase must be defined by the power of the external causes, which, if compared with our own power, indefinitely surpasses our power. And therefore the desires which arise from similar emotions can be more intense than that which arises from the knowledge of good and evil; and therefore they will be able to check or destroy it. Q.e.d.

PROP. XVI. The desire which arises from the knowledge of good and evil, in so far as this knowledge has reference to the future, can more easily be checked or destroyed than the desire of things which are pleasing in the present.

Proof.—Emotion towards a thing which we imagine to be future is less intense than towards a thing present. But the desire which arises from the knowledge of good and evil, although this knowledge should concern things which are good in the present, can be destroyed or checked by any headstrong desire. Therefore the desire which arises from such knowledge, in so far as it has reference to the future, can be more easily destroyed or checked, etc. Q.e.d.

Prop. XVII. Desire which arises from true knowledge of good and evil, in so far as this concerns things contingent, can be far more easily restrained than the desire for things which are present.

Proof.—This proposition is proved in the same manner as the previous one.

Prop. XVIII. Desire which arises from pleasure is stronger, cateris paribus, than the desire which arises from pain.

Proof.—Desire is the very essence of man, that is, the endeavour wherewith man endeavours to persist in his being. Wherefore desire which arises from pleasure is helped or increased by the emotion of pleasure itself; but that desire which arises from sadness or pain is diminished or hindered by the emotion of pain. And therefore the force of desire which arises from pleasure must be defined by human power, and at the same time, by the power of an external cause; but that which arises from pain must only be defined by human power: and therefore the former is stronger than the latter. Q.e.d.

Prop. XIX. Each one necessarily desires or turns from, by the laws of his nature, what he thinks to be good or evil.

Proof.—The knowledge of good and evil is the emotion of pleasure or pain in so far as we are conscious of it: and therefore every one necessarily desires what he thinks to be good, and turns from what he thinks to be evil. But this desire is nothing else than the very essence or nature of man. Therefore every one, from the laws of his nature alone, necessarily desires or turns away from, etc. Q.e.d.

Prop. XX. The more each one seeks what is useful to him, that is, the more he endeavours and can preserve his being, the more he is endowed with virtue; and, on the contrary, the more one neglects to preserve what is useful, or his being, he is thus far impotent or powerless.

Proof.—Virtue is human power itself, which is defined by the essence of man alone, that is, which is defined by the endeavour alone wherewith the endeavours to persist in his own being. The more, therefore, he endeavours and succeeds in preserving his own essence, the more he is endowed with virtue, and consequently in so far as he neglects to preserve his being he is thus far wanting in power. Q.e.d.

PROP. XXI. No one can desire to be blessed, to act well, or live well, who at the same time does not desire to be, to act, and to live, that is, actually to exist.

Proof.—The proof of this proposition, or rather the thing itself, is self-evident, and appears from the definition of desire. For the desire of being blessed, of acting well, and of living well, etc., is the very essence of man, that is, the endeavour wherewith each one endeavours to preserve his own being. Therefore no one can desire, etc. *Q.e.d.*

Prop. XXII. No virtue can be conceived as prior to this virtue of endeavouring to preserve oneself.

Proof.—The endeavour of preserving oneself is the very essence of a thing. If, therefore, any virtue can be conceived as prior to this one,

namely, this endeavour, the essence of the thing would therefore be conceived prior to itself, which, as is self-manifest, is absurd. Therefore no virtue, etc. Q.e.d.

Corollary.—The endeavour of preserving oneself is the first and only basis of virtue, for prior to this principle nothing else can be conceived, and without it no virtue can be conceived.

PROP. XXIII. Man, in so far as he is determined to do anything, by the fact that he has inadequate ideas cannot absolutely be said to act from virtue, but only in so far as he is determined by the fact that he understands.

Proof.—In so far as a man is determined to do something by the fact that he has inadequate ideas, suffers or is passive, that is, he does something which cannot be perceived through its own essence alone, that is, which does not follow from his virtue. But in so far as he is determined to do something, by the fact that he understands, he is active, that is, he does something which can be perceived through its own essence alone or which follows adequately from his virtue. Q.e.d.

Prop. XXIV. To act absolutely according to virtue is nothing else in us than to act under the guidance of reason, to live so, and to preserve one's being on the basis of seeking what is useful to oneself.

Proof.—To act absolutely from virtue is nothing else than to act according to the laws of one's own nature. But we only act so in so far as we understand. Therefore to act according to virtue is nothing else in us than to act, to live, and preserve our being according to the guidance of reason, on the basis of seeking what is useful to oneself. *O.e.d.*

Prop. XXV. No one endeavours to preserve his being for the sake of anything else.

Proof.—The endeavour wherewith each thing endeavours to persist in its own being is defined by the essence of the thing alone, and from this alone, and not from the essence of any other thing. It necessarily follows that each one endeavours to preserve his own essence. Therefore no one endeavours, etc. *Q.e.d.*

Prop. XXVI. Whatever we endeavour to do under the guidance of reason is nothing else than to understand; nor does the mind, in so far as it uses reason, judge anything useful to itself save what is conducive to understanding.

Proof.—The endeavour to preserve oneself is nothing else than the essence of the thing which, in so far as it exists as such, is conceived to have force for persisting in existing, and for doing those things which necessarily follow from its given nature. But the essence of reason is

nothing else than the mind itself in so far as it understands clearly and distinctly. Therefore, whatever we endeavour to do under the guidance of reason is nothing else than to understand. Again, as this endeavour of the mind, in so far as the mind reasons, endeavours to preserve its being, it does nothing else than to understand. Therefore this endeavour to understand is the first and only basis of virtue. Nor do we endeavour to understand for the sake of any end, but, on the contrary, the mind, in so far as it reasons, cannot conceive anything as good to itself save what is conducive to understanding.

Prop. XXVII. We know nothing to be certainly good or evil save what is truly conducive to understanding or what prevents us from understanding.

Proof.—The mind, in so far as it reasons, desires nothing else than to understand, nor does it judge anything useful to itself save what is conducive to understanding. But the mind has no certainty in things save in so far as it has adequate ideas, or, what is the same thing, in so far as it reasons. Therefore we understand nothing to be certainly good save what is conducive to understanding, and, on the contrary, that to be bad which can prevent us from understanding. Q.e.d.

Prop. XXVIII. The greatest good of the mind is the knowledge of God, and the greatest virtue of the mind is to know God.

Proof.—The greatest thing that the mind can understand is God, that is, a being absolutely infinite, and without which nothing can either be or be conceived. Therefore the thing of the greatest use or good to the mind is the knowledge of God. Again, the mind, in so far as it understands, thus far only is active, and thus far can it be absolutely said that it acts according to virtue. To understand, therefore, is the absolute virtue of the mind. But the greatest thing that the mind can understand is God. Therefore the greatest virtue of the mind is to understand or know God. O.e.d.

Prop. XXIX. Any individual thing whose nature is altogether different to ours can aid or hinder our power of understanding, and absolutely nothing can be either good or bad save if it have something in common with us.

Proof.—The power of any individual thing, and consequently the power of man, by which he exists and works, is only determined by another individual thing whose nature must be understood through the same attribute through which human nature is conceived. Therefore our power of acting, in whatever way it may be conceived, can be determined, and consequently aided or hindered, by the power of some other thing which has something in common with us, and not by the power of something

whose nature is altogether different to ours; and inasmuch as we call that good or bad which is the cause of pleasure or pain, that is, which increases or diminishes, aids or hinders our power of acting, therefore the thing whose nature is entirely different to ours can be neither good nor bad to us. Q.e.d.

Prop. XXX. Nothing can be bad through that which it has in common with our nature; but in so far as it is bad, thus far it is contrary to us.

Proof.—We call that bad which is the cause of pain, that is, which increases or diminishes our power of acting. If, therefore, anything through that which it has in common with us were bad to us, it would therefore be able to diminish or hinder what it has in common with us, which is absurd. Therefore nothing through that which it has in common with us can be bad to us; but, on the other hand, in so far as it is bad, that is, in so far as it can diminish or hinder our power of action, thus far it is contrary to us. Q.e.d.

Prop. XXXI. In so far as anything agrees with our nature, thus far it is necessarily good.

Proof.—In so far as anything agrees with our nature it cannot be bad. It will therefore be either good or indifferent. If we suppose this, that it is neither good nor bad, then nothing will follow from its nature which can serve for the preservation of our nature, that is, which serves for the preservation of the thing itself. But this is absurd. It will therefore be, in so far as it agrees with our nature, necessarily good. Q.e.d.

Corollary.—Hence it follows that the more a thing agrees with our nature, the more useful or good it is to us, and, on the other hand, the more useful anything is to us, the more it agrees with our nature. For in so far as it does not agree with our nature it will necessarily be different to our nature or contrary to it. If it is different, then it can be neither good nor bad; if it is contrary, it will therefore be contrary to that which agrees with our nature, that is, contrary to good or bad. Nothing, therefore, save in so far as it agrees with our nature, can be good; and therefore the more it agrees with our nature, the more useful it is to us, and contrariwise. Q.e.d.

Prop. XXXII. In so far as men are liable to passions they cannot thus far be said to agree in nature.

Proof.—Things which are said to agree in nature are understood to agree in power, but not in want of power or negation, and consequently in passion. Wherefore men, in so far as they are liable to passions, cannot be thus far said to agree in nature. **Q.e.d.**

Prop. XXXIII. Men can differ in nature in so far as they are assailed by emotions which are passions, and thus far one and the same man is variable and inconstant.

Proof.—The nature or essence of emotion cannot be explained through our essence or nature alone, but by the power, that is, by the nature of external causes compared with our own, it must be defined. Whence it comes about that there are as many species of each emotion as there are species of objects by which we are affected, and that men are affected by one and the same object in different manners, and thus far disagree in nature, and moreover, that one and the same man is affected in different manners towards the same object, and thus far is variable, etc. Q.e.d.

Prop. XXXIV. Men, in so far as they are assailed by emotions which are passions, can be contrary one to the other.

Proof.—A man, e.g., Peter, can be the cause that Paul is saddened, inasmuch as he has something similar to a thing which Paul hates, or inasmuch as Peter possesses alone something which Paul also loves, or on other accounts. And therefore it hence comes to pass that Paul hates Peter, and consequently it may easily happen that Peter hates Paul on the other hand, and therefore that they endeavour to work each other reciprocal harm, that is, that they become contrary one to the other. But the emotion of pain is always a passion: therefore men, in so far as they are assailed by emotions which are passions, can be contrary one to the other. Q.e.d.

Prop. XXXV. In so far as men live under the guidance of reason, thus far only they always necessarily agree in nature.

Proof.—In so far as men are assailed by emotions which are passions they can be different in nature and contrary one to the other. But men are said to be active only in so far as they live under the guidance of reason, and therefore whatever follows from human nature, in so far as it is defined by reason, must be understood through human nature alone as its proximate cause. But inasmuch as each one desires according to the laws of his own nature what is good, and endeavours to remove what he thinks to be bad, and inasmuch as that which we judge to be good or bad, according to the dictate of reason, is necessarily good or bad, therefore men, in so far as they live according to the dictates of reason, do those things which are necessarily good to human nature, and consequently to each man, that is, which agree with the nature of each man. And therefore men also necessarily agree one with the other in so far as they live according to the mandate of reason. Q.e.d.

Corollary I.—There is no individual thing in nature more useful to man than one who lives under the guidance of reason. For that is most useful to man which mostly agrees with his nature, that is, man. But

man is absolutely active according to the laws of his nature when he lives under the guidance of reason, and thus far only can he agree necessarily with the nature of another man. Therefore there is nothing more useful to man than a man, etc. Q.e.d.

Corollary II.—As each man seeks that most which is useful to him, so men are most useful one to the other. For the more each man seeks what is useful to him and endeavours to preserve himself, the more he is endowed with virtue, or, what is the same thing, the more power he is endowed with to act according to the laws of his nature, that is, to live under the guidance of reason. But men mostly agree in nature when they live under the guidance of reason. Therefore men are most useful one to the other when each one most seeks out what is useful to himself. O.e.d.

Prop. XXXVI. The greatest good of those who follow virtue is common to all, and all can equally enjoy it.

Proof.—To act from virtue is to act from the instruction of reason, and whatever we endeavour to do from reason is understanding. And therefore the greatest good of those who follow virtue is to know God, that is, the good which is common to all men, and which can be possessed equally by all men, in so far as they are of the same nature. Q.e.d.

Prop. XXXVII. The good which each one who follows virtue desires for himself, he also desires for other men, and the more so the more knowledge he has of God.

Proof.—Men, in so far as they live under the guidance of reason, are most useful to men; and therefore we endeavour, under the guidance of reason, to bring it about that men live under the guidance of reason. But the good which each person who lives according to the dictate of reason, that is, who follows virtue, desires for himself, he desires also for other men. Again, desire, in so far as it has reference to the mind, is the very essence of the mind; but the essence of the mind consists of knowledge, which involves knowledge of God, and without which it cannot exist or be conceived. And therefore, according as the essence of the mind involves a greater knowledge of God, so the desire with which he who follows virtue desires the good which he desires for himself for others, will be greater. Q.e.d.

Prop. XXXVIII. That is useful to man which so disposes the human body that it can be affected in many modes, or which renders it capable of affecting external bodies in many modes, and the more so according as it renders the body more apt to be affected in many modes or to affect other bodies so; and, on the contrary, that is harmful to man which renders the body less apt for this.

Proof.—The more the body is rendered apt for this, the more the mind is rendered apt for perceiving: and therefore that which disposes the body in that way and renders it apt for this, is necessarily good or useful, and more useful the more apt it renders the body for this, and, on the contrary, that is harmful which renders the body less apt for this. O.e.d.

Prop. XXXIX. Whatever brings it to pass that the proportion of motion and rest which the parts of the human body hold one to the other is preserved, is good; and contrariwise, that is bad which brings it about that the parts of the human body have another proportion mutually of motion and rest.

Proof.—The human body needs for its preservation many other bodies; but that which constitutes the form of the human body consists of this, that its parts convey one to the other their motions mutually in a certain ratio. Therefore that which brings it about that the proportion of motion and rest which the parts of the body have one to the other is preserved, preserves the form of the human body, and consequently brings it to pass that the human body can be affected in many ways, and also that it can affect external bodies in many ways: and therefore it is good. Again, that which brings it to pass that the parts of the human body assume some other proportion of motion and rest, bring it to pass that the human body assumes another form, that is, that the human body is destroyed, and consequently rendered entirely inapt for being affected in many modes: and therefore it is bad. Q.e.d.

Prop. XL. Whatever is conducive of the common society of men, or whatever brings it about that men live together in peace and agreement, is useful, and, on the contrary, that is bad which induces discord in the state.

Proof.—Whatever brings it about that men live together in agreement, brings it about at the same time that they live under the guidance of reason, and therefore it is good: and that, on the other hand, is bad which fosters discord. *Q.e.d.*

PROP. XLI. Pleasure clearly is not evil but good; but pain, on the contrary, is clearly evil.

Proof.—Pleasure is an emotion by which the power of acting of the body is increased or aided; but pain contrariwise is an emotion whereby the body's power of acting is diminished or hindered; and therefore pleasure is certainly good, etc. *Q.e.d.*

Prop. XLII. There cannot be too much merriment, but it is always good; but, on the other hand, melancholy is always bad.

Proof.-Merriment is pleasure which, in so far as it has reference

to the body, consists of this, that all the parts of the body are equally affected, that is, that the body's power of acting is increased or aided in such a way as all the parts preserve the same proportions of motion and rest one with the other; and therefore merriment is always good, and can have no excess. But melancholy is pain which, in so far as it has reference to the body, consists of this, that the body's power of acting is absolutely diminished or hindered; and therefore it is always bad. O.e.d.

Prop. XLIII. Titillation can be excessive and be bad; but grief may be good in so far as titillation or pleasure is bad.

Proof.—Titillation is pleasure which, in so far as it has reference to the body, consists of this, that one or several parts of the body are affected beyond the rest; the power of this emotion can be so great that it surpasses the remaining actions of the body, and it may become very fixedly adhered to this, and accordingly prevent the body from being ready to be affected by many other modes; and therefore it can be bad. Again, grief which, on the other hand, is pain, considered in itself cannot be good. But inasmuch as its force and increase is defined by the power of an external cause compared with our own, we can therefore conceive infinite degrees and modes of the forces of this emotion; and so we can conceive such a mode or grade which can restrain titillation so that it is not excessive, and thus far bring it about that the body should not be rendered less apt; and thus far it will be good. Q.e.d.

Prop. XLIV. Love and desire can be excessive.

Proof.—Love is pleasure accompanied by the idea of an external cause. Therefore titillation accompanied by the idea of an external cause is love; and therefore love can be excessive. Again, desire is the greater according as the emotion from which it arose is greater. Wherefore, as an emotion can surpass all the other actions of man, so also can desire which arises from that emotion surpass other desires, and so it can have the same excess as we proved in the previous proposition titillation to have. Q.e.d.

PROP. XLV. Hatred can never be good.

Proof.—We endeavour to destroy the man whom we hate, that is, we endeavour to do something which is bad. Therefore, etc. Q.e.d.

Let it be noted that here and in the following propositions I only understand by hatred that towards men.

Corollary I.—Envy, derision, contempt, rage, revenge, and the other emotions which have reference to hatred or arise from it, are bad.

Corollary II.—Whatever we desire owing to the fact that we are affected with hatred is evil and unjust in the state.

Prop. XLVI. He who lives under the guidance of reason endeavours as much as possible to repay his fellow's hatred, rage, contempt, etc., with love and nobleness.

Proof.—All emotions of hatred are bad: and therefore he who lives according to the precepts of reason will endeavour as much as possible to bring it to pass that he is not assailed by emotions of hatred, and consequently he will endeavour to prevent any one else from suffering those emotions. But hatred is increased by reciprocated hatred, and, on the contrary, can be demolished by love in such a way that hatred is transformed into love. Therefore he who lives under the guidance of reason will endeavour to repay another's hatred, etc., with love, that is nobleness. Q.e.d.

Prop. XLVII. The emotions of hope and fear cannot be in themselves good.

Proof.—The emotions of hope and fear are not given without pain. For fear is sadness or pain, and hope is not given without fear. And thus these emotions cannot be in themselves good, but only in so far as they can restrain an excess of pleasure. O.e.d.

Prop. XLVIII. The emotions of partiality and disparagement are always bad.

Proof.—Now these emotions are opposed to reason, and therefore they are bad. Q.e.d.

Prop. XLIX. Partiality easily renders the man who is over-estimated, proud.

Proof.—If we see any one praises more than justly what is in us through love we are easily exulted, or we are affected with pleasure, and we easily believe whatever good we hear said about us. And therefore we esteem ourselves beyond the limits of justice through self-love, that is, we easily become proud. *Q.e.d.*

Prop. L. Pity in a man who lives under the guidance of reason is in itself bad and useless.

Proof.—Now pity is sadness, and therefore is bad in itself. The good which follows from it, namely, that we endeavour to free the man whom we pity from his misery, we desire to do from the mere command of reason, nor can we do anything which we know to be good save under the guidance of reason. And therefore pity in a man who lives under the guidance of reason is bad and useless in itself. Q.e.d.

Corollary.—Hence it follows that a man who lives according to the dictate of reason endeavours as far as possible not to be touched with pity.

Prop. LI. Favour is not opposed to reason, but can agree with it and arise from it.

Proof.—Now favour is love towards him who has benefited another: and therefore it can have reference to the mind in so far as it is said to be active, that is, in so far as it understands; and therefore it agrees with reason, etc. *Q.e.d.*

Prop. LII. Self-complacency can arise from reason, and that self-complacency which arises from reason alone is the greatest.

Proof.—Self-complacency is pleasure arisen from the fact that man regards himself and his power of acting. But the true power of acting of man or his virtue is reason itself, which man clearly and distinctly regards. Therefore self-complacency arises from reason. Again, man while he regards himself perceives nothing clearly and distinctly, save those things which follow from his power of acting, that is, which follow from his power of understanding. Therefore from this self-regarding the greatest self-complacency possible arises. Q.e.d.

Proof.—Humility is not a virtue if it does not arise from reason. *Proof.*—Humility is pain which arises from the fact that man regards his own want of power. But in so far as man knows himself by true reason, thus far he is supposed to understand his essence, that is, his power. Wherefore if man, while he regards himself, perceives any weakness of his, it arises not from the fact that he understands himself, but from the fact that his power of acting is hindered. But if we suppose that man conceives his weakness from the fact that he understands something more powerful than himself, whose knowledge determines his power of acting, then we conceive nothing else than that man distinctly understands himself, and thereby his power of acting is aided. Wherefore humility or pain, which arises from the fact that man regards his weakness, does not arise from true contemplation or reason, and is not a virtue but a passion. *Q.e.d.*

Prop. LIV. Repentance is not a virtue, or, in other words, it does not arise from reason, but he who repents of an action is twice as unhappy or as weak as before.

Proof.—The first part of this proposition is proved in the same manner as the preceding proposition. The second part is clear merely from the definition of this emotion. For the man allows himself to be overcome first by evil desire and then by pain.

Prop. LV. The greatest pride or dejection is the greatest ignorance of self.

Proof.—This is clear from Definitions of the Emotions 28 and 29 [as follows]:

28. Pride (superbia) is over-estimation of oneself by reason of self-love.

Explanation.—Pride is different from partiality, for the latter has reference to the over-estimation of an external object, while the former has reference to self-over-estimation. However, as partiality is the effect or property of love, so pride is that of self-love (philautia), which therefore may be defined as love of self, or self-complacency, in so far as it thus affects man so as to over-estimate himself. There is no contrary to this emotion. For no one under-estimates oneself by reason of self-hate. that is, no one under-estimates himself in so far as he imagines that he cannot do this or that. For whatever a man imagines that he cannot do, he imagines it necessarily, and by that very imagination he is so disposed that in truth he cannot do what he imagines he cannot do. For so long as he imagines that he cannot do this or that, so long is he determined not to do it: and consequently, so long it is impossible to him that he should do it. However, if we pay attention to these things, which depend solely on opinion, we shall be able to conceive that it is possible that a man should under-estimate himself. For it can well come to pass that any one, while sadly regarding his weakness, should imagine that he is despised by all, and that while all other men are thinking of nothing less than of despising him. A man, moreover, may under-estimate himself if he deny himself something in the present with relation to future time of which he is uncertain: as, for example, if he should deny that he can conceive anything certain, or desire or do anything save what is wicked and disgraceful, etc. We could, moreover, say that any one under-estimates himself when we see that he dares not do certain things from too great a fear of shame which others who are his equals do without any fear. We can therefore oppose this emotion to pride; I shall call it self-despising or dejection (abjectio). For as self-complacency arises from pride, so selfdespising arises from humility: and this therefore may thus be defined:

29. Self-despising or dejection (abjectio) is under-estimating oneself by reason of pain.

Explanation.—We are wont, nevertheless, to contrast pride with humility, but then more when we regard their effects than their nature. For we are wont to call him proud who praises himself too much, who relates only his own great deeds and only the evil ones of others, who wishes to be before others, and who lives with that gravity and adornment which is natural to those who are far above him in rank. On the other hand, we call him humble who often blushes, who confesses his faults, and relates the virtues and great deeds of others, who yields to all, who walks with a bowed head, and neglects to take upon himself any ornament of dress. But these emotions of humility and self-despising are very rare, for human nature considered in itself strives as much as possible

against them; and therefore those who are believed to be most abject and humble are usually most ambitious and envious.

Prop. LVI. The greatest pride or dejection indicates the greatest weakness of mind.

Proof.—The primary basis of virtue is self-preservation, and that under the guidance of reason. He, therefore, who knows not himself, knows not the basis of all virtues, and consequently is ignorant of all virtues. Again, to act from virtue is nothing else than to act under the guidance of reason, and he who acts under the guidance of reason must necessarily know that he acts under the guidance of reason. He, therefore, who has the greatest ignorance of himself, and consequently of all the virtues, acts the least from virtue, that is, he is most weak in his mind; and therefore the greatest pride or dejection indicates the greatest weakness of mind. O.e.d.

Corollary.—Hence it follows most clearly that proud and dejected people are most liable to emotions.

Prop. LVII. A proud man loves the presence of parasites or flatterers, but the presence of noble people he hates.

Proof.—Pride is pleasure arisen from the fact that man over-estimates himself; this opinion a proud man endeavours as much as possible to foster. And therefore he will love the presence of parasites or flatterers, and as for the company or presence of noble men, he will hate it. Q.e.d.

Prop. LVIII. Honour is not opposed to reason, but can arise from it. *Proof.*—This is clear from Definition of Emotion 30 [as follows]:

30. Honour or glory (gloria) is pleasure accompanied by the idea of some action of ours which we imagine others to praise.

Prop. LIX. For all actions for which we are determined by an emotion which is a passion we can be determined without that emotion by reason alone.

Proof.—To act from reason is nothing else than to do those things which follow from the necessity of our nature considered in itself. But pain is bad in so far as it diminishes or hinders this power of acting. Therefore from this emotion we can be determined for no action which we could not do if we were led by reason. Moreover, pleasure is bad in so far as it prevents man from being ready for action. And therefore we tan be determined for no action which we could not do if we were led by reason. Again, in so far as pleasure is good it agrees with reason, nor is it a passion saye in so far as it does not increase man's power of acting the extent that he perceives himself and his actions adequately. Wherefore if a man affected with pleasure is led to such perfection that he conceives himself and his actions adequately, he will be as apt, nay more apt,

for those actions for which he was determined by emotions which are passions. But all emotions have reference either to pleasure, pain, or desire, and desire is nothing else than the endeavour to act. Therefore for all actions for which we are determined by an emotion which is a passion we can be determined by reason alone. Q.e.d.

Prop. LX. Desire which arises from pleasure or pain which has reference to one or certain parts of the body has no advantage to man as a whole.

Proof.—Let it be supposed that a part, e.g., A, of a body is so aided by the force of some external cause that it overcomes the rest. This part will not endeavour to lose its forces in order that the other parts may perform their functions, or it would then have the force or power of losing its forces, which is absurd. That part will therefore endeavour, and consequently the mind also will endeavour, to preserve its condition; and therefore desire which arises from such an emotion of pleasure will not bring advantage to the body as a whole. Then if, on the other hand, it is supposed that the part A is hindered in such a way that the remaining parts overcome it, it may be proved in the same manner that the desire which arises from pain will not bring advantage to the body as a whole. Q.e.d.

Prop. LXI. Desire which arises from reason can have no excess.

Proof.—Desire absolutely considered is the very essence of man in so far as it is conceived as determined in any manner to do anything. Therefore desire which arises from reason, that is, which is engendered in us in so far as we are active, is the very essence or nature of man in so far as it is conceived as determined to do those things which are adequately conceived through the essence of man alone. If, therefore, this desire can have excess, then human nature considered in itself can exceed itself, or could do more than it can do, which is a manifest contradiction. And therefore this desire cannot have excess. Q.e.d.

Prop. LXII. In so far as the mind conceives a thing according to the dictate of reason, it will be equally affected whether the idea be of a thing present, past, or future.

Proof.—Whatever the mind conceives under the guidance of reason, it conceives entirely under a certain species of eternity or necessity, and is affected with the same certainty. Wherefore, whether the idea be of a thing future, past, or present, the mind will conceive it by the same necessity and will be affected with the same certainty; and whether the idea be of a thing present, past, or future, it will nevertheless be equally true, that is, it will have, nevertheless, the same properties of an adequate idea. And therefore in so far as the mind conceives a thing according to

the dictates of reason it is affected in the same manner, whether the idea be of a thing future, past, or present. Q.e.d.

Prop. LXIII. He that is led by fear to do good in order to avoid evil is not led by reason.

Proof.—All emotions which have reference to the mind in so far as it is active, that is, which have reference to reason, are none other than the emotions of pleasure and desire. And therefore he that is led by fear to do good in order to avoid evil is not led by reason. *Q.e.d.*

Corollary.—By reason of the desire which arises from reason we directly follow what is good and indirectly avoid what is evil.

Proof.—The desire which arises from reason can only arise from the emotion of pleasure which is not a passion, that is, from pleasure which cannot be excessive, and not from pain. And accordingly this desire arises from the knowledge of good, and not from that of evil. And therefore under the guidance of reason we directly desire what is good, and thus far only we avoid what is evil. Q.e.d.

PROP. LXIV. The knowledge of evil is inadequate knowledge.

Proof.—The knowledge of evil is pain itself in so far as we are conscious of it. But pain is a transition to a lesser state of perfection, which on that account cannot be understood through the essence itself of man. And accordingly it is a passion which depends on inadequate ideas, and consequently the knowledge of evil is inadequate. Q.e.d.

Corollary.—Hence it follows that if the human mind had only adequate ideas it would form no notion of evil.

PROP. LXV. Under the guidance of reason we follow the greater of two things which are good and the lesser of two things which are evil.

Proof.—A good thing which prevents us from enjoying a greater good is in truth an evil, for good and bad is said of things in so far as we compare them one with the other, and a lesser evil is in truth a good. Wherefore under the guidance of reason we desire or follow only the greater of two things which are good and the lesser of two which are evil. Q.e.d.

Corollary.—We may follow under the guidance of reason the lesser evil as if it were the greater good, and neglect the lesser good as the cause of a greater evil. For the evil which is here called lesser is in truth good, and, on the other hand, the good is evil. Wherefore we desire the former and avoid the latter. Q.e.d.

Prop. LXVI. Under the guidance of reason we desire a greater future good before a lesser present one, and a lesser evil in the present "before a greater in the future" (Van Vloten's version).

Proof.—If the mind could have adequate knowledge of a future thing,

it would be affected with the same emotion towards a future thing as towards a present one. Wherefore, in so far as we have regard to reason, as we are supposed to do in this proposition, whether the greater good or evil be supposed future or present, the thing is the same. And therefore we desire a greater future good before a lesser present one. Q.e.d.

Corollary.—We desire under the guidance of reason a lesser present evil which is the cause of a greater future good, and we avoid a lesser present good which is the cause of a greater future evil.

PROP. LXVII. A free man thinks of nothing less than of death, and his wisdom is a meditation not of death but of life.

Proof.—A free man, that is, one who lives according to the dictate of reason alone, is not led by the fear of death, but directly desires what is good, that is, to act, to live, and preserve his being on the basis of seeking what is useful to him. And therefore he thinks of nothing less than of death, but his wisdom is a meditation of life. *Q.e.d.*

Prop. LXVIII. If men were born free they would form no conception of good and evil as long as they were free.

Proof.—I said that he was free who is led by reason alone. He, therefore, who is born free and remains free has only adequate ideas, and accordingly has no conception of evil, and consequently none of good. Q.e.d.

Prop. LXIX. The virtue of a free man appears equally great in refusing to face difficulties as in overcoming them.

Proof.—An emotion cannot be hindered or taken away save by a contrary emotion stronger in restraining. But blind daring and fear are emotions which can be conceived equally great. Therefore an equally great virtue or fortitude of mind is required to restrain daring as to restrain fear, that is, a free man declines dangers with the same mental virtue as that with which he attempts to overcome them. Q.e.d.

Corollary.—Therefore a free man is led by the same fortitude of mind to take flight in time as to fight; or a free man chooses from the same courage or presence of mind to fight or to take flight.

Prop. LXX. A free man, who lives among ignorant people, tries as much as he can to refuse their benefits.

Proof.—Every one judges according to his own disposition what is good. Therefore an ignorant man who has conferred a benefit on any one will estimate it according to his own disposition, and if he sees it to be estimated less by him to whom he gave it, he will be pained. But the free man desires to join other men to him in friendship, and not to repay men with similar gifts according to their emotion towards him: he tries to lead himself and others according to the free judgment of reason,

and to do those things only which he knows to be of primary importance. Therefore a free man, lest he should become hateful to the ignorant, and lest he should be governed not by their desire or appetite, but by reason alone, endeavours as far as possible to refuse their benefits. Q.e.d.

PROP. LXXI. Only free men are truly grateful one to the other.

Proof.—Only free men are truly useful one to the other, and are united by the closest bond of friendship, and endeavour to benefit each other with an equal impulse of love. And therefore only free men are truly grateful one to the other. Q.e.d.

Prop. LXXII. A free man never acts by fraud, but always with good faith.

Proof.—If a free man were to do something by fraud in so far as he is free, he would act according to the dictate of reason; and therefore to act fraudulently would be a virtue, and consequently it would be most advantageous to each one to act fraudulently, that is, it would be most advantageous for men to agree only in what they say, but to be contrary one to the other in what they do, which is absurd. Therefore a free man, etc. Q.e.d.

Prop. LXXIII. A man who is guided by reason is more free in a state where he lives according to common law than in solitude where he is subject to no law.

Proof.—A man who is guided by reason is not held in subjection by fear, but in so far as he endeavours to preserve his being according to the dictates of reason, that is, in so far as he endeavours to live freely, he desires to have regard for common life and advantage, and consequently he desires to live according to the ordinary decrees of the state. Therefore a man who is guided desires, in order to live with more freedom, to regard the ordinary laws of the state. Q.e.d.

FIFTH PART: CONCERNING THE POWER OF THE INTELLECT OR HUMAN FREEDOM

AXIOMS

I. If in the same subject two contrary actions are excited, a change must take place in both or in one of them until they cease to be contrary.

II. The power of emotion is defined by the power of its cause in so far as its essence is explained or defined through the essence of its cause. This axiom is clear from Prop. 7, Part III.

PROPOSITIONS

Prop. I. Just as thoughts and the ideas of the mind are arranged and connected in the mind, so in the body its modifications or the modifications of things are arranged and connected according to their order.

Proof.—The order and connection of ideas is the same as the order and connection of things, and vice versa, the order and connection of things is the same as the order and connection of ideas. Wherefore just as the order and connection of ideas in the mind is made according to the order and connection of the modifications of the body, so, vice versa, the order and connection of the modifications of the body is made according as thoughts and the ideas of things are arranged and connected in the mind. Q.e.d.

Prop. II. If we remove disturbance of the mind or emotion from the thought of an external cause and unite it to other thoughts, then love or hatred towards the external cause, as well as waverings of the mind which arise from these emotions, are destroyed.

Proof.—Now that which constitutes the form of love or hatred is pleasure or pain accompanied by the idea of an external cause. When this then is removed, the form of love or hatred is also removed: and therefore these emotions and those which arise from them are destroyed. *Q.e.d.*

Prop. III. An emotion which is a passion ceases to be a passion as soon as we form a clear and distinct idea of it.

Proof.—An emotion which is a passion is a confused idea. If, therefore, we form a clear and distinct idea of this emotion, this idea will be distinguished from the emotion in so far as it has reference to the mind alone by reason alone: and therefore the emotion will cease to be a passion. **Q.e.d.**

Corollary.—Therefore the more an emotion becomes known to us, the more it is within our power and the less the mind is passive to it.

Prop. IV. There is no modification of the body of which we cannot form some clear and distinct conception.

Proof.—Things which are common to all can only be adequately conceived: and therefore there is no modification of the body of which we cannot form some clear and distinct conception. Q.e.d.

Corollary.—Hence it follows that there is no emotion of which we cannot form some clear and distinct conception. For an emotion is the idea of a modification of the body, which on that account must involve some clear and distinct conception.

PROP. V. Emotion towards a thing which we imagine simply and not as necessary nor possible nor contingent, is, cæteris paribus, the greatest of all.

Proof.—Emotion towards a thing which we imagine to be free is greater than that towards one which is necessary, and consequently still greater than that towards a thing which we imagine as possible or contingent. But to imagine a thing as free is nothing else than that we imagined it simply while we were ignorant of the causes by which it was determined for acting. Therefore emotion towards a thing which we imagine simply is greater, cateris paribus, than towards a thing necessary, possible, or contingent, and consequently the greatest. Q.e.d.

Prop. VI. In so far as the mind understands all things as necessary it has more power over the emotions or is less passive to them.

Proof.—The mind understands all things as necessary, and to be determined for existing and acting by the infinite connection of causes: and therefore it brings it about that it is less passive to the emotions which arise from them and it will be affected less towards them. Q.e.d.

Prop. VII. Emotions which arise or are excited by reason, if we regard time, are greater than those which are referred to individual things which we regard as absent.

Proof.—We do not regard a thing as absent by reason of the emotion with which we imagine it, but by reason of the fact that the body is affected by another emotion which cuts off the existence of that thing. Wherefore an emotion which is referred to a thing which we regard as absent is not of such a nature that surpasses and overcomes the other actions and power of man, but contrariwise is of such a nature that it can be hindered in some manner by those modifications which cut off the existence of its external cause. But emotion which arises from reason has reference necessarily to the common properties of things which we always regard as present, and which we always imagine in the same manner. Wherefore such an emotion remains the same always, and consequently emotions which are contrary to it, and which are not aided by their external causes, must more and more accommodate themselves with it until they are no longer contrary, and thus far emotion which arises from reason is the stronger. Q.e.d.

Prop. VIII. The more an emotion is excited by many emotions concurring at the same time, the greater it will be.

Proof.—Many causes can do more at the same time than if they were fewer. And therefore the more an emotion is excited by many causes at the same time, the stronger it is. *Q.e.d.*

PROP. IX. Emotion which has reference to many different causes which the mind regards at the same time as the emotion itself is less harmful, and we are less passive to it and less affected toward each cause than another emotion equally great which has reference to one alone or fewer causes.

Proof.—An emotion is bad or harmful only in so far as the mind is prevented by it from thinking as much as before. And therefore that emotion by which the mind is determined for regarding many objects at the same time is less harmful than another equally great which detains the mind in the contemplation of one alone or fewer objects in such a manner that it cannot think of the others: which was the first point. Again, inasmuch as the essence of the mind, that is, its power, consists of thought alone, therefore the mind is less passive to an emotion by which it is determined for the regarding of many things than to an emotion equally great which holds the mind occupied in regarding one alone or fewer objects: which is the second point. Finally, this emotion, in so far as it has reference to many external causes, is less towards each one of them. O.e.d.

PROP. X. As long as we are not assailed by emotions which are contrary to our nature we are able to arrange and connect the modifications of the body according to their intellectual order.

Proof.—The emotions which are contrary to our nature, that is, which are evil, are evil in so far as they prevent the mind from understanding. As long, therefore, as we are assailed by emotions which are contrary to our nature, so long the mind's power by which it endeavours to understand things is not hindered; and therefore so long it has the power of forming clear and distinct ideas and of deducing certain ones from others: and consequently so long we have the power of arranging and connecting the modifications of the body according to their intellectual order. Q.e.d.

PROP. XI. The more any image has reference to many things, the more frequent it is, the more often it flourishes, and the more it occupies the mind.

Proof.—The more an image or emotion has reference to many things, the more causes there are by which it can be excited and cherished, all of which the mind regards at the same time with the emotion. And therefore the emotion is more frequent or more often flourishes, and it occupies the mind more. *Q.e.d.*

PROP. XII. The images of things are more easily joined to images which have reference to things which we understand clearly and distinctly than to others.

Proof.—Things which we clearly and distinctly understand are either

the common properties of things or what we deduce from them, and consequently they are more often excited in us. And therefore it can more easily happen that we should regard things at the same time with these than with other things, and consequently that they are associated with these more easily than with other things. Q.e.d.

Prop. XIII. The more an image is associated with many other things, the more often it flourishes.

Proof.—The more an image is associated with many other things, the more causes there are by which it can be excited. Q.e.d.

Prop. XIV. The mind can bring it to pass that all the modifications of the body or images of things have reference to the idea of God.

Proof.—There is no modification of the body of which the mind cannot form a clear and distinct conception. And therefore it can bring it to pass that all the images have reference to the idea of God. Q.e.d.

PROP. XV. He who understands himself and his emotions loves God, and the more so the more he understands himself and his emotions.

Proof.—He who clearly and distinctly understands himself and his emotions, rejoices accompanied with the idea of God. And therefore he loves God, and the more so the more he understands himself and his emotions. Q.e.d.

PROP. XVI. This love towards God must occupy the mind chiefly.

Proof.—This love is associated with all the modifications of the mind, by all of which it is cherished. And therefore it must chiefly occupy the mind. Q.e.d.

Prop. XVII. God is free from passions, nor is he affected with any emotion of pleasure or pain.

Proof.—All ideas, in so far as they have reference to God, are true, that is, they are adequate: and therefore God is without passions. Again, God cannot pass to a higher or a lower perfection: and therefore he is affected with no emotion of pleasure or pain. Q.e.d.

Corollary.—God, to speak strictly, loves no one nor hates any one. For God is affected with no emotion of pleasure or pain, and consequently loves no one nor hates any one.

PROP. XVIII. No one can hate God.

Proof.—The idea of God in us is adequate and perfect. And therefore in so far as we regard God we are active, and consequently there can be no pain accompanied by the idea of God, that is, none can hate God. Q.e.d.

Corollary.—Love towards God cannot be changed into hatred.

Prop. XIX. He who loves God cannot endeavour to bring it about that God should love him in return.

Proof.—If man desired this, he would therefore desire that the God whom he loves should not be God, and consequently he would desire to be pained, which is absurd. Therefore he who loves God, etc. *Q.e.d.*

Prop. XX. This love towards God cannot be polluted by an emotion either of envy or jealousy, but it is cherished the more, the more we imagine men to be bound to God by this bond of love.

Proof.—This love towards God is the greatest good which we can desire according to the dictate of reason, and it is common to all men, and we desire that all should enjoy it. And therefore it cannot be stained by the emotion of envy, nor again by the emotion of jealousy; but, on the other hand, it must be cherished the more, the more men we imagine to enjoy it. Q.e.d.

Prop. XXI. The mind can imagine nothing nor recollect past things save while in the body.

Proof.—The mind does not express the actual existence of its body nor conceives the modifications of the body to be actual save while in the body, and consequently it conceives no body as actually existing save while its own body exists. And thus it can imagine nothing nor recollect past things save while in the body. Q.e.d.

Prop. XXII. In God, however, there is necessarily granted the idea which expresses the essence of this or that human body under the species of eternity.

Proof.—God is not only the cause of this or that human body's existence, but also their essence, which therefore must necessarily be conceived through the essence of God, and that under a certain eternal necessity: and this conception must necessarily be granted in God. Q.e.d.

Prop. XXIII. The human mind cannot be absolutely destroyed with the human body, but there is some part of it that remains eternal.

Proof.—There is necessarily in God the conception or idea which expresses the essence of the human body, which therefore is something necessarily which appertains to the essence of the human mind. But we attribute to the human mind no duration which can be defined by time, save in so far as it expresses the actual essence of the human body, which is explained by means of duration and is defined by time, that is, we do not attribute duration save as long as the body lasts. But as there is nevertheless something else which is conceived under a certain eternal necessity through the essence of God, this something will be necessarily the eternal part which appertains to the essence of the mind. O.e.d.

Prop. XXIV. The more we understand individual things, the more we understand God.

Proof.—This is clear from Prop. 25, Part I.

Prop. XXV. The greatest endeavour of the mind and its greatest virtue is to understand things by the third class of knowledge.

Proof.—The third class of knowledge proceeds from the adequate idea of certain attributes of God to the adequate knowledge of the essence of things, and the more we understand things in this manner, the more we understand God. And therefore the greatest virtue of the mind, that is, the mind's power or nature, or its greatest endeavour, is to understand things according to the third class of knowledge. Q.e.d.

Prop. XXVI. The more apt the mind is to understand things by the third class of knowledge, the more it desires to understand things by this class of knowledge.

Proof.—This is clear. For in so far as we conceive the mind to be apt to understand things by this kind of knowledge, thus far we conceive it as determined to understand things by the same kind of knowledge, and consequently the more apt the mind is for this, the more it desires it. Q.e.d.

Prop. XXVII. From this third class of knowledge the greatest possible mental satisfaction arises.

Proof.—The greatest virtue of the mind is to know God, or to understand according to the third class of knowledge: and this virtue is the greater according as the mind knows more things by this class of knowledge. And therefore he who knows things according to this class of knowledge, passes to the greatest state of perfection, and consequently he is affected with the greatest pleasure, and that accompanied by the idea of himself and his virtue: and therefore from this kind of knowledge the greatest satisfaction possible arises. Q.e.d.

Prop. XXVIII. The endeavour or desire of knowing things according to the third class of knowledge cannot arise from the first but the second class of knowledge.

Proof.—This proposition is self-evident. For whatever we understand clearly and distinctly, we understand either through itself or through something else that is conceived through itself: that is, the ideas which are distinct and clear in us, or which have reference to the third class of knowledge, cannot follow from ideas mutilated and confused which have reference to the first class of knowledge, but from adequate ideas or from the second and third class of knowledge. And therefore the desire of knowing things by the third class of knowledge cannot arise from knowledge of the first class, but only of the second. Q.e.d.

Prop. XXIX. Whatever the mind understands under the species of eternity, it does not understand owing to the fact that it conceives the actual present existence of the body, but owing to the fact that it conceives the essence of the body under the species of eternity.

Proof.—In so far as the mind conceives the present existence of its body, thus far it conceives duration which can be determined by time, and thus far only it has the power of conceiving things with relation to time. But eternity cannot be explained through time. Therefore the mind thus far has not the power of conceiving things under the species of eternity, but inasmuch as it is the nature of reason to conceive things under the species of eternity, and it appertains to the nature of the mind to conceive the essence of the body under the species of eternity, and save these two nothing else appertains to the essence of the mind. Therefore this power of conceiving things under the species of eternity does not appertain to the mind save in so far as it conceives the essence of the body under the species of eternity. O.e.d.

Prop. XXX. The human mind in so far as it knows itself and its body under the species of eternity, thus far it necessarily has knowledge of God, and knows that it exists in God and is conceived through God.

Proof.—Eternity is the essence of God in so far as this necessarily involves existence. Therefore to conceive things under the species of eternity is to conceive them in so far as they are conceived through the essence of God as real entities, or in so far as they involve existence through the essence of God. And therefore our mind, in so far as it conceives itself and its body under a species of eternity, has thus far necessarily a knowledge of God, and knows, etc. Q.e.d.

Prop. XXXI. The third kind of knowledge depends on the mind as its formal cause in so far as the mind is eternal.

Proof.—The mind conceives nothing under the species of eternity save in so far as it conceives the essence of its body under the species of eternity, that is, save in so far as it is eternal. And therefore in so far as it is eternal it has knowledge of God, and this is necessarily adequate: and therefore the mind, in so far as it is eternal, is apt for understanding all those things which can follow from a given knowledge of God, that is, for understanding things by the third class of knowledge: and therefore the mind, in so far as it is eternal, is the adequate or formal cause of this. Q.e.d.

Prop. XXXII. Whatever we understand according to the third class of knowledge we are pleased with, and that accompanied with the idea of God as the cause.

Proof.—From this knowledge follows the greatest possible satisfaction

of mind, that is, pleasure arises, and that accompanied by the idea of the mind, and consequently accompanied also by the idea of God as the cause. Q.e.d.

Corollary.—From the third kind of knowledge arises necessarily the intellectual love of God. For from this kind of knowledge arises pleasure accompanied by the idea of God as the cause, that is, the love of God, not in so far as we imagine him present, but in so far as we understand God to be eternal; this is what I call intellectual love towards God.

Prop. XXXIII. The intellectual love towards God which arises from the third kind of knowledge is eternal.

Proof.—The third kind of knowledge is eternal: and therefore love which arises from it is also necessarily eternal. Q.e.d.

Prop. XXXIV. The mind is only liable to emotions which are referred to passions while the body lasts.

Proof.—Imagination is the idea with which the mind regards anything as present, which nevertheless indicates rather the present disposition of the human body than the nature of the eternal body. Therefore emotion is imagination in so far as it indicates the present disposition of the body: and therefore the mind is only liable to emotions which are referred to passions while the body lasts. Q.e.d.

Corollary.—Hence it follows that no love save intellectual love is eternal.

PROP. XXXV. God loves himself with infinite intellectual love.

Proof.—God is absolutely infinite, that is, the nature of God enjoys infinite perfection, and that accompanied by the idea of himself, that is, by the idea of his cause, and this is what we said to be intellectual love.

Prop. XXXVI. The mental intellectual love towards God is the very love of God with which God loves himself, not in so far as he is infinite, but in so far as he can be expressed through the essence of the human mind considered under the species of eternity, that is, mental intellectual love towards God is part of the infinite love with which God loves himself.

Proof.—This mental love must be referred to the actions of the mind, which therefore is an action with which the mind regards itself accompanied by the idea of God as a cause, that is, an action by which God, in so far as he may be expressed through the human mind, regards himself accompanied by the idea of himself. And therefore this mental love is part of the infinite love with which God loves himself. Q.e.d.

Corollary.—Hence it follows that God, in so far as he loves himself, loves men, and consequently that the love of God for men and the mind's intellectual love towards God is one and the same thing.

PROP. XXXVII. There is nothing in nature which is contrary to this intellectual love or which can remove it.

Proof.—This intellectual love follows necessarily from the nature of the mind in so far as it is considered as an eternal truth through the nature of God. If, therefore, there be anything contrary to this, it must be contrary to what is true, and consequently whatever could remove this love would bring it about that what is true should be made false, which (as is self-evident) is absurd. Therefore there is nothing in nature, etc. Q.e.d.

PROP. XXXVIII. The more the mind understands things by the second and third kinds of knowledge, the less it will be passive to emotions which are evil, and the less it will fear death.

Proof.—The essence of the mind consists of knowledge. The more things then the mind understands by the second and third kinds of knowledge, the greater will be that part of it that remains, and consequently the greater will be the part of it that is not touched by emotions which are contrary to our nature, that is, which are evil. The more then the mind understands things by the second and third kinds of knowledge, the greater will be that part of it which remains unhurt, and consequently it will be less subject to emotions, etc. Q.e.d.

PROP. XXXIX. He who has a body capable of many things, has a mind of which the greater part is eternal.

Proof.—He who has a body apt for doing many things is less assailed by emotions which are evil, that is, by emotions which are contrary to our nature. And therefore he has the power of arranging and connecting the modifications of the body according to intellectual order, and consequently of bringing it to pass that all the modifications of the body have reference to the idea of God, from which it follows that he is affected with love towards God, and this love must occupy or constitute the greatest part of his mind: and therefore he has a mind of which the greatest part is eternal. Q.e.d.

PROP. XL. The more perfection anything has, the more active and the less passive it is; and contrariwise, the more active it is, the more perfect it becomes.

Proof.—The more perfect anything is, the more reality it has, and consequently it is more active and less passive: which proof can proceed in an inverted order; from which it may follow that a thing is more perfect the more active it is. **Q.e.d.**

Corollary.—Hence it follows that the part of the mind which remains, of whatever size it is, is more perfect than the rest. For the eternal part of the mind is the intellect, through which alone we are said to act; but that part which we see to perish is the imagination, through which alone

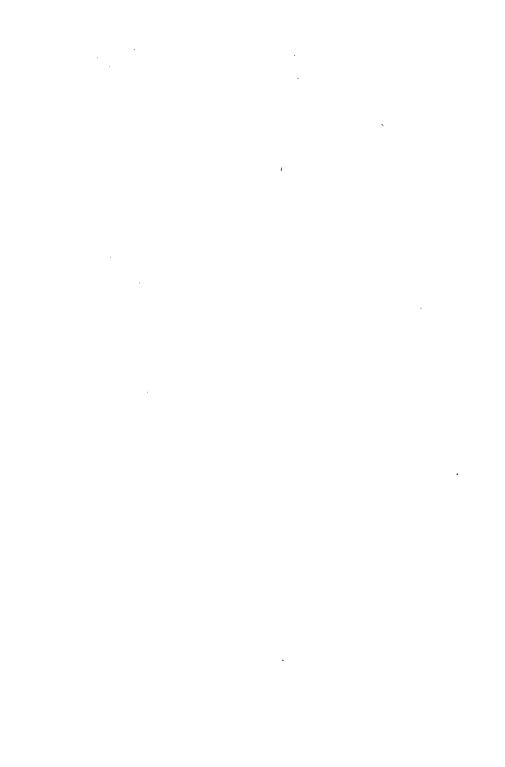
we are said to be passive. And therefore the first part, of whatever size it may be, is more perfect than the other. Q.e.d.

Prop. XLI. Although we did not know that our mind is eternal, we would hold before all things piety and religion, and absolutely all things which we have shown in Part IV, to have reference to courage and nobility.

Proof.—The first and only basis of virtue or a system of right living is the seeking of what is useful to oneself. But to determine these things which reason dictates to be useful to us, we had no regard for the eternity of the mind, which we have only considered in this fifth part. Therefore, although we were ignorant at that time that the mind is eternal, yet we held those things first which we showed to have reference to courage and nobleness. And therefore, though we were ignorant of it now, we should hold first these precepts of reason. Q.e.d.

Prop. XLII. Blessedness is not the reward of virtue, but virtue itself: nor should we rejoice in it for that we restrain our lusts, but, on the contrary, because we rejoice therein we can restrain our lusts.

Proof.—Blessedness consists of love towards God, and this love arises from the third kind of knowledge. And therefore this love must be referred to the mind in so far as it is active, and therefore it is virtue itself: which is the first point. Again, the more the mind rejoices in this divine love or blessedness, the more it understands, that is, the more power it has over the emotions, and the less passive it is to emotions which are evil. And therefore, by the very fact that the mind rejoices in this divine love or blessedness, it has the power of restraining lusts, inasmuch as human power to restrain lusts consists of intellect alone. Therefore no one rejoices in blessedness because he restrained lusts, but, on the contrary, the power of restraining lusts arises from blessedness itself. Q.e.d.



AN ESSAY CONCERNING HUMAN UNDERSTANDING

JOHN LOCKE

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JOHN LOCKE

1632-1704

SIX YEARS after the death of Francis Bacon and three months before the birth of Baruch Spinoza, on the 29th of August 1632, there was born at Wrington in Somersetshire, England, one of the great philosophical geniuses of modern times—John Locke. At thirty-eight he was to begin a work, the Essay Concerning Human Understanding, which, when published eighteen years later, 1688, was to challenge the philosophic world of his day.

Locke's father was a genial Puritan whose time was taken up largely with supervising a small estate, practicing law, and educating his son in the classical tradition and in the tenets of English Puritanism. For a time he was engaged in

military service with the parliamentary party.

In 1646 young Locke entered Westminster School, where he continued his education for six years. Here he was unhappy and developed a prejudice against public schools. This prejudice is clearly evident in his treatise Some Thoughts Concern-

ing Education.

At twenty Locke entered the College of Christ Church, Oxford. Here began a period of study and activity which to a great extent determined his later point of view. Christ Church, at that time, was dominated by John Owen, the Puritan dean and vice-chancellor of the university. Under Owen's influence the Independents, who at first advocated religious toleration, ruled Oxford. But the subsequent fanaticism of the Independents, who made of religious toleration a dogma, coupled with the intolerance of the Presbyterians, turned Locke away from Puritanism to an independence which was his own. This leaning is evidenced in his famous Letter

on Toleration and in the intellectual battles which developed after the publication of the Essay.

In 1056 Locke won his bachelor's degree and two years later received his master's degree at Oxford. In 1660 he served as tutor at Christ Church, lecturing on Greek, rhetoric, and philosophy.

But Locke was more interested in the sciences and was devoting much time to experiments in the field of chemistry. For a few years he was restless, chafing under the restraint of his professional career and yearning for something which would permit him greater freedom. At one time he contemplated taking orders in the Church of England, but his dread of ecclesiastical bondage induced him to give up this idea.

Then he turned to medicine and, by 1666, he became a practicing physician in Oxford. Though known to his friends as Doctor Locke, he never received a medical degree. Indeed, owing to his chronic tuberculosis and asthma, he gave up medicine as a career.

In 1666 an incident occurred which determined much of Locke's later life. Through his physician, Dr. Thomas, he was introduced to Lord Ashley, who later became the first Earl of Shaftesbury. Lord Ashley had come to Oxford for his health and found great attraction in the young physician and scholar. The two men had much in common, and almost immediately there developed a friendship which was to last for many years.

In 1667 Locke moved into Ashley's London home, Exeter House, as the confidential secretary and companion of his new-found friend. This appointment removed Locke from the confines of the study into the world of men and events. At Exeter House it was the custom for important personages to gather and to discuss matters of many interests. At one of these discussions, in 1670, the participants became so involved that there seemed no way out. Locke observed that before they proceeded further, it might be wise to define the "limits of human understanding." This observation appealed to the group. They suggested that he expand his remarks for their benefit. He believed he could do this immediately and on "one sheet of paper." But it took him eighteen years to release his speculations in a volume of many hundreds of pages. This volume was his Essay Concerning Human Understanding.

The rest of Locke's life was largely determined by the fortunes of Ashley—now raised to the peerage and known as the Earl of Shaftesbury. In 1675, when Shaftesbury fell into disgrace, Locke was compelled to flee to France, where he remained until Shaftesbury was restored to power in 1679. But Locke was under suspicion, and his life was far from pleasant. In 1683 he retired to Holland and lived under the assumed name of Dr. Van der Linden. The English Government sought to arrest him, but he managed to escape and was able to live in some comfort.

In Holland, Locke began his great period of publication. His Essay came out in 1688. He continued his work when he returned to England, after the landing of William of Orange, in 1689. In that same year, when he issued his Letter on Toleration, the clergy attacked him fiercely and continued their attacks from then on until October 28, 1704, when he died "in perfect charity with all men, and in sincere communion with the whole church of Christ, by whatever name Christ's followers call themselves."

Today we accept much of Locke's controversial writing as a matter of fact. But in his own day he lived the life of an intellectual pioneer. He initiated the criticism of human knowledge and fought for the privilege of careful observation. He worked in season and out of season for free inquiry and universal toleration, and he was the sworn enemy of all loose thinking, fanaticism, and intolerance wherever found. He helped make possible the modern world of thought.

What is the actual truth, Locke asked himself, as compared with the so-called accepted truths of mankind? In order to answer this question, he said, "Let us put the ideas of our mind, just as we put the things of the laboratory, to the test of experience."

We find that the so-called simple ideas—the ideas of heat and of cold, for example—come to us directly from our experience. But what about the complex ideas—the ideas of beauty, of justice, of love? These, too, declares Locke, come from our experience. A complex idea is a combination of simple ideas. We experience a number of beautiful things, and we combine these concrete beautiful objects into an abstract concept of beauty. Our idea of eternity is a combination of our ideas of time—seconds, minutes, hours, days, years, centuries. The same is true of our ideas of space. Our mind

has a way of combining concrete units of experience into abstract conceptions.

All knowledge, therefore, is based upon our experience. Our knowledge of God is based upon our experience of ourselves. Each man has his own experiences, and consequently his own conception of God. There is no such thing as an absolute God, absolute truth, absolute justice, absolute love. Let each man square himself with the world in accordance with his own lights. Let not society impose arbitrary standards upon the individual. Leave every man to his own conscience and his own religion. Let there be freedom of religion, of speech, and of thought. For in the freedom of each is the happiness of all.

AN ESSAY CONCERNING HUMAN UNDERSTANDING

Book One

I. INTRODUCTION

An inquiry into the understanding, pleasant and useful.—Since it is the understanding that sets man above the rest of sensible beings, and gives him all the advantage and dominion which he has over them, it is certainly a subject, even for its nobleness, worth our labour to inquire into. The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance, and make it its own object.

It shall suffice to my present purpose, to consider the discerning faculties of a man as they are employed about the objects which they have to do with; and I shall imagine I have not wholly misemployed myself in the thoughts I shall have on this occasion, if, in this historical, plain method, I can give any account of the ways whereby our understandings come to attain those notions of things we have, and can set down any measures of the certainty of our knowledge, or the grounds of those persuasions which are to be found amongst men, so various, different, and wholly contradictory; and yet asserted somewhere or other with such assurance, and confidence, that he that shall take a view of the opinions of mankind, observe their opposition, and at the same time consider the fondness and devotion wherewith they are embraced, the resolution and eagerness wherewith they are maintained, may perhaps have reason to suspect that either there is no such thing as truth at all, or that mankind hath no sufficient means to attain a certain knowledge of it.

Useful to know the extent of our comprehension.—If by this inquiry into the nature of the understanding, I can discover the powers thereof, how far they reach, to what things they are in any degree proportionate, and where they fail us, I suppose it may be of use to prevail with the busy mind of man to be more cautious in meddling with things exceeding its comprehension, to stop when it is at the utmost extent of its

tether, and to sit down in a quiet ignorance of those things which, upon examination, are found to be beyond the reach of our capacities.

Knowledge of our capacity a cure of scepticism and idleness.—When we know our own strength, we shall the better know what to undertake with hopes of success; and when we have well surveyed the powers of our own minds, and made some estimate what we may expect from them, we shall not be inclined either to sit still, and not set our thoughts on work at all, in despair of knowing anything; nor, on the other side, question everything, and disclaim all knowledge, because some things are not to be understood. Our business here is not to know all things, but those which concern our conduct. If we can find out those measures whereby a rational creature, put in that state which man is in in this world, may and ought to govern his opinions and actions depending thereon, we need not be troubled that some other things escape our knowledge.

Occasion of this Essay.—This was that which gave the first rise to this Essay concerning the Understanding. For I thought that the first step towards satisfying several inquiries the mind of man was very apt to run into, was, to take a survey of our own understandings, examine our own powers, and see to what things they were adapted. Till that was done, I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of being; as if all that boundless extent were the natural and undoubted possession of our understandings, wherein there was nothing exempt from its decisions, or that escaped its comprehension.

What "idea" stands for.—Thus much I thought necessary to say concerning the occasion of this inquiry into human understanding. But, before I proceed on to what I have thought on this subject, I must here, in the entrance, beg pardon of my reader for the frequent use of the word "idea" which he will find in the following treatise. It being that term which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks, I have used it to express whatever is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking; and I could not avoid frequently using it.

I presume it will be easily granted me, that there are such *ideas* in men's minds. Everyone is conscious of them in himself; and men's words and actions will satisfy him that they are in others.

II. NO INNATE PRINCIPLES IN THE MIND

The way shown how we come by any knowledge, sufficient to prove it not innate.—It is an established opinion among some men, that there are

in the understanding certain innate principles; some primary notions, characters, as it were, stamped upon the mind of man, which the soul receives in its very first being, and brings into the world with it. It would be sufficient to convince unprejudiced readers of the falseness of this supposition, if I should only show how men, barely by the use of their natural faculties, may attain to all the knowledge they have, without the help of any innate impressions, and may arrive at certainty without any such original notions or principles.

General assent the great argument.—There is nothing more commonly taken for granted, than that there are certain principles, both speculative and practical, universally agreed upon by all mankind; which therefore, they argue, must needs be constant impressions which the souls of men receive in their first beings, and which they bring into the world with them, as necessarily and really as they do any of their inherent faculties.

Universal consent proves nothing innate.—This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths wherein all mankind agreed, it would not prove them innate, if there can be any other way shown, how men may come to that universal agreement in the things they do consent in; which I presume may be done.

"What is, is"; and, "It is impossible for the same thing to be, and not to be," not universally assented to.—But, which is worse, this argument of universal consent, which is made use of to prove innate principles, seems to me a demonstration that there are none such; because there are none to which all mankind give an universal assent. I shall begin with the speculative, and instance in those magnified principles of demonstration: "Whatsoever is, is"; and, "It is impossible for the same thing to be, and not to be," which, of all others, I think, have the most allowed title to innate. These have so settled a reputation of maxims universally received, that it will, no doubt, be thought strange if anyone should seem to question it. But yet I take liberty to say, that these propositions are so far from having an universal assent, that there are a great part of mankind to whom they are not so much as known.

The steps by which the mind attains several truths.—The senses at first let in particular ideas, and furnish the yet empty cabinet: and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards the mind, proceeding farther, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the materials about which to exercise its discursive faculty; and the use of reason becomes daily more visible, as these materials, that give it employment, increase. But though the having of general ideas, and the use of general words and reason, usually grow together, yet I see not how this any

way proves them innate. The knowledge of some truths, I confess, is very early in the mind; but in a way that shows them not to be innate. For, if we will observe, we shall find it still to be about ideas not innate, but acquired; it being about those first, which are imprinted by external things, with which infants have earliest to do, which make the most frequent impressions on their senses. In ideas thus got, the mind discovers that some agree, and others differ, probably as soon as it has any use of memory, as soon as it is able to retain and receive distinct ideas. But whether it be then or no, this is certain, it does so long before it has the use of words, or comes to that which we commonly call "the use of reason." For a child knows as certainly, before it can speak, the difference between the ideas of sweet and bitter, as it knows afterwards, when it comes to speak, that wormwood and sugarplums are not the same thing.

III. NO INNATE PRACTICAL PRINCIPLES

No moral principles so clear and so generally received as the fore-mentioned speculative maxims.—If speculative maxims have not an actual universal assent from all mankind, it is much more visible concerning practical principles, that they come short of an universal reception; and I think it will be hard to instance any one moral rule which can pretend to so general and ready an assent as, "What is, is," or to be so manifest a truth as this, "That it is impossible for the same thing to be, and not to be." Whereby it is evident that they are farther removed from a title to be innate; and the doubt of their being native impressions on the mind is stronger against these moral principles than the other. Not that it brings their truth at all in question. They are equally true, though not equally evident. Those speculative maxims carry their own evidence with them; but moral principles require reasoning and discourse, and some exercise of the mind, to discover the certainty of their truth. They lie not open as natural characters engraven on the mind; which if any such were, they must needs be visible by themselves, and by their own light be certain and known to everybody. But this is no derogation to their truth and certainty; no more than it is to the truth or certainty of the three angles of a triangle being equal to two right ones, because it is not so evident as, "The whole is bigger than a part," nor so apt to be assented to at first hearing. It may suffice that these moral rules are capable of demonstration; and therefore it is our own fault if we come not to a certain knowledge of them. But the ignorance wherein many men are of them, and the slowness of assent wherewith others receive them, are manifest proofs that they are not innate, and such as offer themselves to their view without searching.

Virtue generally approved, not because innate, but because profitable.

—Hence naturally flows the great variety of opinions concerning the moral rules, which are to be found among men according to the different sorts of happiness they have a prospect of, or propose to themselves; which could not be, if practical principles were innate, and imprinted in our minds immediately by the hand of God. I grant the existence of God is so many ways manifest, and the obedience we owe him so congruous to the light of reason, that a great part of mankind give testimony to the law of nature; but yet I think it must be allowed, that several moral rules may receive from mankind a very general approbation, without either knowing or admitting the true ground of morality; which can only be the will and law of a God, who sees men in the dark, has in his hand rewards and punishments, and power enough to call to account the proudest offender.

Men's actions convince us, that the rule of virtue is not their internal principle.—For, if we will not in civility allow too much sincerity to the professions of most men, but think their actions to be the interpreters of their thoughts, we shall find that they have no such internal veneration for these rules, nor so full a persuasion of their certainty and obligation. The great principle of morality, "To do as one would be done to," is more commended than practised.

Men have contrary practical principles.—He that will carefully peruse the history of mankind, and look abroad into the several tribes of men, and with indifferency survey their actions, will be able to satisfy himself that there is scarce that principle of morality to be named, or rule of virtue to be thought on (those only excepted that are absolutely necessary to hold society together, which commonly, too, are neglected betwixt distinct societies), which is not, somewhere or other, slighted and condemned by the general fashion of whole societies of men, governed by practical opinions and rules of living quite opposite to others.

Those who maintain innate practical principles, tell us not what they are.—The difference there is amongst men, in their practical principles, is so evident, that, I think, I need say no more to evince that it will be impossible to find any innate moral rules by this mark of general assent. And it is enough to make one suspect, that the supposition of such innate principles is but an opinion taken up at pleasure; since those who talk so confidently of them are so sparing to tell us which they are. This might with justice be expected from those men who lay stress upon this opinion; and it gives occasion to distrust either their knowledge or charity, who, declaring that God has imprinted on the minds of men the foundations of knowledge and the rules of living, are yet so little favourable to the information of their neighbours, or the quiet of mankind, as not to point out to them which they are, in the variety men are distracted with. But, in truth, were there any such innate principles, there would be no need to teach them.

Contrary principles in the world.—I easily grant that there are great numbers of opinions which, by men of different countries, educations, and tempers, are received and embraced as first and unquestionable principles; many whereof, both for their absurdity as well as opposition one to another, it is impossible should be true. But yet all those propositions, how remote soever from reason, are so sacred somewhere or other, that men even of good understanding in other matters will sooner part with their lives, and whatever is dearest to them, than suffer themselves to doubt, or others to question, the truth of them.

How men commonly come by their principles.—This, however strange it may seem, is that which every day's experience confirms: and will not. perhaps, appear so wonderful if we consider the ways and steps by which it is brought about, and how really it may come to pass, that doctrines that have been derived from no better original than the superstition of a nurse, or the authority of an old woman, may, by length of time and consent of neighbours, grow up to the dignity of principles in religion or morality. For such who are careful (as they call it) to principle children well (and few there be who have not a set of those principles for them which they believe in), instil into the unwary, and as yet unprejudiced, understanding (for white paper receives any characters) those doctrines they would have them retain and profess. These—being taught them as soon as they have any apprehension, and still as they grow up confirmed to them, either by the open profession or tacit consent of all they have to do with; or at least by those of whose wisdom, knowledge, and piety they have an opinion, who never suffer those propositions to be otherwise mentioned but as the basis and foundation on which they build their religion or manners-come, by these means, to have the reputation of unquestionable, self-evident, and innate truths.

Principles must be examined.—By this progress how many there are who arrive at principles which they believe innate, may be easily observed in the variety of opposite principles held and contended for by all sorts and degrees of men. And he that shall deny this to be the method wherein most men proceed to the assurance they have of the truth and evidence of their principles, will, perhaps, find it a hard matter any other way to account for the contrary tenets, which are firmly believed, confidently asserted, and which great numbers are ready at any time to seal with their blood. And, indeed, if it be the privilege of innate principles to be received upon their own authority, without examination, I know not what may not be believed, or how anyone's principles can be questioned. If they may and ought to be examined and tried, I desire to know how first and innate principles can be tried; or at least it is reasonable to demand the marks and characters whereby the genuine innate principles may be distinguished from others; that so, amidst the great variety of pretenders, I may be kept

from mistakes in so material a point as this. When this is done, I shall be ready to embrace such welcome and useful propositions; and till then I may with modesty doubt, since I fear universal consent (which is the only one produced) will scarce prove a sufficient mark to direct my choice, and assure me of any innate principles. From what has been said, I think it past doubt, that there are no practical principles wherein all men agree, and therefore none innate.

IV. OTHER CONSIDERATIONS CONCERNING INNATE PRIN-CIPLES BOTH SPECULATIVE AND PRACTICAL

Principles not innate, unless their ideas be innate.—Had those who would persuade us that there are innate principles, not taken them together in gross, but considered separately the parts out of which those propositions are made, they would not, perhaps, have been so forward to believe they were innate; since, if the ideas which made up those truths were not, it was impossible that the propositions made up of them should be, innate, or our knowledge of them be born with us. For if the ideas be not innate, there was a time when the mind was without those principles; and then they will not be innate, but be derived from some other original: for where the ideas themselves are not, there can be no knowledge, no assent, no mental or verbal propositions about them.

Ideas, especially those belonging to principles, not born with children.—If we will attentively consider new-born children, we shall have little reason to think that they bring many ideas into the world with them: for, bating, perhaps, some faint ideas of hunger, and thirst, and warmth, and some pains which they may have felt in the womb, there is not the least appearance of any settled ideas at all in them; especially of ideas answering the terms which make up those universal propositions that are esteemed innate principles. One may perceive how, by degrees, afterwards, ideas come into their minds; and that they get no more, nor no other, than what experience, and the observation of things that come in their way, furnish them with; which might be enough to satisfy us that they are not original characters stamped on the mind.

Idea of God not innate.—If any idea can be imagined innate, the idea of God may, of all others, for many reasons, be thought so; since it is hard to conceive how there should be innate moral principles without an innate idea of a Deity: without a notion of a law-maker, it is impossible to have a notion of a law, and an obligation to observe it. But had all mankind everywhere a notion of a God (whereof yet history tells us the contrary), it would not from thence follow that the idea of him was innate. For though no nation were to be found without a name and some few dark

notions of him, yet that would not prove them to be natural impressions on the mind, no more than the names of "fire," or the "sun," "heat," or "number," do prove the ideas they stand for to be innate, because the names of those things, and the ideas of them, are so universally received and known amongst mankind.

Nor, on the contrary, is the want of such a name, or the absence of such a notion out of men's minds, any argument against the being of a God, any more than it would be a proof that there was no loadstone in the world, because a great part of mankind had neither a notion of any such thing, nor a name for it; or be any show of argument to prove, that there are no distinct and various species of angels, or intelligent beings above us, because we have no ideas of such distinct species or names for them. For men, being furnished with words by the common language of their own countries, can scarce avoid having some kind of ideas of those things whose names those they converse with have occasion frequently to mention to them; and if it carry with it the notion of excellency, greatness, or something extraordinary; if apprehension and concernment accompany it; if the fear of absolute and irresistible power set it on upon the mind; the idea is likely to sink the deeper and spread the farther; especially if it be such an idea as is agreeable to the common light of reason, and naturally deducible from every part of our knowledge, as that of a God is. For the visible marks of extraordinary wisdom and power appear so plainly in all the works of the creation, that a rational creature who will but seriously reflect on them, cannot miss the discovery of a Deity; and the influence that the discovery of such a Being must necessarily have on the minds of all that have but once heard of it is so great, and carries such a weight of thought and communication with it, that it seems stranger to me that a whole nation of men should be anywhere found so brutish as to want the notion of a God, than that they should be without any notion of numbers, or fire.

Ideas of God various in different men.—I grant, that if there were any ideas to be found imprinted on the minds of men, we have reason to expect it should be the notion of his Maker, as a mark God set on his own workmanship, to mind man of his dependence and duty; and that herein should appear the first instances of human knowledge. But how late is it before any such notion is discoverable in children! and when we find it there, how much more does it resemble the opinion and notion of the teacher, than represent the true God! He that shall observe in children the progress whereby their minds attain the knowledge they have, will think that the objects they do first and most familiarly converse with, are those that make the first impressions on their understandings; nor will he find the least footsteps of any other. It is easy to take notice how their thoughts enlarge themselves only as they come to be acquainted with a greater

variety of sensible objects, to retain the ideas of them in their memories, and to get the skill to compound and enlarge them, and several ways put them together.

If the idea of God be not innate, no other can be supposed innate.—Since, then, though the knowledge of a God be the most natural discovery of human reason, yet the idea of him is not innate, as, I think, is evident from what has been said; I imagine there will be scarce any other idea found that can pretend to it; since, if God had set any impression, any character, on the understanding of men, it is most reasonable to expect it should have been some clear and uniform idea of himself, as far as our weak capacities were capable to receive so incomprehensible and infinite an object. But our minds being at first void of that idea which we are most concerned to have, it is a strong presumption against all other innate characters. I must own, as far as I can observe, I can find none, and would be glad to be informed by any other.

No propositions can be innate since no ideas are innate.—Whatever, then, we talk of innate, either speculative or practical, principles, it may with as much probability be said, that a man hath £ 100 sterling in his pocket, and yet denied that he hath either penny, shilling, crown, or any other coin out of which the sum is to be made up; as to think, that certain propositions are innate, when the ideas about which they are can by no means be supposed to be so. The general reception and assent that is given doth not at all prove that the ideas expressed in them are innate; for in many cases, however the ideas came there, the assent to words expressing the agreement or disagreement of such ideas will necessarily follow.

Everyone that hath a true idea of God and worship, will assent to this proposition, that "God is to be worshipped," when expressed in a language he understands; and every rational man that hath not thought on it to-day, may be ready to assent to this proposition to-morrow; and yet millions of men may be well supposed to want one or both of those ideas to-day. For if we will allow savages and most country people to have ideas of God and worship (which conversation with them will not make one forward to believe), yet, I think, few children can be supposed to have those ideas, which therefore they must begin to have some time or other; and then they will also begin to assent to that proposition, and make very little question of it ever after. But such an assent upon hearing no more proves the ideas to be innate, than it does that one born blind (with cataracts which will be couched to-morrow) had the innate ideas of the sun or light, or saffron or vellow, because, when his sight is cleared, he will certainly assent to this proposition, that "the sun is lucid," or that "saffron is yellow"; and therefore if such an assent upon hearing cannot prove the ideas innate, it can much less the propositions made up of those ideas. If they have any innate ideas, I would be glad to be told what and how many they are.

Book Two

1. OF IDEAS IN GENERAL, AND THEIR ORIGINAL

Idea is the object of thinking.—Every man being conscious to himself, that he thinks, and that which his mind is applied about, whilst thinking, being the ideas that are there, it is past doubt that men have in their mind several ideas, such as are those expressed by the words, "whiteness, hardness, sweetness, thinking, motion, man, elephant, army, drunkenness," and others. It is in the first place then to be inquired, How he comes by them? I know it is a received doctrine, that men have native ideas and original characters stamped upon their minds in their very first being. This opinion I have at large examined already; and, I suppose, what I have said in the foregoing book will be much more easily admitted, when I have shown whence the understanding may get all the ideas it has, and by what ways and degrees they may come into the mind; for which I shall appeal to everyone's own observation and experience.

All ideas come from sensation or reflection.—Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store, which the busy and boundless fancy of man has painted on it with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from experience: in that all our knowledge is founded, and from that it ultimately derives itself. Our observation, employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking. These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.

The object of sensation one source of ideas.—First. Our senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them; and thus we come by those ideas we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all those which we call sensible qualities; which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those perceptions. This great source of most of the ideas we have, depending wholly upon our senses, and derived by them to the understanding, I call "sensation."

The operations of our minds the other source of them.—Secondly. The other fountain, from which experience furnisheth the understanding with ideas, is the perception of the operations of our own minds within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas which could not be had from things without; and such are perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds; which we, being conscious of, and observing in ourselves, do from these receive into our understanding as distinct ideas, as we do from bodies affecting our senses. This source of ideas every man has wholly in himself; and though it be not sense as having nothing to do with external objects, yet it is very like it, and might properly enough be called "internal sense." But as I call the other "sensation," so I call this "reflection," the ideas it affords being such only as the mind gets by reflecting on its own operations within itself.

By reflection, then, in the following part of this discourse, I would be understood to mean that notice which the mind takes of its own operations, and the manner of them, by reason whereof there come to be ideas of these operations in the understanding. These two, I say, viz., external material things as the objects of sensation, and the operations of our own minds within as the objects of reflection, are, to me, the only originals from whence all our ideas take their beginnings. The term "operations" here, I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought.

All our ideas are of the one or the other of these.—The understanding seems to me not to have the least glimmering of any ideas which it doth not receive from one of these two. External objects furnish the mind with the ideas of sensible qualities, which are all those different perceptions they produce in us; and the mind furnishes the understanding with ideas of its own operations.

These, when we have taken a full survey of them, and their several modes, combinations, and relations, we shall find to contain all our whole stock of ideas; and that we have nothing in our minds which did not come in one of these two ways. Let anyone examine his own thoughts, and thoroughly search into his understanding, and then let him tell me, whether all the original ideas he has there, are any other than of the objects of his senses, or of the operations of his mind considered as objects of his reflection; and how great a mass of knowledge soever he imagines to be lodged there, he will, upon taking a strict view, see that he has not any idea in his mind but what one of these two hath imprinted, though perhaps with infinite variety compounded and enlarged by the understanding, as we shall see hereafter.

The original of all our knowledge.—In time the mind comes to reflect on its own operations about the ideas got by sensation, and thereby stores itself with a new set of ideas, which I call "ideas of reflection." These are the impressions that are made on our senses by outward objects, that are extrinsical to the mind; and its own operations, proceeding from powers intrinsical and proper to itself, which, when reflected on by itself, become also objects of its contemplation, are, as I have said, the original of all knowledge. Thus the first capacity of human intellect is, that the mind is fitted to receive the impressions made on it, either through the senses by outward objects, or by its own operations when it reflects on them. This is the first step a man makes towards the discovery of anything, and the ground-work whereon to build all those notions which ever he shall have naturally in this world. All those sublime thoughts which tower above the clouds, and reach as high as heaven itself, take their rise and footing here: in all that great extent wherein the mind wanders in those remote speculations it may seem to be elevated with, it stirs not one jot beyond those ideas which sense or reflection have offered for its contemplation.

✓ II. OF SIMPLE IDEAS

Uncompounded appearances.—The better to understand the nature, manner, and extent of our knowledge, one thing is carefully to be observed concerning the ideas we have; and that is, that some of them are simple, and some complex.

Though the qualities that affect our senses are, in the things themselves, so united and blended that there is no separation, no distance between them; yet it is plain the ideas they produce in the mind enter by the senses simple and unmixed. For though the sight and touch often take in from the same object at the same time different ideas—as a man sees at once motion and colour, the hand feels softness and warmth in the same piece of wax—yet the simple ideas thus united in the same subject are as perfectly distinct as those that come in by different senses; the coldness and hardness which a man feels in a piece of ice being as distinct ideas in the mind as the smell and whiteness of a lily, or as the taste of sugar and smell of a rose: and there is nothing can be plainer to a man than the clear and distinct perception he has of those simple ideas; which, being each in itself uncompounded, contains in it nothing but one uniform appearance or conception in the mind, and is not distinguishable into different ideas.

The mind can neither make nor destroy them.—These simple ideas, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways above mentioned, viz., sensation and reflec-

tion. When the understanding is once stored with these simple ideas, it has the power to repeat, compare, and unite them, even to an almost infinite variety, and so can make at pleasure new complex ideas. But it is not in the power of the most exalted wit or enlarged understanding, by any quickness or variety of thoughts, to invent or frame one new simple idea in the mind, not taken in by the ways before mentioned: nor can any force of the understanding destroy those that are there: the dominion of man in this little world of his own understanding, being much-what the same as it is in the great world of visible things, wherein his power, however managed by art and skill, reaches no farther than to compound and divide the materials that are made to his hand but can do nothing towards the making the least particle of new matter, or destroying one atom of what is already in being. The same inability will everyone find in himself, who shall go about to fashion in his understanding any simple idea not received in by his senses from external objects, or by reflection from the operations of his own mind about them. I would have anyone try to fancy any taste which had never affected his palate, or frame the idea of a scent he had never smelt: and when he can do this, I will also conclude, that a blind man hath ideas of colours, and a deaf man true, distinct notions of sounds.

III. OF IDEAS OF ONE SENSE

Division of simple ideas.—The better to conceive the ideas we receive from sensation, it may not be amiss for us to consider them in reference to the different ways whereby they make their approaches to our minds, and make themselves perceivable by us.

First, then, there are some which come into our minds by one sense only.

Secondly. There are others that convey themselves into the mind by more senses than one.

Thirdly. Others that are had from reflection only.

Fourthly. There are some that make themselves way, and are suggested to the mind, by all the ways of sensation and reflection.

We shall consider them apart under these several heads.

There are some ideas which have admittance only through one sense, which is peculiarly adapted to receive them. I think it will be needless to enumerate all the particular simple ideas belonging to each sense. Nor indeed is it possible if we would, there being a great many more of them belonging to most of the senses than we have names for. The variety of smells, which are as many almost, if not more, than species of bodies in the world, do most of them want names.

IV. OF SOLIDITY

We receive this idea from touch.—The idea of solidity we receive by our touch; and it arises from the resistance which we find in body to the entrance of any other body into the place it possesses, till it has left it. There is no idea which we receive more constantly from sensation than solidity. Whether we move or rest, in what posture soever we are, we always feel something under us that supports us, and hinders our farther sinking downwards; and the bodies which we daily handle make us perceive that whilst they remain between them, they do, by an insurmountable force, hinder the approach of the parts of our hands that press them. That which thus hinders the approach of two bodies, when they are moving one towards another, I call "solidity."

Solidity fills space.—This is the idea belongs to body, whereby we conceive it to fill space. The idea of which filling of space is, that where we imagine any space taken up by a solid substance, we conceive it so to possess it that it excludes all other solid substances, and will for ever hinder any two other bodies, that move towards one another in a straight line, from coming to touch one another, unless it removes from between them in a line not parallel to that which they move in. This idea of it, the bodies which we ordinarily handle sufficiently furnish us with.

Distinct from space.—This resistance, whereby it keeps other bodies out of the space which it possesses, is so great that no force, how great soever, can surmount it. All the bodies in the world, pressing a drop of water on all sides, will never be able to overcome the resistance which it will make, as soft as it is, to their approaching one another, till it be removed out of their way: whereby our idea of solidity is distinguished both from pure space, which is capable neither of resistance nor motion, and from the ordinary idea of hardness. For a man may conceive two bodies at a distance so as they may approach one another without touching or displacing any solid thing till their superficies come to meet; whereby, I think, we have the clear idea of space without solidity.

On solidity depend impulse, resistance, and protrusion.—By this idea of solidity is the extension of body distinguished from the extension of space: the extension of body being nothing but the cohesion or continuity of solid, separable, movable parts; and the extension of space, the continuity of unsolid, inseparable, and immovable parts. Upon the solidity of bodies also depend their mutual impulse, resistance, and protrusion. Of pure space, then, and solidity, there are several (amongst which I confess myself one) who persuade themselves they have clear and distinct ideas: and that they can think on space without anything in it that resists

or is protruded by body. This is the idea of pure space, which they think they have as clear as any idea they can have of the extension of body; the idea of the distance between the opposite parts of a concave superficies being equally as clear without as with the idea of any solid parts between; and on the other side they persuade themselves that they have, distinct from that of pure space, the idea of something that fills space, that can be protruded by the impulse of other bodies, or resist their motion. If there be others that have not these two ideas distinct, but confound them, and make but one of them, I know not how men who have the same idea under different names, or different ideas under the same name, can in that case talk with one another, any more than a man who, not being blind or deaf, has distinct ideas of the colour of scarlet and the sound of a trumpet, would discourse concerning scarlet-colour with the blind man who fancied that the idea of scarlet was like the sound of a trumpet.

What it is.—If anyone asks me, what this solidity is, I send him to his senses to inform him: let him put a flint or a football between his hands, and then endeavour to join them, and he will know. If he thinks this not a sufficient explanation of solidity, what it is, and wherein it consists, I promise to tell him what it is, and wherein it consists, when he tells me what thinking is, or wherein it consists; or explains to me what extension or motion is, which perhaps seems much easier. The simple ideas we have are such as experience teaches them us; but if, beyond that, we endeavour by words to make them clearer in the mind, we shall succeed no better than if we went about to clear up the darkness of a blind man's mind by talking, and to discourse into him the ideas of light and colour. The reason of this I shall show in another place.

V. OF SIMPLE IDEAS OF DIVERS SENSES

THE IDEAS we get by more than one sense are of space or extension, figure, rest and motion: for these make perceivable impressions both on the eyes and touch; and we can receive and convey into our minds the ideas of our extension, figure, motion, and rest of bodies, both by seeing and feeling. But having occasion to speak more at large of these in another place, I here only enumerate them.

VI. OF SIMPLE IDEAS OF REFLECTION

Simple ideas of reflection are the operations of the mind about its other ideas.—The mind, receiving the ideas mentioned in the foregoing chapters from without, when it turns its view inward upon itself, and observes

its own actions about those ideas it has, takes from thence other ideas, which are as capable to be the objects of its contemplation as any of those it received from foreign things.

The idea of perception, and idea of willing, we have from reflection.— The two great and principal actions of the mind, which are most frequently considered, and which are so frequent that everyone that pleases may take notice of them in himself, are these two: perception or thinking, and volition or willing. The power of thinking is called "the understanding," and the power of volition is called "the will"; and these two powers or abilities in the mind are denominated "faculties."

VII. OF SIMPLE IDEAS OF BOTH SENSATION AND REFLECTION

Pleasure and pain.—There be other simple ideas which convey themselves into the mind by all the ways of sensation and reflection; viz., pleasure or delight, and its opposite, pain or uneasiness; power, existence, unity.

Delight or uneasiness, one or other of them, join themselves to almost all our ideas both of sensation and reflection; and there is scarce any affection of our senses from without, any retired thought of our mind within, which is not able to produce in us pleasure or pain. By "pleasure" and "pain," I would be understood to signify whatsoever delights or molests us; whether it arises from the thoughts of our minds, or anything operating on our bodies. For whether we call it "satisfaction, delight, pleasure, happiness," &c., on the one side; or "uneasiness, trouble, pain, torment, anguish, misery," &c., on the other; they are still but different degrees of the same thing, and belong to the ideas of pleasure and pain, delight or uneasiness; which are the names I shall most commonly use for those two sorts of ideas.

Pain has the same efficacy and use to set us on work that pleasure has, we being as ready to employ our faculties to avoid that, as to pursue this: only this is worth our consideration—that pain is often produced by the same objects and ideas that produce pleasure in us. This their near conjunction, which makes us often feel pain in the sensations where we expected pleasure, gives us new occasion of admiring the wisdom and goodness of our Maker, who, designing the preservation of our being, has annexed pain to the application of many things to our bodies, to warn us of the harm that they will do, and as advices to withdraw from them. But He, not designing our preservation barely, but the preservation of every part and organ in its perfection, hath in many cases annexed pain to those very ideas which delight us. Thus heat, that is very agreeable to us in one degree, by a little greater increase of it proves no ordinary torment; and the most pleasant of all sensible objects, light itself, if there be

too much of it, if increased beyond a due proportion to our eyes, causes a very painful sensation: which is wisely and favourably so ordered by nature, that when any object does by the vehemency of its operation disorder the instruments of sensation, whose structures cannot but be very nice and delicate, we might by the pain be warned to withdraw before the organ be quite put out of order, and so be unfitted for its proper functions for the future. The consideration of those objects that produce it may well persuade us, that this is the end or use of pain; for though great light be insufferable to our eyes, yet the highest degree of darkness does not at all disease them, because the causing no disorderly motion in it leaves that curious organ unharmed in its natural state. But yet excess of cold as well as heat pains us because it is equally destructive to that temper which is necessary to the preservation of life, and the exercise of the several functions of the body, and which consists in a moderate degree of warmth, or, if you please, a motion of the insensible parts of our bodies confined within certain bounds.

Pleasure and pain.—Though what I have here said may not perhaps make the ideas of pleasure and pain clearer to us than our own experience does, which is the only way that we are capable of having them; yet the consideration of the reason why they are annexed to so many other ideas, serving to give us due sentiments of the wisdom and goodness of the Sovereign Disposer of all things, may not be unsuitable to the main end of these inquiries: the knowledge and veneration of Him being the chief end of all our thoughts, and the proper business of all our understandings.

Existence and unity.—Existence and unity are two other ideas that are suggested to the understanding by every object without, and every idea within. When ideas are in our minds, we consider them as being actually there, as well as we consider things to be actually without us: which is, that they exist, or have existence: and whatever we can consider as one thing, whether a real being or idea, suggests to the understanding the idea of unity.

Power.—Power also is another of those simple ideas which we receive from sensation and reflection. For, observing in ourselves that we can at pleasure move several parts of our bodies which were at rest, the effects also that natural bodies are able to produce in one another occurring every moment to our senses, we both these ways get the idea of power.

Succession.—Besides these there is another idea, which though suggested by our senses yet is more constantly offered us by what passes in our own minds; and that is the idea of succession. For if we look immediately into ourselves, and reflect on what is observable there, we shall find our ideas always, whilst we are awake or have any thought, passing in train, one going and another coming without intermission.

Simple ideas the materials of all our knowledge.—These, if they are

not all, are at least (as I think) the most considerate of those simple ideas which the mind has, and out of which is made all its other knowledge: all of which it receives only by the two fore-mentioned ways of sensation and reflection.

VIII. SOME FARTHER CONSIDERATIONS CONCERNING OUR SIMPLE IDEAS

Positive ideas from privative causes.—Concerning the simple ideas of sensation it is to be considered, that whatsoever is so constituted in nature as to be able by affecting our senses to cause any perception in the mind, doth thereby produce in the understanding a simple idea; which, whatever be the external cause of it, when it comes to be taken notice of by our discerning faculty, it is by the mind looked on and considered there to be a real positive idea in the understanding, as much as any other whatsoever; though perhaps the cause of it be but a privation in the subject.

Ideas in the mind, qualities in bodies.—To discover the nature of our ideas the better, and to discourse of them intelligibly, it will be convenient to distinguish them, as they are ideas or perceptions in our minds, and as they are modifications of matter in the bodies that cause such perceptions in us; that so we may not think (as perhaps usually is done) that they are exactly the images and resemblances of something inherent in the subject; most of those of sensation being in the mind no more the likeness of something existing without us than the names that stand for them are the likeness of our ideas, which yet upon hearing they are apt to excite in us.

Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call "idea"; and the power to produce any idea in our mind, I call "quality" of the subject wherein that power is. Thus a snowball having the power to produce in us the ideas of white, cold, and round, the powers to produce those ideas in us as they are in the snowball, I call "qualities"; and as they are sensations or perceptions in our understandings, I call them "ideas"; which ideas, if I speak of them sometimes as in the things themselves, I would be understood to mean those qualities in the objects which produce them in us.

Primary qualities.—Qualities thus considered in bodies are, first, such as are utterly inseparable from the body, in what estate soever it be; such as, in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as sense constantly finds in every particle of matter which has bulk enough to be perceived, and the mind finds inseparable from every particle of matter, though less than to make

itself singly be perceived by our senses; v.g., take a grain of wheat, divide it into two parts, each part has still solidity, extension, figure, and mobility; divide it again, and it retains still the same qualities: and so divide it on till the parts become insensible, they must retain still each of them all those qualities. For, division (which is all that a mill or pestle or any other body does upon another, in reducing it to insensible parts) can never take away either solidity, extension, figure, or mobility from any body, but only makes two or more distinct separate masses of matter of that which was but one before; all which distinct masses, reckoned as so many distinct bodies, after division, make a certain number. These I call original or primary qualities of body, which I think we may observe to produce simple ideas in us, viz., solidity, extension, figure, motion or rest, and number.

Secondary qualities. Secondly. Such qualities, which in truth are nothing in the objects themselves, but powers to produce various sensations in us by their primary qualities, i.e., by the bulk, figure, texture, and motion of their insensible parts, as colours, sounds, tastes, &c., these I call secondary qualities. To these might be added a third sort, which are allowed to be barely powers, though they are as much real qualities in the subject as those which I, to comply with the common way of speaking, call qualities, but, for distinction, secondary qualities. For, the power in fire to produce a new colour or consistence in wax or clay by its primary qualities, is as much a quality in fire as the power it has to produce in me a new idea or sensation of warmth or burning, which I felt not before, by the same primary qualities, viz., the bulk, texture, and motion of its insensible parts.

How primary qualities produce their ideas.—The next thing to be considered is, how bodies produce ideas in us; and that is manifestly by impulse, the only way which we can conceive bodies operate in.

If, then, external objects be not united to our minds when they produce ideas in it, and yet we perceive these original qualities in such of them as singly fall under our senses, it is evident that some motion must be thence continued by our nerves or animal spirits, by some parts of our bodies, to the brain or the seat of sensation, there to produce in our minds the particular ideas we have of them. And since the extension, figure, number, and motion of bodies of an observable bigness, may be perceived at a distance by the sight, it is evident some singly imperceptible bodies must come from them to the eyes, and thereby convey to the brain some motion which produces these ideas which we have of them in us.

How secondary.—After the same manner that the ideas of these original qualities are produced in us, we may conceive that the ideas of secondary qualities are also produced, viz., by the operation of insensible particles on our senses. For it being manifest that there are bodies, and good store of bodies, each whereof are so small that we cannot by any

of our senses discover either their bulk, figure, or motion (as is evident in the particles of the air and water, and other extremely smaller than those, perhaps as much smaller than the particles of air or water as the particles of air or water are smaller than pease or hailstones): let us suppose at present that the different motions and figures, bulk and number, of such particles, affecting the several organs of our senses, produce in us those different sensations which we have from the colours and smells of bodies, v.g., that a violet, by the impulse of such insensible particles of matter of peculiar figures and bulks, and in different degrees and modifications of their motions, causes the ideas of the blue colour and sweet scent of that flower to be produced in our minds; it being no more impossible to conceive that God should annex such ideas to such motions with which they have no similitude, than that he should annex the idea of pain to the motion of a piece of steel dividing our flesh, with which that idea hath no resemblance.

What I have said concerning colours and smells may be understood also of tastes and sounds, and other the like sensible qualities; which, whatever reality we by mistake attribute to them, are in truth nothing in the objects themselves, but powers to produce various sensations in us, and depend on those primary qualities, viz., bulk, figure, texture, and motion of parts, as I have said.

Three sorts of qualities in bodies.—The qualities then that are in bodies, rightly considered, are of three sorts:

First. The bulk, figure, number, situation, and motion or rest of their solid parts; those are in them, whether we perceive them or no; and when they are of that size that we can discover them, we have by these an idea of the thing as it is in itself, as is plain in artificial things. These I call primary qualities.

Secondly. The power that is in any body by reason of its insensible primary qualities, to operate after a peculiar manner on any of our senses, and thereby produce in us the different ideas of several colours, sounds, smells, tastes, &c. These are usually called *sensible* qualities.

Thirdly. The power that is in any body, by reason of the particular constitution of its primary qualities, to make such a change in the bulk, figure, texture, and motion of another body, as to make it operate on our senses differently from what it did before. Thus the sun has a power to make wax white, and fire, to make lead fluid. These are usually called "powers."

The first of these, as has been said, I think may be properly called real, original, or primary qualities, because they are in the things themselves, whether they are perceived or no; and upon their different modifications it is that the secondary qualities depend.

The other two are only powers to act differently upon other things, which powers result from the different modifications of those primary qualities.

IX. OF PERCEPTION

Perception the first simple idea of reflection.—Perception, as it is the first faculty of the mind exercised about our ideas, so it is the first and simplest idea we have from reflection, and is by some called "thinking" in general. Though thinking, in the propriety of the English tongue, signifies that sort of operation of the mind about its ideas wherein the mind is active; where it, with some degree of voluntary attention, considers anything: for in bare, naked perception, the mind is, for the most part, only passive, and what it perceives it cannot avoid perceiving.

Is only when the mind receives the impression.—What perception is, everyone will know better by reflecting on what he does himself, when he sees, hears, feels, &c., or thinks, than by any discourse of mine. Whoever reflects on what passes in his own mind, cannot miss it; and if he does not reflect, all the words in the world cannot make him have any notion of it.

Which ideas first, is not evident.—As there are some ideas which we may reasonably suppose may be introduced into the minds of children in the womb, subservient to the necessities of their life and being there; so after they are born those ideas are the earliest imprinted which happen to be the sensible qualities which first occur to them: amongst which, light is not the least considerable, nor of the weakest efficacy. And how covetous the mind is to be furnished with all such ideas as have no pain accompanying them, may be a little guessed by what is observable in children new born, who always turn their eyes to that part from whence the light comes, lay them how you please. But the ideas that are most familiar at first being various, according to the divers circumstances of children's first entertainment in the world, the order wherein the several ideas come at first into the mind is very various and uncertain also, neither is it much material to know it.

Perception the inlet of knowledge.—Perception, then, being the first step and degree towards knowledge, and the inlet of all the materials of it, the fewer senses any man as well as any other creature hath, and the fewer and duller the impressions are that are made by them, and the duller the faculties are that are employed about them, the more remote are they from that knowledge which is to be found in some men. But this, being in great variety of degrees (as may be perceived amongst men), cannot certainly be discovered in the several species of animals, much less in their particular individuals. It suffices me only to have remarked here, that percep-

tion is the first operation of all our intellectual faculties, and the inlet of all knowledge into our minds. And I am apt, too, to imagine that it is perception in the lowest degree of it which puts the boundaries between animals and the inferior ranks of creatures. But this I mention only as my conjecture by the by, it being indifferent to the matter in hand which way the learned shall determine of it.

X. OF RETENTION

Contemplation.—The next faculty of the mind, whereby it makes a farther progress towards knowledge, is that which I call retention or the keeping of those simple ideas which from sensation or reflection it hath received. This is done two ways. First, by keeping the idea which is brought into it for some time actually in view, which is called contemplation.

Memory.—The other way of retention is the power to revive again in our minds those ideas which after imprinting have disappeared, or have been as it were laid aside out of sight; and thus we do, when we conceive heat or light, yellow or sweet, the object being removed. This is memory, which is, as it were, the storehouse of our ideas. For the narrow mind of man, not being capable of having many ideas under view and consideration at once, it was necessary to have a repository to lay up those ideas, which at another time it might have use of. But our ideas being nothing but actual perceptions in the mind, which cease to be anything when there is no perception of them, this laying up of our ideas in the repository of the memory signifies no more but this,—that the mind has a power, in many cases, to revive perceptions which it has once had, with this additional perception annexed to them,—that it has had them before.

In remembering, the mind is often active.—In this secondary perception, as I may so call it, or viewing again the ideas that are lodged in the memory, the mind is oftentimes more than barely passive; the appearances of those dormant pictures depending sometimes on the will. The mind very often sets itself on work in search of some hidden idea, and turns, as it were, the eye of the soul upon it; though sometimes too they start up in our minds of their own accord, and offer themselves to the understanding, and very often are roused and tumbled out of their dark cells into open daylight by some turbulent and tempestuous passion; our affections bringing ideas to our memory which had otherwise lain quiet and unregarded. This farther is to be observed concerning ideas lodged in the memory, and upon occasion revived by the mind,—that they are not only (as the word "revive" imports) none of them new ones, but also that the mind takes notice of them as of a former impression, and renews its acquaintance with them as with ideas it had known before. So that though

ideas formerly imprinted are not all constantly in view, yet in remembrance they are constantly known to be such as have been formerly imprinted, i.e., in view, and taken notice of before by the understanding.

XI. OF DISCERNING, AND OTHER OPERATIONS OF THE MIND

No knowledge without discerning.—Another faculty we may take notice of in our minds, is that of discerning and distinguishing between the several ideas it has. It is not enough to have a confused perception of something in general: unless the mind had a distinct perception of different objects and their qualities, it would be capable of very little knowledge; though the bodies that affect us were as busy about us as they are now, and the mind were continually employed in thinking. On this faculty of distinguishing one thing from another, depends the evidence and certainty of several even very general propositions, which have passed for innate truths; because men, overlooking the true cause why those propositions find universal assent, impute it wholly to native uniform impressions: whereas it in truth depends upon this clear discerning faculty of the mind, whereby it perceives two ideas to be the same or different.

Clearness alone hinders confusion .- To the well distinguishing our ideas, it chiefly contributes that they be clear and determinate; and when they are so, it will not breed any confusion or mistake about them, though the senses should (as sometimes they do) convey them from the same object differently on different occasions, and so seem to err. For though a man in a fever should from sugar have a bitter taste, which at another time would produce a sweet one, yet the idea of bitter in that man's mind would be as clear and distinct from the idea of sweet, as if he had tasted only gall. Nor does it make any more confusion between the two ideas of sweet and bitter, that the same sort of body produces at one time one and at another time another idea by the taste, than it makes a confusion in two ideas of white and sweet, or white and round, that the same piece of sugar produces them both in the mind at the same time. And the ideas of orange-colour and azure that are produced in the mind by the same parcel of the infusion of lignum nephriticum, are no less distinct ideas than those of the same colours taken from two very different bodies.

Comparing.—The comparing them one with another, in respect of extent, degrees, time, place, or any other circumstances, is another operation of the mind about its ideas, and is that upon which depends all that large tribe of ideas, comprehended under relation; which of how vast an extent it is, I shall have occasion to consider hereafter.

Naming.—When children have by repeated sensations got ideas fixed in their memories, they begin by degrees to learn the use of signs. And

when they have got the skill to apply the organs of speech to the framing of articulate sounds, they begin to make use of words to signify their ideas to others. These verbal signs they sometimes borrow from others, and sometimes make themselves, as one may observe among the new and unusual names children often give to things in their first use of language.

Abstracting.—The use of words then being to stand as outward marks of our internal ideas, and those ideas being taken from particular things, if every particular idea that we take in should have a distinct name, names must be endless. To prevent this, the mind makes the particular ideas, received from particular objects, to become general; which is done by considering them as they are in the mind such appearances separate from all other existences, and the circumstances of real existence, as time, place, or any other concomitant ideas. This is called "abstraction," whereby ideas taken from particular beings become general representatives of all of the same kind; and their names, general names, applicable to whatever exists conformable to such abstract ideas. Such precise, naked appearances in the mind, without considering how, whence, or with what others they came there, the understanding lays up (with names commonly annexed to them) as the standards to rank real existences into sorts, as they agree with these patterns, and to denominate them accordingly.

Method.—These, I think, are the first faculties and operations of the mind which it makes use of in understanding; and though they are exercised about all its ideas in general, yet the instances I have hitherto given have been chiefly in simple ideas; and I have subjoined the explication of these faculties of the mind to that of simple ideas, before I come to what I have to say concerning complex ones, for these following reasons:—

First, because, several of these faculties being exercised at first principally about simple ideas, we might, by following nature in its ordinary method, trace and discover them in their rise, progress, and gradual improvements.

Secondly, because, observing the faculties of the mind, how they operate about simple ideas, which are usually in most men's minds much more clear, precise, and distinct than complex ones, we may the better examine and learn how the mind abstracts, denominates, compares, and exercises its other operations about those which are complex, wherein we are much more liable to mistake.

Thirdly, because these very operations of the mind about ideas received from sensation are themselves, when reflected on, another set of ideas, derived from that other source of our knowledge which I call "reflection"; and therefore fit to be considered in this place after the simple ideas of sensation. Of compounding, comparing, abstracting, &c., I have but just spoken, having occasion to treat of them more at large in other places.

XII. OF COMPLEX IDEAS

Made by the mind out of simple ones.—We have hitherto considered those ideas, in the reception whereof the mind is only passive, which are those simple ones received from sensation and reflection before mentioned. whereof the mind cannot make one to itself, nor have any idea which does not wholly consist of them. But as the mind is wholly passive in the reception of all its simple ideas, so it exerts several acts of its own, whereby out of its simple ideas, as the materials and foundations of the rest, the others are framed. The acts of the mind wherein it exerts its power over its simple ideas are chiefly these three: (1.) Combining several simple ideas into one compound one; and thus all complex ideas are made. (2.) The second is bringing two ideas, whether simple or complex, together, and setting them by one another, so as to take a view of them at once, without uniting them into one; by which it gets all its ideas of relations. (3.) The third is separating them from all other ideas that accompany them in their real existence; this is called "abstraction": and thus all its general ideas are made. This shows man's power and its way of operation to be muchwhat the same in the material and intellectual world. For, the materials in both being such as he has no power over, either to make or destroy, all that man can do is either to unite them together, or to set them by one another, or wholly separate them.

Made voluntarily.—In this faculty of repeating and joining together its ideas, the mind has great power in varying and multiplying the objects of its thoughts infinitely beyond what sensation or reflection furnished it with; but all this still confined to those simple ideas which it received from those two sources, and which are the ultimate materials of all its compositions. For, simple ideas are all from things themselves; and of these the mind can have no more nor other than what are suggested to it. It can have no other ideas of sensible qualities than what come from without by the senses, nor any ideas of other kind of operations of a thinking substance than what it finds in itself; but when it has once got these simple ideas, it is not confined barely to observation, and what offers itself from without; it can, by its own power, put together those ideas it has, and make new complex ones which it never received so united.

Are either modes, substances, or relations.—Complex ideas, however compounded and decompounded, though their number be infinite, and the variety endless wherewith they fill and entertain the thoughts of men, yet I think they may be all reduced under these three heads: 1. Modes. 2. Substances. 3. Relations.

XIII. OF SIMPLE MODES; AND FIRST, OF THE SIMPLE MODES OF SPACE

Simple modes.—Though in the foregoing part I have often mentioned simple ideas, which are truly the materials of all our knowledge; yet, having treated of them there rather in the way that they come into the mind than as distinguished from others more compounded, it will not be perhaps amiss to take a view of some of them again under this consideration, and examine those different modifications of the same idea, which the mind either finds in things existing, or is able to make within itself, without the help of any extrinsical object, or any foreign suggestion.

Those modifications of any one simple idea (which I call "simple modes") are as perfectly different and distinct ideas in the mind as those of the greatest distance or contrariety; for the idea of two is as distinct from that of one as blueness from heat, or either of them from any number; and yet it is made up only of that simple idea of an unit repeated; and repetitions of this kind joined together make those distinct simple modes of a dozen, a gross, a million.

Idea of space.—I shall begin with the simple idea of space. I have showed above that we get the idea of space both by our sight and touch: which I think is so evident that it would be as needless to go to prove that men perceive by their sight a distance between bodies of different colours, or between the parts of the same body, as that they see colours themselves; nor is it less obvious that they can do so in the dark by feeling and touch.

Space and extension.—This space considered barely in length between any two beings, without considering anything else between them, is called "distance"; if considered in length, breadth, and thickness, I think it may be called "capacity"; the term "extension" is usually applied to it, it what manner soever considered.

XIV. OF DURATION. AND ITS SIMPLE MODES

Duration is fleeting extension.—There is another sort of distance or length, the idea whereof we get not from the permanent parts of space, but from the fleeting and perpetually perishing parts of succession: this we call "duration," the simple modes whereof are any different lengths of it whereof we have distinct ideas, as hours, days, years, &c., time, and eternity.

Its idea from reflection on the train of our ideas.—The answer of a great man to one who asked what time was, Si non rogas intelligo (which

amounts to this: "The more I set myself to think of it the less I understand it,"), might perhaps persuade one that time, which reveals all other things, is itself not to be discovered. Duration, time, and eternity are not without reason thought to have something very abstruse in their nature. But however remote these may seem from our comprehension, yet if we trace them right to their originals, I doubt not but one of those sources of all our knowledge, viz., sensation and reflection, will be able to furnish us with these ideas as clear and distinct as many other which are thought much less obscure; and we shall find that the idea of eternity itself is derived from the same common original with the rest of our ideas.

To understand time and eternity aright, we ought with attention to consider what idea it is we have of duration, and how we came by it. It is evident to anyone who will but observe what passes in his own mind, that there is a train of ideas which constantly succeed one another in his understanding as long as he is awake. Reflection on these appearances of several ideas one after another in our minds, is that which furnishes us with the idea of succession; and the distance between any parts of that succession, or between the appearance of any two ideas in our minds, is that we call duration. For whilst we are thinking, or whilst we receive successively several ideas in our minds, we know that we do exist; and so we call the existence or the continuation of the existence of ourselves, or anything else commensurate to the succession of any ideas in our minds, the duration of ourselves, or any such other thing co-existing with our thinking.

The idea of succession not from motion.—Thus, by reflecting on the appearance of various ideas one after another in our understandings, we get the notion of succession; which if anyone should think we did rather get from our observation of motion by our senses, he will perhaps be of my mind, when he considers that even motion produces in his mind an idea of succession no otherwise than as it produces there a continued train of distinguishable ideas. For, a man, looking upon a body really moving, perceives yet no motion at all, unless that motion produces a constant train of successive ideas; v.g., a man becalmed at sea, out of sight of land, in a fair day may look on the sun, or sea, or ship, a whole hour together, and perceive no motion at all in either; though it be certain that two, and perhaps all of them, have moved during that time a great way; but as soon as he perceives either of them to have changed distance with some other body, as soon as this motion produces any new idea in him, then he perceives that there has been motion. But wherever a man is with all things at rest about him, without perceiving any motion at all, if during this hour of quiet he has been thinking, he will perceive the various ideas of his own thoughts in his own mind appearing one after another, and thereby observe and find succession where he could observe no motion.

This train the measure of other successions.—So that to me it seems, that the constant and regular succession of ideas in a waking man is, as it were, the measure and standard of all other successions; whereof if any one either exceeds the place of our ideas,—as where two sounds or pains, &c., take up in their succession the duration of but one idea, or else where any motion or succession is so slow that it keeps not pace with the ideas in our minds, or the quickness in which they take their turns; as when any one or more ideas in their ordinary course come into our mind between those which are offered to the sight by the different perceptible distances of a body in motion, or between sounds or smells following one another,—there also the sense of a constant, continued succession is lost, and we perceive it not but with certain gaps of rest between.

Time is duration set out by measures.—Having thus got the idea of duration, the next thing natural for the mind to do is, to get some measure of this common duration, whereby it might judge of its different lengths, and consider the distinct order wherein several things exist: without which a great part of our knowledge would be confused, and a great part of history be rendered very useless. This consideration of duration, as set out by certain periods, and marked by certain measures or epochs, is that, I think, which most properly we call "time."

A good measure of time must divide its whole duration into equal periods.—In the measuring of extension there is nothing more required but the application of the standard or measure we make use of to the thing of whose extension we would be informed. But in the measuring of duration this cannot be done, because no two different parts of succession can be put together to measure one another; and nothing being a measure of duration but duration, as nothing is of extension but extension, we cannot keep by us any standing unvarying measure of duration, which consists in a constant fleeting succession, as we can of certain lengths of extension, as inches, feet, yards, &c., marked out in permanent parcels of matter. Nothing then could serve well for a convenient measure of time but what has divided the whole length of its duration into apparently equal portions by constantly repeated periods. What portions of duration are not distinguished or considered as distinguished and measured by such periods come not so properly under the notion of time, as appears by such phrases as these, viz., "before all time," and "when time shall be no more."

Eternity.—By the same means, therefore, and from the same original, that we come to have the idea of time, we have also that idea which we call "eternity," viz., having got the idea of succession and duration, by reflecting on the train of our own ideas, caused in us either by the natural appearances of those ideas coming constantly of themselves into our waking thoughts, or else caused by external objects successively affecting our senses; and having from the revolutions of the sun got the ideas of

certain lengths of duration, we can in our thoughts add such lengths of duration to one another as often as we please, and apply them, so added, to durations past or to come: and this we can continue to do on, without bounds or limits, and proceed in infinitum, and apply thus the length of the annual motion of the sun to duration, supposed before the sun's or any other motion had its being; which is no more difficult or absurd than to apply the notion I have of the moving of a shadow one hour to-day upon the sun-dial to the duration of something last night; v.g., the burning of a candle, which is now absolutely separate from all actual motion; and it is as impossible for the duration of that flame for an hour last night to co-exist with any motion that now is, or for ever shall be, as for any part of duration that was before the beginning of the world to co-exist with the motion of the sun now. But yet this hinders not but that, having the idea of the length of the motion of the shadow on a dial between the marks of two hours, I can as distinctly measure in my thoughts the duration of that candle-light last night as I can the duration of anything that does now exist; and it is no more than to think, that had the sun shone then on the dial, and moved after the same rate it doth now, the shadow on the dial would have passed from one hour-line to another whilst that flame of the candle lasted.

For as, in the history of the creation delivered by Moses, I can imagine that light existed three days before the sun was or had any motion, barely by thinking that the duration of light before the sun was created was so long as (if the sun had moved then as it doth now) would have been equal to three of his diurnal revolutions; so by the same way I can have an idea of the chaos, or angels being created, before there was either light or any continued motion, a minute, an hour, a day, a year, or one thousand years. For if I can but consider duration equal to one minute, before either the being or motion of any body, I can add one minute more till I come to sixty; and by the same way of adding minutes, hours, or years (i.e., such or such parts of the sun's revolution, or any other period whereof I have the idea), proceed in infinitum, and supposing a duration exceeding as many such periods as I can reckon, let me add whilst I will: which I think is the notion we have of eternity, of whose infinity we have no other notion than we have of the infinity of number. to which we can add for ever without end.

XV: OF DURATION AND EXPANSION CONSIDERED TOGETHER

Both capable of greater and less.—Though we have in the precedent chapters dwelt pretty long on the considerations of space and duration, yet they being ideas of general concernment, that have something very

abstruse and peculiar in their nature, the comparing them one with another may perhaps be of use for their illustration; and we may have the more clear and distinct conception of them by taking a view of them together. Distance or space, in its simple abstract conception, to avoid confusion, I call "expansion," to distinguish it from extension, which by some is used to express this distance only as it is in the solid parts of matter, and so includes, or at least intimates, the idea of body; whereas, the idea of pure distance includes no such thing. I prefer also the word "expansion" to "space," because space is often applied to distance of fleeting successive parts, which never exist together, as well as to those which are permanent. In both these (viz., expansion and duration) the mind has this common idea of continued lengths, capable of greater or less quantities; for a man has as clear an idea of the difference of the length of an hour and a day as of an inch and a foot.

Expansion not bounded by matter.—The mind having got the idea of the length of any part of expansion, let it be a span, or a pace, or what length you will, can, as has been said, repeat that idea; and so adding it to the former, enlarge its idea of length, and make it equal to two spans. or two paces, and so, as often as it will, till it equals the distance of any parts of the earth one from another, and increase thus till it amounts to the distance of the sun or remotest star. By such a progression as this, setting out from the place where it is, or any other place, it can proceed and pass beyond all those lengths, and find nothing to stop its going on either in or without body. It is true we can easily in our thoughts come to the end of solid extension; the extremity and bounds of all body, we have no difficulty to arrive at: but when the mind is there, it finds nothing to hinder its progress into this endless expansion: of that it can neither find nor conceive any end. Nor let anyone say, that beyond the bounds of body there is nothing at all, unless he will confine God within the limits of matter.

Nor duration by motion.—Just so is it in duration. The mind, having got the idea of any length of duration, can double, multiply, and enlarge it, not only beyond its own, but beyond the existence of all corporeal beings and all the measures of time, taken from the great bodies of the world and their motions. But yet everyone easily admits, that though we make duration boundless, as certainly it is, we cannot yet extend it beyond all being. God, everyone easily allows, fills eternity; and it is hard to find a reason why anyone should doubt that he likewise fills immensity. His infinite being is certainly as boundless one way as another; and methinks it ascribes a little too much to matter to say, "Where there is no body, there is nothing."

Time to duration, is as place to expansion.—Time in general is to duration as place to expansion. They are so much of those boundless

oceans of eternity and immensity, as is set out and distinguished from the rest as it were by land-marks; and so are made use of to denote the position of finite real beings, in respect one to another, in those uniform infinite oceans of duration and space. These, rightly considered, are nothing but ideas of determinate distances, from certain known points fixed in distinguishable sensible things, and supposed to keep the same distance one from another. From such points fixed in sensible beings we reckon, and from them we measure our portions of those infinite quantities; which, so considered, are that which we call "time" and "place." For duration and space being in themselves uniform and boundless, the order and position of things without such known settled points would be lost in them; and all things would lie jumbled in an incurable confusion.

They belong to all beings.—Where and When are questions belonging to all finite existences, and are by us always reckoned from some known parts of this sensible world, and from some certain epochs marked out to us by the motions observable in it. Without some such fixed parts or periods, the order of things would be lost to our finite understandings in the boundless, invariable oceans of duration and expansion; which comprehend in them all finite beings, and in their full extent belong only to the Deity. And therefore we are not to wonder that we comprehend them not, and do so often find our thoughts at a loss, when we would consider them either abstractedly in themselves, or as any way attributed to the first incomprehensible Being. But when applied to any particular finite beings, the extension of any body is so much of that infinite space as the bulk of that body takes up. And place is the position of any body, when considered at a certain distance from some other. As the idea of the particular duration of anything is an idea of that portion of infinite duration which passes during the existence of that thing, so the time when the thing existed is the idea of that space of duration which passed between some known and fixed period of duration, and the being of that thing. One shows the distance of the extremities of the bulk or existence of the same thing, as that it is a foot square, or lasted two years; the other shows the distance of it in place or existence from other fixed points of space or duration.

All the parts of extension are extension; and all the parts of duration are duration.—There is one thing more wherein space and duration have a great conformity; and that is, though they are justly reckoned amongst our simple ideas, yet none of the distinct ideas we have of either is without all manner of composition; it is the very nature of both of them to consist of parts: but their parts, being all of the same kind, and without the mixture of any other idea, hinder them not from having a place amongst simple ideas. Could the mind, as in number, come to so small

a part of extension or duration as excluded divisibility, that would be, as it were, the indivisible unit or idea; by repetition of which, it would make its more enlarged ideas of extension and duration. But since the mind is not able to frame an idea of any space without parts, instead thereof it makes use of the common measures, which by familiar use in each country have imprinted themselves on the memory: (as inches, and feet; or cubits, and parasangs; and so seconds, minutes, hours, days, and years in duration) the mind makes use, I say, of such ideas as these, as simple ones; and these are the component parts of larger ideas, which the mind, upon occasion, makes by the addition of such known lengths which it is acquainted with.

On the other side, the ordinary smallest measure we have of either, is looked on as an unit in number, when the mind by division would reduce them into less fractions. Though on both sides, both in addition and division, either of space or duration, when the idea under consideration becomes very big or very small, its precise bulk becomes very obscure and confused; and it is the number of its repeated additions or divisions, that alone remains clear and distinct; as will easily appear to anyone who will let his thoughts loose in the vast expansion of space. or divisibility of matter. Every part of duration is duration too; and every part of extension is extension; both of them capable of addition or division in infinitum. But the least portions of either of them, whereof we have clear and distinct ideas, may perhaps be fittest to be considered by us as the simple ideas of that kind, out of which our complex modes of space, extension, and duration are made up, and into which they can again be distinctly resolved. Such a small part in duration may be called a "moment," and is the time of one idea in our minds, in the train of their ordinary succession there. The other, wanting a proper name, I know not whether I may be allowed to call "a sensible point," meaning thereby the least particle of matter or space we can discern, which is ordinarily about a minute, and to the sharpest eyes seldom less than thirty seconds, of a circle whereof the eye is the centre.

XVI. OF NUMBER

Number, the simplest and most universal idea.—Amongst all the ideas we have, as there is none suggested to the mind by more ways, so there is none more simple, than that of unity, or one. It has no shadow of variety of composition in it; every object our senses are employed about, every idea in our understandings, every thought of our minds, brings this idea along with it: and therefore it is the most intimate to our thoughts, as well as it is, in its agreement to all other things, the most

universal idea we have. For number applies itself to men, angels, actions, thoughts,—everything that either doth exist or can be imagined.

Its modes made by addition.—By repeating this idea in our minds, and adding the repetitions together, we come by the complex ideas of the modes of it. Thus by adding one to one we have the complex idea of a couple: by putting twelve units together we have the complex idea of a dozen; and a score, or a million, or any other number.

Each mode distinct.—The simple modes of number are of all other the most distinct; every the least variation which is an unit, making each combination as clearly different from that which approacheth nearest to it, as the most remote: two being as distinct from one as two hundred; and the idea of two as distinct from the idea of three, as the magnitude of the whole earth is from that of a mite. This is not so in other simple modes, in which it is not so easy, nor perhaps possible, for us to distinguish betwixt two approaching ideas, which yet are really different. For who will undertake to find a difference between the white of this paper and that of the next degree to it? or can form distinct ideas of every the least excess in extension?

Therefore demonstrations in numbers the most precise.—The clearness and distinctness of each mode of number from all others, even those that approach nearest, makes me apt to think that demonstrations in numbers, if they are not more evident and exact than in extension, yet they are more general in their use, and more determinate in their application. But it is not so in extension, where whatsoever is more than just a foot, or an inch, is not distinguishable from the standard of a foot, or an inch; and in lines which appear of an equal length, one may be longer than the other by innumerable parts; nor can anyone assign an angle which shall be the next biggest to a right one.

Number measures all measurables.—This farther is observable in number, that it is that which the mind makes use of in measuring all things that by us are measurable, which principally are expansion and duration; and our idea of infinity even when applied to those seems to be nothing but the infinity of number. For what else are our ideas of eternity and immensity, but the repeated additions of certain ideas of imagined parts of duration and expansion, with the infinity of number, in which we can come to no end of addition? For such an inexhaustible stock, number, of all our other ideas, most clearly furnishes us with, as is obvious to everyone. For let a man collect into one sum as great a number as he pleases, this multitude, how great soever, lessens not one jot the power of adding to it, or brings him any nearer the end of the inexhaustible stock of number, where still there remains as much to be added as if none were taken out. And this endless addition or addibility (if anyone like the word better) of numbers, so apparent to the mind, is that,

I think, which gives us the clearest and most distinct idea of infinity; of which more in the following chapter.

XVII. OF INFINITY

How we come by the idea of infinity.—Everyone that has any idea of any stated lengths of space, as a foot, finds that he can repeat that idea; and, joining it to the former, make the idea of two feet, and, by the addition of a third, three feet, and so on, without ever coming to an end of his additions, whether of the same idea of a foot, or, if he pleases, of doubling it, or any other idea he has of any length, as a mile, or diameter of the earth, or of the orbis magnus; for, whichsoever of these he takes, and how often soever he doubles or any otherwise multiplies it, he finds that, after he has continued this doubling in his thoughts and enlarged his idea as much as he pleases, he has no more reason to stop, nor is one jot nearer the end of such addition than he was at first setting out: the power of enlarging his idea of space by farther additions remaining still the same, he hence takes the idea of infinite space.

Our idea of space boundless.—This, I think, is the way whereby the mind gets the idea of infinite space. It is a quite different consideration to examine whether the mind has the idea of such a boundless space actually existing, since our ideas are not always proofs of the existence of things; but yet, since this comes here in our way, I suppose I may say that we are apt to think that space in itself is actually boundless, to which imagination the idea of space or expansion of itself naturally leads us. For, it being considered by us either as the extension of body, or as existing by itself, without any solid matter taking it up (for of such a void space we have not only the idea, but I have proved, as I think, from the motion of body, its necessary existence), it is impossible the mind should be ever able to find or suppose any end of it, or be stopped anywhere in its progress in this space, how far soever it extends its thoughts.

And so of duration.—As, by the power we find in ourselves of repeating as often as we will any idea of space, we get the idea of immensity; so, by being able to repeat the idea of any length of duration we have in our minds, with all the endless addition of number, we come by the idea of eternity. For we find in ourselves, we can no more come to an end of such repeated ideas than we can come to the end of number; which everyone perceives he cannot. But here again it is another question, quite different from our having an idea of eternity, to know whether there were any real being whose duration has been eternal. And as to this, I say, he that considers something now existing must necessarily come to something eternal.

Difference between infinity of space and space infinite.—Though our idea of infinity arise from the contemplation of quantity, and the endless increase the mind is able to make in quantity, by the repeated additions of what portions thereof it pleases; yet, I guess, we cause great confusion in our thoughts when we join infinity to any supposed idea of quantity the mind can be thought to have, and so discourse or reason about an infinite quantity (viz.), an infinite space or an infinite duration. For our idea of infinity being, as I think, an endless growing idea, but the idea of any quantity the mind has being at that time terminated in that idea (for be it as great as it will, it can be no greater than it is), to join infinity to it, is to adjust a standing measure to a growing bulk; and therefore I think it is not an insignificant subtilty if I say that we are carefully to distinguish between the idea of the infinity of space and the idea of a space infinite: the first is nothing but a supposed endless progression of the mind over what repeated ideas of space it pleases; but to have actually in the mind the idea of a space infinite, is to suppose the mind already passed over, and actually to have a view of all those repeated ideas of space which an endless repetition can never totally represent to it; which carries in it a plain contradiction.

No positive idea of infinite.—Though it be hard, I think, to find anyone so absurd as to say he has the positive idea of an actual infinite number, the infinity whereof lies only in a power still of adding any combination of units to any former number, and that as long and as much as one will: the like also being in the infinity of space and duration, which power leaves always to the mind room for endless additions; yet there be those who imagine they have positive ideas of infinite duration and space. It would, I think, be enough to destroy any such positive idea of infinite to ask him that has it, whether he could add to it or no? which would easily show the mistake of such a positive idea. We can, I think, have no positive idea of any space or duration which is not made up of, and commensurate to, repeated numbers of feet or yards, or days and years; which are the common measures whereof we have the idea in our minds, and whereby we judge of the greatness of these sort of quantities. And therefore, since an idea of infinite space or duration must needs be made up of infinite parts, it can have no other infinity than that of number, capable still of farther addition; but not an actual positive idea of a number infinite. For, I think, it is evident that the addition of finite things together (as are all lengths whereof we have the positive ideas) can never otherwise produce the idea of infinite than as number does; which, consisting of additions of finite units one to another, suggests the idea of infinite only by a power we find we have of still increasing the sum, and adding more of the same kind, without coming one jot nearer the end of such progression.

XVIII. OF OTHER SIMPLE MODES

Modes of motion.—Though I have in the foregoing chapters shown how, from simple ideas taken in by sensation the mind comes to extend itself even to infinity; which, however it may of all others seem most remote from any sensible perception, yet at last hath nothing in it but what is made out of simple ideas received into the mind by the senses, and afterwards there put together by the faculty the mind has to repeat its own ideas: though, I say, these might be instances enough of simple modes of the simple ideas of sensation, and suffice to show how the mind comes by them; yet I shall, for method's sake, though briefly, give an account of some few more, and then proceed to more complex ideas.

Modes of tastes.—All compounded tastes and smells are also modes made up of these simple ideas of those senses. But they, being such as generally we have no names for, are less taken notice of, and cannot be set down in writing; and therefore must be left without enumeration to the thoughts and experience of my reader.

XIX. OF THE MODES OF THINKING

Sensation, remembrance, contemplation, &c.—When the mind turns its view inwards upon itself, and contemplates its own actions, thinking is the first that occurs. In it the mind observes a great variety of modifications, and from thence receives distinct ideas. Thus the perception which actually accompanies and is annexed to any impression on the body made by an external object, being distinct from all other modifications of thinking, furnishes the mind with a distinct idea which we call "sensation"; which is, as it were, the actual entrance of any idea into the understanding by the senses. The same idea, when it again recurs without the operation of the like object on the external sensory, is "remembrance": if it be sought after by the mind, and with pain and endeavour found, and brought again in view, it is "recollection": if it be held there long under attentive consideration, it is "contemplation": when ideas float in our mind without any reflection or regard of the understanding, it is that which the French call réverie; our language has scarce a name for it: when the ideas that offer themselves are taken notice of, and, as it were, registered in the memory, it is "attention": when the mind with great earnestness, and of choice, fixes its view on any idea, considers it on all sides, and will not be called off by the ordinary solicitation of other ideas, it is that we call "intention," or "study": "sleep" without dreaming is rest from all

these: and "dreaming" itself is the having of ideas in the mind not suggested by any external objects or known occasion, nor under any choice or conduct of the understanding at all; and whether that which we call "ecstasy" be not dreaming with the eyes open, I leave to be examined.

XX. ON MODES OF PLEASURE AND PAIN

Pleasure and pain simple ideas.—Amongst the simple ideas which we receive both from sensation and reflection, pain and pleasure are two very considerable ones. For as in the body there is sensation barely in itself, or accompanied with pain or pleasure; so the thought or perception of the mind is simply so, or else accompanied also with pleasure or pain, delight or trouble, call it how you please. These, like other simple ideas, cannot be described, nor their names defined: the way of knowing them is, as of the simple ideas of the senses, only by experience. For to define them by the presence of good or evil, is no otherwise to make them known to us than by making us reflect on what we feel in ourselves, upon the several and various operations of good and evil upon our minds, as they are differently applied to or considered by us.

Good and evil, what.—Things then are good or evil only in reference to pleasure or pain. That we call "good," which is apt to cause or increase pleasure, or diminish pain, in us; or else to procure or preserve us the possession of any other good, or absence of any evil. And, on the contrary, we name that "evil," which is apt to produce or increase any pain, or diminish any pleasure, in us; or else to procure us any evil, or deprive us of any good. By "pleasure" and "pain," I must be understood to mean of body or mind, as they are commonly distinguished; though, in truth, they be only different constitutions of the mind, sometimes occasioned by disorder in the body, sometimes by thoughts in the mind.

Our passions moved by good and evil.—Pleasure and pain, and that which causes them, good and evil, are the hinges on which our passions turn: and if we reflect on ourselves, and observe how these, under various considerations, operate in us,—what modifications or tempers of mind, what internal sensations (if I may so call them) they produce in us,—we may thence form to ourselves the ideas of our passions.

XXI. OF POWER

This idea how got.—The mind being every day informed, by the senses, of the alteration of those simple ideas it observes in things without, and taking notice how one comes to an end and ceases to be, and another

begins to exist which was not before; reflecting also, on what passes within itself, and observing a constant change of its ideas, sometimes by the impression of outward objects on the senses, and sometimes by the determination of its own choice; and concluding, from what it has so constantly observed to have been, that the like changes will for the future be made in the same things by like agents, and by the like ways; considers in one thing the possibility of having any of its simple ideas changed, and in another the possibility of making that change; and so comes by that idea which we call "power."

Power active and passive.—Power thus considered is twofold; viz., as able to make, or able to receive, any change: the one may be called "active," and the other "passive," power. Whether matter be not wholly destitute of active power, as its author, God, is truly above all passive power; and whether the intermediate state of created spirits be not that alone which is capable of both active and passive power, may be worth consideration. I shall not now enter into that inquiry; my present business being not to search into the original of power, but how we come by the idea of it. But since active powers make so great a part of our complex ideas of natural substances (as we shall see hereafter), and I mention them as such, according to common apprehension; yet they being not, perhaps, so truly active powers as our hasty thoughts are apt to represent them, I judge it not amiss, by this intimation, to direct our minds to the consideration of God and spirits, for the clearest idea of active power.

Whence the ideas of liberty and necessity.—Everyone, I think, finds in himself a power to begin or forbear, continue or put an end to, several actions in himself. From the consideration of the extent of this power of the mind over the actions of the man, which everyone finds in himself, arise the ideas of liberty and necessity.

Liberty, what.—All the actions that we have any idea of, reducing themselves, as has been said, to these two, viz., thinking and motion, so far as a man has a power to think or not to think, to move or not to move, according to the preference or direction of his own mind, so far is a man free. Wherever any performance and forbearance are not equally in a man's power, wherever doing or not doing will not equally follow upon the preference of his mind directing it, there he is not free, though perhaps the action may be voluntary. So that the idea of liberty is the idea of a power in any agent to do or forbear any particular action, according to the determination or thought of the mind, whereby either of them is preferred to the other; where either of them is not in the power of the agent, to be produced by him according to his volition, there he is not at liberty, that agent is under necessity. So that liberty cannot be where there is no thought, no volition, no will; but there may be thought, there may be will, there may be volition, where there is no liberty.

XXII. OF MIXED MODES

Mixed modes, what.—Having treated of simple modes in the foregoing chapters, and given several instances of some of the most considerable of them, to show what they are, and how we come by them: we are now, in the next place, to consider those we call "mixed modes": such are the complex ideas we mark by the names "obligation," "drunkenness," "a lie," &c., which, consisting of several combinations of simple ideas of different kinds, I have called "mixed modes," to distinguish them from the more simple modes, which consist only of simple ideas of the same kind. These mixed modes, being also such combinations of simple ideas as are not looked upon to be characteristical marks of any real beings that have a steady existence, but scattered and independent ideas put together by the mind, are thereby distinguished from the complex ideas of substances.

How we get the ideas of mixed modes.—There are therefore three ways whereby we get the complex ideas of mixed modes. (1.) By experience and observation of things themselves; thus by seeing two men wrestle or fence, we get the idea of wrestling or fencing. (2.) By invention, or voluntary putting together of several simple ideas in our own minds: so he that first invented printing, or etching, had an idea of it in his mind before it ever existed. (3.) Which is the most usual way, by explaining the names of actions we never saw, or notions we cannot see; and by enumerating, and thereby, as it were, setting before our imaginations all those ideas which go to the making them up, and are the constituent parts of them. For, having by sensation and reflection stored our minds with simple ideas, and by use got the names that stand for them, we can by those names represent to another any complex idea we would have him conceive; so that it has in it no simple ideas but what he knows, and has with us the same name for. For all our complex ideas are ultimately resolvable into simple ideas, of which they are compounded, and originally made up, though perhaps their immediate ingredients, as I may so say, are also complex ideas.

Mixed modes made also of other ideas.—I think I shall not need to remark here, that though power and action make the greatest part of mixed modes, marked by names and familiar in the minds and mouths of men, yet other simple ideas, and their several combinations, are not excluded; much less, I think, will it be necessary for me to enumerate all the mixed modes which have been settled, with names to them. That would be to make a dictionary of the greatest part of the words made use of in divinity, ethics, law, and politics, and several other sciences. All

that is requisite to my present design is, to show what sort of ideas those are which I called "mixed modes": how the mind comes by them; and that they are compositions made up of simple ideas got from sensation and reflection; which, I suppose, I have done.

XXIII. OF OUR COMPLEX IDEAS OF SUBSTANCES

Ideas of substance, how made.—The mind being, as I have declared, furnished with a great number of the simple ideas conveyed in by the senses, as they are found in exterior things, or by reflection on its own operations, takes notice, also, that a certain number of these simple ideas go constantly together; which being presumed to belong to one thing, and words being suited to common apprehensions, and made use of for quick despatch, are called, so united in one subject, by one name; which, by inadvertency, we are apt afterward to talk of and consider as one simple idea, which indeed is a complication of many ideas together: because, as I have said, not imagining how these simple ideas can subsist by themselves, we accustom ourselves to suppose some substratum wherein they do subsist, and from which they do result; which therefore we call "substance."

Our idea of substance in general.—So that if anyone will examine himself concerning his notion of pure substance in general, he will find he has no other idea of it at all, but only a supposition of he knows not what support of such qualities which are capable of producing simple ideas in us; which qualities are commonly called "accidents." If anyone should be asked, "What is the subject wherein colour or weight inheres?" he would have nothing to say but, "The solid extended parts." And if he were demanded, "What is it that solidity and extension inhere in?" he would not be in a much better case than the Indian who, saying that the world was supported by a great elephant, was asked, what the elephant rested on? to which his answer was, "A great tortoise": but being again pressed to know what gave support to the broad-backed tortoise, replied,-something, he knew not what. And thus here, as in all other cases where we use words without having clear and distinct ideas, we talk like children; who, being questioned what such a thing is which they know not readily give this satisfactory answer,—that it is something; which in truth signifies no more, when so used, either by children or men, but that they know not what; and that the thing they pretend to know and talk of, is what they have no distinct idea of at all, and so are perfectly ignorant of it, and in the dark. The idea, then, we have, to which we give the general name "substance," being nothing but the supposed, but unknown, support of those qualities we find existing, which we

imagine cannot subsist sine re substante, "without something to support them," we call that support substantia; which, according to the true import of the word, is, in plain English, "standing under," or "upholding."

No clear idea of substance in general.—Hence, when we talk or think of any particular sort of corporeal substances, as horse, stone, &c., though the idea we have of either of them be but the complication or collection of those several simple ideas of sensible qualities which we used to find united in the thing called "horse" or "stone"; yet because we cannot conceive how they should subsist alone, nor one in another, we suppose them existing in, and supported by, some common subject; which support we denote by the name "substance," though it be certain we have no clear or distinct idea of that thing we suppose a support.

Three sorts of ideas make our complex ones of substances.—The ideas that make our complex ones of corporeal substances are of these three sorts. First: The ideas of the primary qualities of things which are discovered by our senses, and are in them even when we perceive them not: such are the bulk, figure, number, situation, and motion of the parts of bodies, which are really in them, whether we take notice of them or no. Secondly: The sensible secondary qualities which, depending on these, are nothing but the powers those substances have to produce several ideas in us by our senses; which ideas are not in the things themselves otherwise than as anything is in its cause. Thirdly: The aptness we consider in any substance to give or receive such alterations of primary qualities as that the substance so altered should produce in us different ideas from what it did before; these are called "active and passive powers": all which powers, as far as we have any notice or notion of them, terminate only in sensible simple ideas. For, whatever alteration a loadstone has the power to make in the minute particles of iron, we should have no notion of any power it had at all to operate on iron, did not its sensible motion discover it: and I doubt not but there are a thousand changes that bodies we daily handle have a power to cause in one another, which we never suspect, because they never appear in sensible effects.

Powers make a great part of our complex ideas of substances.—Powers therefore justly make a great part of our eomplex ideas of substances. He that will examine his complex idea of gold, will find several of its ideas that make it up to be only powers: as the power of being melted, but of not spending itself in the fire, of being dissolved in aqua regia, are ideas as necessary to make up our complex idea of gold, as its colour and weight: which, if duly considered, are also nothing but different powers. For, to speak truly, yellowness is not actually in gold; but is a power in gold to produce that idea in us by our eyes, when placed in a due light: and the heat which we cannot leave out of our idea of the sun, is no more really in the sun than the white colour it introduces into

wax. These are both equally powers in the sun, operating, by the motion and figure of its insensible parts, so on a man as to make him have the idea of heat; and so on wax as to make it capable to produce in a man the idea of white.

XXIV. OF COLLECTIVE IDEAS OF SUBSTANCES

One idea.—Besides these complex ideas of several single substances, as of man, horse, gold, violet, apple, &c., the mind hath also "complex collective ideas" of substances; which I so call, because such ideas are made up of many particular substances considered together, as united into one idea, and which so joined are looked on as one; v.g., the idea of such a collection of men as make an army, though consisting of a great number of distinct substances, is as much one idea as the idea of a man; and the great collective idea of all bodies whatsoever, signified by the name "world," is as much one idea as the idea of any the least particle of matter in it; it sufficing to the unity of any idea, that it be considered as one representation or picture, though made up of ever so many particulars.

Made by the power of composing in the mind.—These collective ideas of substances the mind makes by its power of composition, and uniting, severally, either simple or complex ideas into one, as it does by the same faculty make the complex ideas of particular substances, consisting of an aggregate of divers simple ideas united in one substance: and as the mind, by putting together the repeated ideas of unity, makes the collective mode or complex idea of any number, as a score, or a gross, &c., so by putting together several particular substances, it makes collective ideas of substances, as a troop, an army, a swarm, a city, a fleet: each of which everyone finds that he represents to his own mind by one idea, in one view; and so under that notion considers those several things as perfectly one, as one ship, or one atom. Nor is it harder to conceive how an army of ten thousand men should make one idea, than how a man should make one idea; it being as easy to the mind to unite into one the idea of a great number of men, and consider it as one, as it is to unite into one particular all the distinct ideas that make up the composition of a man, and consider them all together as one.

XXV. OF RELATION

Relation, what.—Besides the ideas, whether simple or complex, that the mind has of things, as they are in themselves, there are others it gets

from their comparison one with another. The understanding, in the consideration of anything, is not confined to that precise object: it can carry any idea, as it were, beyond itself, or, at least, look beyond it, to see how it stands in conformity to any other. When the mind so considers one thing, that it does, as it were, bring it to and set it by another, and carry its view from one to the other: this is, as the words import, "relation" and "respect"; and the denominations given to positive things, intimating that respect, and serving as marks to lead the thoughts beyond the subject itself denominated to something distinct from it, are what we call "relatives"; and the things so brought together, "related."

Relation only betwixt two things.—Whatsoever doth or can exist, or be considered as one thing, is positive; and so not only simple ideas and substances, but modes also, are positive beings; though the parts of which they consist are very often relative one to another; but the whole together considered as one thing, and producing in us the complex idea of one thing, which idea is in our minds as one picture, though an aggregate of divers parts and under one name, it is a positive or absolute thing or idea. Thus a triangle, though the parts thereof, compared one to another, be relative, yet the idea of the whole is a positive absolute idea. The same may be said of a family, a tune, &c., for there can be no relation but betwixt two things, considered as two things. There must always be in relation two ideas, or things, either in themselves really separate, or considered as distinct, and then a ground or occasion for their comparison.

All things capable of relation.—Concerning relation in general, these things may be considered.

First: That there is no one thing, whether simple idea, substance, mode, or relation, or name of either of them, which is not capable of almost an infinite number of considerations in reference to other things; and therefore this makes no small part of men's thoughts and words.

The ideas of relations clearer often than of the subjects related.—Secondly: This farther may be considered concerning relation, that though it be not contained in the real existence of things, but something extraneous and superinduced; yet the ideas which relative words stand for are often clearer and more distinct than of those substances to which they do belong. The notion we have of a father or brother is a great deal clearer and more distinct than that we have of a man: or, if you will, paternity is a thing whereof it is easier to have a clear idea than of humanity: and I can much easier conceive what a friend is than what God. Because the knowledge of one action, or one simple idea, is oftentimes sufficient to give the notion of a relation: but to the knowing of any substantial being, an accurate collection of sundry ideas is necessary. A man, if he compares two things together, can hardly be supposed not to know what it is

wherein he compares them: so that when he compares any things together, he cannot but have a very clear idea of that relation.

Relations all terminate in simple ideas.—Thirdly: Though there be a great number of considerations wherein things may be compared one with another, and so a multitude of relations; yet they all terminate in, and are concerned about, those simple ideas either of sensation or reflection, which I think to be the whole materials of all our knowledge.

Terms leading the mind beyond the subject denominated are relative.

—Fourthly: That relation being the considering of one thing with another, which is extrinsical to it, it is evident that all words that necessarily lead the mind to any other ideas than are supposed really to exist in that thing to which the word is applied, are relative words.

XXVI. OF CAUSE AND EFFECT AND OTHER RELATIONS

Whence their ideas got.—In the notice that our senses take of the constant vicissitude of things, we cannot but observe that several particular both qualities and substances begin to exist; and that they receive this their existence from the due application and operation of some other being. From this observation we get our ideas of cause and effect. That which produces any simple or complex idea, we denote by the general name "cause"; and that which is produced, "effect." Thus finding that in that substance which we call "wax" fluidity, which is a simple idea that was not in it before, is constantly produced by the application of a certain degree of heat, we call the simple idea of heat, in relation to fluidity in wax, the cause of it, and fluidity the effect. So also finding that the substance, wood, which is a certain collection of simple ideas so called, by the application of fire is turned into another substance called "ashes," i.e., another complex idea, consisting of a collection of simple ideas, quite different from that complex idea which we call "wood," we consider fire, in relation to ashes, as cause, and the ashes, as effect. So that whatever is considered by us to conduce or operate to the producing any particular simple idea, or collection of simple ideas, whether substance or mode, which did not before exist, hath thereby in our minds the relation of a cause, and so is denominated by us.

XXVII. OF IDENTITY AND DIVERSITY

Identity of substances. Identity of modes.—We have the ideas but of three sorts of substances: 1. God. 2. Finite intelligences. 3. Bodies. First: God is without beginning, eternal, unalterable, and everywhere; and therefore concerning his identity, there can be no doubt. Secondly: Finite

spirits having had each its determinate time and place of beginning to exist, the relation to that time and place will always determine to each of them its identity as long as it exists. Thirdly: The same will hold of every particle of matter, to which no addition or subtraction of matter being made, it is the same. For though these three sorts of substances, as we term them, do not exclude one another out of the same place: yet we cannot conceive but that they must necessarily each of them exclude any of the same kind out of the same place: or else the notions and names of "identity and diversity" would be in vain, and there could be no such distinction of substances, or anything else, one from another.

Principium individuationis.—From what has been said, it is easy to discover, what is so much inquired after, the principium individuationis; and that, it is plain, is existence itself, which determines a being of any sort to a particular time and place incommunicable to two beings of the same kind. This, though it seems easier to conceive in simple substances or modes, yet, when reflected on, is not more difficult in compounded ones, if care be taken to what it is applied; v.g., let us suppose an atom, i.e., a continued body under one immutable superficies, existing in a determined time and place; it is evident, that, considered in any instant of its existence, it is, in that instant, the same with itself. For, being at that instant what it is and nothing else, it is the same, and so must continue as long as its existence is continued; for so long it will be the same and no other. In like manner, if two or more atoms be joined together into the same mass, every one of those atoms will be the same, by the foregoing rule: and whilst they exist united together, the mass, consisting of the same atoms, must be the same mass, or the same body, let the parts be ever so differently jumbled: but if one of these atoms be taken away, or one new one added, it is no longer the same mass, or the same bodv.

In the state of living creatures, their identity depends not on a mass of the same particles, but on something else. For in them the variation of great parcels of matter alters not the identity; an oak, growing from a plant to a great tree, and then lopped, is still the same oak: and a colt, grown up to a horse, sometimes fat, sometimes lean, is all the while the same horse: though, in both these cases, there may be a manifest change of the parts; so that truly they are not either of them the same masses of matter, though there be truly one of them the same oak, and the other the same horse. The reason whereof is, that, in these two cases of a mass of matter and a living body, identity is not applied to the same thing.

Consciousness makes the same person.—But though the same immaterial substance or soul does not alone, wherever it be, and in whatsoever state, make the same man; yet it is plain, consciousness, as far as ever it can be extended, should it be to ages past, unites existences and

actions, very remote in time, into the same person, as well as it does the existence and actions of the immediately preceding moment: so that whatever has the consciousness of present and past actions is the same person to whom they both belong.

Self depends on consciousness.—Self is that conscious thinking thing (whatever substance made up of, whether spiritual or material, simple or compounded, it matters not) which is sensible or conscious of pleasure and pain, capable of happiness or misery, and so is concerned for itself, as far as that consciousness extends. Thus everyone finds, that whilst comprehended under that consciousness, the little finger is as much a part of itself as what is most so. Upon separation of this little finger, should this consciousness go along with the little finger, and leave the rest of the body, it is evident the little finger would be the person, the same person; and self then would have nothing to do with the rest of the body. As in this case it is the consciousness that goes along with the substance, when one part is separate from another, which makes the same person, and constitutes this inseparable self, so it is in reference to substances remote in time. That with which the consciousness of this present thinking thing can join itself makes the same person, and is one self with it, and with nothing else; and so attributes to itself and owns all the actions of that thing as its own, as far as that consciousness reaches, and no farther: as everyone who reflects will perceive.

Consciousness alone makes self.—Nothing but consciousness can unite remote existences into the same person; the identity of substance will not do it. For, whatever substance there is, however framed, without consciousness there is no person: and a carcass may be a person, as well as any sort of substance be so without consciousness.

Could we suppose two distinct incommunicable consciousnesses acting the same body, the one constantly by day, the other by night; and, on the other side, the same consciousness acting by intervals two distinct bodies: I ask, in the first case, whether the day and the night man would not be two as distinct persons as Socrates and Plato? and whether, in the second case, there would not be one person in two distinct bodies, as much as one man is the same in two distinct clothings? Nor is it at all material to say, that this same and this distinct consciousness. in the cases above mentioned, is owing to the same and distinct immaterial substances, bringing it with them to those bodies; which, whether true or no, alters not the case: since it is evident the personal identity would equally be determined by the consciousness, whether that consciousness were annexed to some individual immaterial substance or no. For, granting that the thinking substance in man must be necessarily supposed immaterial, it is evident that immaterial thinking thing may sometimes part with its past consciousness, and be restored to it again, as appears

in the forgetfulness men often have of their past actions, and the mind many times recovers the memory of a past consciousness which it had lost for twenty years together. Make these intervals of memory and forgetfulness to take their turns regularly by day and night, and you have two persons with the same immaterial spirit, as much as in the former instance two persons with the same body. So that self is not determined by identity or diversity of substance, which it cannot be sure of, but only by identity of consciousness.

The difficulty from ill use of names.—To conclude: Whatever substance begins to exist, it must, during its existence, necessarily be the same: whatever compositions of substances begin to exist, during the union of those substances, the concrete must be the same; whatsoever mode begins to exist, during its existence it is the same: and so if the composition be of distinct substances and different modes, the same rule holds. Whereby it will appear, that the difficulty or obscurity that has been about this matter rather rises from the names ill used, than from any obscurity in things themselves. For whatever makes the specific idea to which the name is applied, if that idea be steadily kept to, the distinction of any thing into the same and diverse will easily be conceived, and there can arise no doubt about it.

XXVIII. OF OTHER RELATIONS

Proportional.—Besides the before-mentioned occasions of time, place, and casualty of comparing, or referring things one to another, there are, as I have said, infinite others, some whereof I shall mention.

First: The first I shall name, is some one simple idea, which, being capable of parts or degrees, affords an occasion of comparing the subjects wherein it is to one another, in respect of that simple idea, v.g., "whiter, sweeter, bigger, equal, more," &c. These relations, depending on the equality and excess of the same simple idea in several subjects, may be called, if one will, "proportional"; and that these are only conversant about those simple ideas received from sensation or reflection, is so evident that nothing need be said to evince it.

Natural.—Secondly: Another occasion of comparing things together, or considering one thing so as to include in that consideration some other thing, is the circumstances of their origin or beginning; which, being not afterwards to be altered, make the relations depending thereon as lasting as the subjects to which they belong; v.g., father and son, brothers, cousinsgerman, &c., which have their relations by one community of blood, wherein they partake in several degrees; countrymen, i.e., those who were born in the same country or track of ground; and these I call "natural re-

lations": wherein we may observe, that mankind have fitted their notions and words to the use of common life, and not to the truth and extent of things. For it is certain that in reality the relation is the same betwixt the begetter and the begotten in the several races of other animals as well as men: but yet it is seldom said, "This bull is the grandfather of such a calf"; or that two pigeons are cousins-german.

Instituted.—Thirdly: Sometimes the foundation of considering things with reference to one another, is some act whereby anyone comes by a moral right, power, or obligation to do something. Thus a general is one that hath power to command an army; and an army under a general is a collection of armed men obliged to obey one man. A citizen or a burgher is one who has a right to certain privileges in this or that place. All this sort depending upon men's wills or agreement in society, I call "instituted," or "voluntary," and may be distinguished from the natural, in that they are, most if not all of them, some way or other alterable and separable from the persons to whom they have sometimes belonged, though neither of the substances so related be destroyed. Now, though these are all reciprocal, as well as the rest, and contain in them a reference of two things one to the other; yet, because one of the two things often wants a relative name importing that reference, men usually take no notice of it, and the relation is commonly overlooked, v.g., a patron and client are easily allowed to be relations; but a constable or dictator are not so readily. at first hearing, considered as such; because there is no peculiar name for those who are under the command of a dictator or constable, expressing a relation to either of them; though it be certain that either of them hath a certain power over some others; and so is so far related to them, as well as a patron is to his client, or general to his army.

Moral.—Fourthly: There is another sort of relation, which is the conformity or disagreement men's voluntary actions have to a rule to which they are referred, and by which they are judged of; which, I think, may be called "moral relation," as being that which denominates our moral actions, and deserves well to be examined, there being no part of knowledge wherein we should be more careful to get determined ideas, and avoid, as much as may be, obscurity and confusion. Human actions, when, with their various ends, objects, manners, and circumstances, they are framed into distinct complex ideas, are, as has been shown, so many mixed modes, a great part whereof have names affixed to them. Thus, supposing gratitude to be a readiness to acknowledge and return kindness received; polygamy to be the having more wives than one at once: when we frame these notions thus in our minds, we have there so many determined ideas of mixed modes. But this is not all that concerns our actions: it is not enough to have determined ideas of them, and to know what names belong to such and such combinations of ideas. We have a farther and greater concernment; and that is, to know whether such actions so made up are morally good or bad.

These three laws the rules of moral good and evil.—These three, then, first, the law of God, secondly, the law of politic societies, thirdly, the law of fashion, or private censure—are those to which men variously compare their actions: and it is by their conformity to one of these laws that they take their measures, when they would judge of their moral rectitude, and denominate their actions good or bad.

Morality is the relation of actions to these rules.—Whether the rule to which, as to a touchstone, we bring our voluntary actions to examine them by, and try their goodness, and accordingly to name them; which is, as it were, the mark of the value we set upon them: whether, I say, we take that rule from the fashion of the country, or the will of a law-maker, the mind is easily able to observe the relation any action hath to it, and to judge whether the action agrees or disagrees with the rule; and so hath a notion of moral goodness or evil, which is either conformity or not conformity of any action to that rule: and therefore is often called "moral rectitude." This rule being nothing but a collection of several simple ideas, the conformity thereto is but so ordering the action that the simple ideas belonging to it may correspond to those which the law requires. And thus we see how moral beings and notions are founded on, and terminated in, these simple ideas we have received from sensation or reflection.

XXIX. OF CLEAR AND OBSCURE, DISTINCT AND CONFUSED IDEAS

"Clear" and "obscure" explained by sight.—The perception of the mind being most aptly explained by words relating to the sight, we shall best understand what is meant by "clear" and "obscure" in our ideas, by reflecting on what we call "clear" and "obscure" in the objects of sight. Light being that which discovers to us visible objects, we give the name of "obscure" to that which is not placed in a light sufficient to discover minutely to us the figure and colours which are observable in it, and which in a better light would be discernible. In like manner our simple ideas are clear, when they are such as the objects themselves, from whence they were taken, did or might, in a well-ordered sensation or perception, present them. Whilst the memory retains them thus, and can produce them to the mind whenever it has occasion to consider them, they are clear ideas. So far as they either want anything of that original exactness, or have lost any of their first freshness, and are, as it were, faded or tarnished by time, so far are they obscure. Complex ideas, as they are made up of simple ones, so they are clear when the ideas that go to their composition

are clear; and the number and order of those simple ideas, that are the ingredients of any complex one, is determinate and certain.

Distinct and confused, what.—As a clear idea is that whereof the mind has such a full and evident perception as it does receive from an outward object operating duly on a well-disposed organ, so a distinct idea is that wherein the mind perceives a difference from all other, and a confused idea is such an one as is not sufficiently distinguishable from another from which it ought to be different.

Confusion concerns always two ideas.—Confusion, making it a difficulty to separate two things that should be separated, concerns always two ideas; and those most which most approach one another. Whenever therefore we suspect any idea to be confused, we must examine what other it is in danger to be confounded with, or which it cannot easily be separated from; and that will always be found an idea belonging to another name, and so should be a different thing, from which yet it is not sufficiently distinct; being either the same with it, or making a part of it, or, at least, as properly called by that name as the other it is ranked under; and so keeps not that difference from that other idea, which the different names import.

Causes of confusion.—This, I think, is the confusion proper to ideas, which still carries with it a secret reference to names. At least, if there be any other confusion of ideas this is that which most of all disorders men's thoughts and discourses: ideas, as ranked under names, being those that for the most part men reason of within themselves, and always those which they commune about with others. And therefore where there are supposed two different ideas, marked by two different names, which are not as distinguishable as the sounds that stand for them, there never fails to be confusion; and where any ideas are distinct, as the ideas of those two sounds they are marked by, there can be between them no confusion. The way to prevent it is to collect and unite into one complex idea, as precisely as is possible, all those ingredients whereby it is differenced from others; and to them so united in a determinate number and order, apply steadily the same name. But this neither accommodating men's ease or vanity, or serving any design but that of naked truth, which is not always the thing aimed at, such exactness is rather to be wished than hoped for. And since the loose application of names to undetermined, variable, and almost no ideas serves both to cover our own ignorance, as well as to perplex and confound others, which goes for learning and superiority in knowledge, it is no wonder that most men should use it themselves whilst they complain of it in others. Though, I think, no small part of the confusion to be found in the notions of men might, by care and ingenuity, be avoided; yet I am far from concluding it everywhere wilful. Some ideas are so complex, and made up of so many parts, that the memory does not easily

retain the very same precise combination of simple ideas under one name; much less are we able constantly to divine for what precise complex idea such a name stands in another man's use of it. From the first of these follows confusion in a man's own reasonings and opinions within himself; from the latter frequent confusion in discoursing and arguing with others. But having more at large treated of words, their defects and abuses, in the following book, I shall here say no more of it.

XXX. OF REAL AND FANTASTICAL IDEAS

Real ideas are conformable to their archetypes.—Besides what we have already mentioned concerning ideas, other considerations belong to them, in reference to things from whence they are taken, or which they may be supposed to represent; and thus, I think, they may come under a threefold distinction; and are,

First: Either real or fantastical.

Secondly: Adequate or inadequate.

Thirdly: True or false.

First: By "real ideas," I mean such as have a foundation in nature; such as have a conformity with the real being and existence of things, or with their archetypes. "Fantastical or chimerical," I call such as have no foundation in nature, nor have any conformity with that reality of being to which they are tacitly referred as to their archetypes. If we examine the several sorts of ideas before mentioned, we shall find, that,

Simple ideas all real.—First: Our simple ideas are all real, all agree to the reality of things. Not that they are all of them the images or representations of what does exist; the contrary whereof, in all but the primary qualities of bodies, hath been already showed. But though whiteness and coldness are no more in snow than pain is; yet those ideas of whiteness and coldness, pain, &c., being in us the effects of powers in things without us, ordained by our Maker to produce in us such sensations, they are real ideas in us, whereby we distinguish the qualities that are really in things themselves.

Mixed modes made of consistent ideas are real.—Secondly: Mixed modes and relations having no other reality but what they have in the minds of men, there is nothing more required to those kinds of ideas to make them real but that they be so framed that there be a possibility of existing conformable to them. These ideas, being themselves archetypes, cannot differ from their archetypes, and so cannot be chimerical, unless anyone will jumble together in them inconsistent ideas. Indeed, as any of them have the names of a known language assigned to them, by which he that has them in his mind would signify them to others, so bare possibility

of existing is not enough; they must have a conformity to the ordinary signification of the name that is given them, that they may not be thought fantastical: as if a man would give the name of "justice" to that idea which common use calls "liberality." But this fantasticalness relates more to propriety of speech, than reality of ideas. For a man to be undisturbed in danger, sedately to consider what is fittest to be done, and to execute it steadily, is a mixed mode or a complex idea of an action which may exist. But to be undisturbed in danger, without using one's reason or industry, is what is also possible to be; and so is as real an idea as the other. Though the first of these, having the name "courage" given to it, may, in respect of that name, be a right or a wrong idea: but the other, whilst it has not a common received name of any known language assigned to it, is not capable of any deformity, being made with no reference to anything but itself.

Ideas of substance are real when they agree with the existence of things.—Thirdly: Our complex ideas of substances, being made all of them in reference to things existing without us, and intended to be representations of substances as they really are, are no farther real than as they are such combinations of simple ideas as are really united, and coexist in things without us. On the contrary, those are fantastical which are made up of such collections of simple ideas as were really never united, never were found together in any substance.

XXXI. OF ADEQUATE AND INADEQUATE IDEAS

Adequate ideas are such as perfectly represent their archetypes.—Of our real ideas, some are adequate, and some are inadequate. Those I call "adequate" which perfectly represent those archetypes which the mind supposes them taken from; which it intends them to stand for, and to which it refers them. Inadequate ideas are such which are but a partial or incomplete representation of those archetypes to which they are referred. Upon which account it is plain,

Simple ideas all adequate.—First: That all our simple ideas are adequate. Because being nothing but the effects of certain powers in things, fitted and ordained by God to produce such sensations in us, they cannot but be correspondent and adequate to those powers: and we are sure they agree to the reality of things.

Modes are all adequate.—Secondly: Our complex ideas of modes, being voluntary collections of simple ideas which the mind puts together, without reference to any real archetypes or standing patterns existing anywhere, are and cannot but be adequate ideas. Because they, not being intended for copies of things really existing, but for archetypes made by the

mind to rank and denominate things by, cannot want any thing; they having each of them that combination of ideas, and thereby that perfection, which the mind intended they should: so that the mind acquiesces in them, and can find nothing wanting.

Ideas of substances, as referred to real essences, not adequate.—Thirdly: What ideas we have of substances, I have above showed. Now, those ideas have in the mind a double reference. (1.) Sometimes they are referred to a supposed real essence of each species of things. (2.) Sometimes they are only designed to be pictures and representations in the mind of things that do exist by ideas of those qualities that are discoverable in them. In both which ways, these copies of those originals and archetypes are imperfect and inadequate.

First: It is usual for men to make the names of substances stand for things, as supposed to have certain real essences, whereby they are of this or that species: and names standing for nothing but the ideas that are in men's minds, they must consequently refer their ideas to such real essences as to their archetypes. That men (especially such as have been bred up in the learning taught in this part of the world), do suppose certain specific essences of substances, which each individual, in its several kinds, is made conformable to and partakes of, is so far from needing proof, that it will be thought strange if anyone should do otherwise. And thus they ordinarily apply the specific names they rank particular substances under, to things, as distinguished by such specific real essences. Who is there almost who would not take it amiss if it should be doubted whether he called himself "man" with any other meaning than as having the real essence of a man? And yet if you demand what those real essences are, it is plain men are ignorant, and know them not. From whence it follows, that the ideas they have in their minds, being referred to real essences, as to archetypes which are unknown, must be so far from being adequate, that they cannot be supposed to be any representation of them at all.

Ideas of substances, as collections of their qualities, are all inadequate.
—Secondly: Those who, neglecting that useless supposition of unknown real essences whereby they are distinguished, endeavour to copy the substances that exist in the world by putting together the ideas of those sensible qualities which are found co-existing in them, though they come much nearer a likeness of them, than those who imagine they-know-not-what real specific essences; yet they arrive not at perfectly adequate ideas of those substances they would thus copy into their minds; nor do those copies exactly and fully contain all that is to be found in their archetypes. Because those qualities and powers of substances, whereof we make their complex ideas, are so many and various that no man's complex idea contains them all. That our complex ideas of substances do not contain in

them all the simple ideas that are united in the things themselves, is evident, in that men do rarely put into their complex idea of any substance all the simple ideas they do know to exist in it. Because endeavouring to make the signification of their specific names as clear and as little cumbersome as they can, they make their specific ideas of the sorts of substances, for the most part, of a few of those simple ideas which are to be found in them: but these having no original precedency or right to be put in and make the specific idea, more than others that are left out, it is plain that, both these ways, our ideas of substances are deficient and inadequate. These simple ideas, whereof we make our complex ones of substances, are all of them (bating only the figure and bulk of some sorts) powers; which being relations to other substances, we can never be sure that we know all the powers that are in any one body, till we have tried what changes it is fitted to give to, or receive from, other substances in their several ways of application: which being impossible to be tried upon any one body, much less upon all, it is impossible we should have adequate ideas of any substance made up of a collection of all its properties.

Ideas of substances, as collections of their qualities, are all inadequate.

—So that all our complex ideas of substances are imperfect and inadequate. Which would be so also in mathematical figures, if we were to have our complex ideas of them only by collecting their properties in reference to other figures. How uncertain and imperfect would our ideas be of an ellipsis, if we had no other idea of it but some few of its properties! Whereas, having in our plain idea the whole essence of that figure, we from thence discover those properties, and demonstratively see how they flow and are inseparable from it.

Ideas of modes and relations are archetypes, and cannot but be adequate.—Thirdly: Complex ideas of modes and relations are originals and archetypes; are not copies, nor made after the pattern of any real existence, to which the mind intends them to be conformable, and exactly to answer. These being such collections of simple ideas that the mind itself puts together, and such collections that each of them contains in it precisely all that the mind intends it should, they are archetypes and essences of modes that may exist; and so are designed only for and belong only to such modes as, when they do exist, have an exact conformity with those complex ideas. The ideas thereof of modes and relations cannot but be adequate.

XXXII. OF TRUE AND FALSE IDEAS

Truth and falsehood properly belong to propositions.—Though truth and falsehood belong, in propriety of speech, only to propositions, yet ideas are oftentimes termed "true or false," though I think that when ideas them-

selves are termed "true or false," there is still some secret or tacit proposition which is the foundation of that denomination: as we shall see, if we examine the particular occasions wherein they come to be called "true or false." In all which we shall find some kind of affirmation or negation, which is the reason of that denomination. For our ideas being nothing but bare appearances or perceptions in our minds, cannot properly and simply in themselves be said to be true or false, no more than a single name of anything can be said to be true or false.

Metaphysical truth contains a tacit proposition.—Indeed, both ideas and words may be said to be true in a metaphysical sense of the word "truth," as all other things that any way exist are said to be true; i.e., really to be such as they exist. Though in things called "true," even in that sense, there is, perhaps, a secret reference to our ideas, looked upon as the standards of that truth, which amounts to a mental proposition, though it be usually not taken notice of.

No idea, as an appearance in the mind, true or false.—But it is not in that metaphysical sense of truth which we inquire here, when we examine whether our ideas are capable of being true or false; but in the more ordinary acceptation of those words, and so, I say, that the ideas in our minds being only so many perceptions or appearances there, none of them are false; the idea of a centaur having no more falsehood in it, when it appears in our minds, than the name "centaur" has falsehood in it, when it is pronounced by our mouths, or written on paper. For, truth or falsehood lying always in some affirmation or negation, mental or verbal, our ideas are not capable, any of them, of being false, till the mind passes some judgment on them; that is, affirms or denies something of them.

Ideas referred to anything may be true or false.—Whenever the mind refers any of its ideas to anything extraneous to them, they are then capable to be called true or false. Because the mind in such a reference makes a tacit supposition of their conformity to that thing; which supposition, as it happens to be true or false, so the ideas themselves come to be denominated.

Simple ideas may be false in reference to others of the same name, but are least liable to be so.—First, then, I say, that when the truth of our ideas is judged of by the conformity they have to the ideas which other men have and commonly signify by the same name, they may be any of them false. But yet simple ideas are least of all liable to be mistaken: because a man by his senses, and every day's observation, may easily satisfy himself what the simple ideas are which their several names that are in common use stand for, they being but few in number, and such as, if he doubts or mistakes in, he may easily rectify by the objects they are to be found in. Therefore it is seldom that anyone mistakes in his names of simple ideas, or applies the name "red" to the idea of "green," or the name "sweet"

to the idea "bitter": much less are men apt to confound the names of ideas belonging to different senses, and call a colour by the name of a taste, etc., whereby it is evident, that the simple ideas they call by any name are commonly the same that others have and mean when they use the same names.

Ideas of mixed modes most liable to be false in this sense.—Complex ideas are much more liable to be false in this respect; and the complex ideas of mixed modes much more than those of substances: because in substances some remarkable sensible qualities, serving ordinarily to distinguish one sort from another, easily preserve those who take any care in the use of their words from applying them to sorts of substances to which they do not at all belong. But in mixed modes we are much more uncertain, it being not so easy to determine of several actions whether they are to be called "justice" or "cruelty," "liberality" or "prodigality." And so, in referring our ideas to those of other men called by the same names, ours may be false; and the idea in our minds, which we express by the word "justice," may, perhaps, be that which ought to have another name.

First: Simple ideas in this sense not false, and why.—First: Our simple ideas being barely such perceptions as God has fitted us to receive, and given power to external objects to produce in us by established laws and ways, suitable to his wisdom and goodness, though incomprehensible to us; their truth consists in nothing else but in such appearances as are produced in us, and must be suitable to those powers he has placed in external objects, or else they could not be produced in us: and thus answering those powers, they are, what they should be, true ideas. Nor do they become liable to any imputation of falsehood, if the mind judges these ideas to be in the things themselves.

Secondly: Modes not false.—Secondly: Neither can our complex ideas of modes, in reference to the essence of anything really existing, be false. Because whatever complex idea I have of any mode, it hath no reference to any pattern existing, and made by nature: it is not supposed to contain in it any other ideas than what it hath, nor to represent anything but such a complication of ideas as it does.

Thirdly: Ideas of substances when false.—Thirdly: Our complex ideas of substances, being all referred to patterns in things themselves, may be false. That they are all false when looked upon as the representations of the unknown essences of things, is so evident that there needs nothing to be said of it. I shall therefore pass over that chimerical supposition, and consider them as collections of simple ideas in the mind, taken from combinations of simple ideas existing together constantly in things, of which patterns they are the supposed copies: and in this reference of them to the existence of things, they are false ideas: (1.) When they put together

simple ideas, which in the real existence of things have no union; as when to the shape and size that exist together in a horse, is joined in the same complex idea the power of barking like a dog; which three ideas, however put together into one in the mind, were never united in nature; and this therefore may be called a false idea of a horse. (2.) Ideas of substances are in this respect also false, when, from any collection of simple ideas that do always exist together, there is separated by a direct negation, any other simple idea which is constantly joined with them.

Ideas in themselves neither true nor false.—Any idea, then, which we have in our minds, whether conformable or not to the existence of things, or to any ideas in the minds of other men, cannot properly for this alone be called false. For these representations, if they have nothing in them but what is really existing in things without, cannot be thought false, being exact representations of something: nor yet if they have anything in them differing from the reality of things, can they properly be said to be false representations or ideas of things they do not represent.

More properly to be called "right" or "wrong."—Upon the whole matter, I think that our ideas, as they are considered by the mind, either in reference to the proper signification of their names, or in reference to the reality of things, may very fitly be called "right" or "wrong" ideas, according as they agree or disagree to those patterns to which they are referred. But if anyone had rather call them "true" or "false," it is fit he use a liberty which everyone has to call things by those names he thinks best; though, in propriety of speech, "truth" or "falsehood" will, I think, scarce agree to them, but as they, some way or other, virtually contain in them some mental proposition. The ideas that are in a man's mind, simply considered, cannot be wrong, unless complex ones, wherein inconsistent parts are jumbled together. All other ideas are in themselves right; and the knowledge about them, right and true knowledge: but when we come to refer them to anything, as to their patterns and archetypes, then they are capable of being wrong, as far as they disagree with such archetypes.

XXXIII. OF THE ASSOCIATION OF IDEAS

Something unreasonable in most men.—There is scarce anyone that does not observe something that seems odd to him, and is in itself really extravagant, in the opinions, reasonings, and actions of other men. The least flaw of this kind, if at all different from his own, everyone is quick-sighted enough to espy in another, and will by the authority of reason forwardly condemn, though he be guilty of much greater unreasonableness in his own tenets and conduct, which he never perceives, and will very hardly, if at all, be convinced of.

A degree of madness.—I shall be pardoned for calling it by so harsh a name as "madness," when it is considered, that opposition to reason deserves that name, and is really madness; and there is scarce a man so free from it but that if he should always, on all occasions, argue or do as in some cases he constantly does, would not be thought fitter for Bedlam than civil conversation. I do not here mean when he is under the power of an unruly passion, but in the steady calm course of his life. That which will yet more apologize for this harsh name, and ungrateful imputation on the greatest part of mankind, is, that inquiring a little by the by into the nature of madness, I found it to spring from the very same root, and to depend on the very same cause, we are here speaking of. This consideration of the thing itself, at a time when I thought not the least on the subject which I am now treating of, suggested it to me. And if this be a weakness to which all men are so liable, if this be a taint which so universally infects mankind, the greater care should be taken to lay it open under its due name, thereby to excite the greater care in its prevention and cure.

From a wrong connexion of ideas.—Some of our ideas have a natural correspondence and connexion one with another; it is the office and excellency of our reason to trace these, and hold them together in that union and correspondence which is founded in their peculiar beings. Besides this, there is another connexion of ideas wholly owing to chance or custom: ideas that in themselves are not at all of kin, come to be so united in some men's minds that it is very hard to separate them; they always keep in company, and the one no sooner at any time comes into the understanding, but its associate appears with it; and if they are more than two which are thus united, the whole gang, always inseparable, show themselves together.

A great cause of errors.—This wrong connexion in our minds of ideas, in themselves loose and independent one of another, has such an influence, and is of so great force, to set us awry in our actions, as well moral as natural, passions, reasonings, and notions themselves, that perhaps there is not any one thing that deserves more to be looked after.

Book Three

I. OF WORDS OR LANGUAGE IN GENERAL

Man fitted to form articulate sounds.—God, having designed man for a sociable creature, made him not only with an inclination and under a

necessity to have fellowship with those of his own kind, but furnished him also with language, which was to be the great instrument and common tie of society. Man therefore had by nature his organs so fashioned as to be fit to frame articulate sounds, which we call "words." But this was not enough to produce language; for parrots and several other birds will be taught to make articulate sounds distinct enough, which yet by no means are capable of language.

To make them signs of ideas.—Besides articulate sounds, therefore, it was farther necessary that he should be able to use these sounds as signs of internal conceptions, and to make them stand as marks for the ideas within his own mind; whereby they might be made known to others, and the thoughts of men's minds be conveyed from one to another.

To make general signs.—But neither was this sufficient to make words so useful as they ought to be. It is not enough for the perfection of language that sounds can be made signs of ideas, unless those signs can be so made use of as to comprehend several particular things: for the multiplication of words would have perplexed their use, had every particular thing need of a distinct name to be signified by. To remedy this inconvenience, language had yet a farther improvement in the use of general terms, whereby one word was made to mark a multitude of particular existences: which advantageous use of sounds was obtained only by the difference of the ideas they were made signs of: those names becoming general which are made to stand for general ideas, and those remaining particular where the ideas they are used for are particular.

Words ultimately derived from such as signify sensible ideas.—It may also lead us a little towards the original of all our notions and knowledge, if we remark how great a dependence our words have on common sensible ideas; and how those which are made use of to stand for actions and notions quite removed from sense, have their rise from thence, and from obvious sensible ideas are transferred to more abstruse significations, and made to stand for ideas that come not under the cognizance of our senses.

Distribution.—But, to understand better the use and force of language as subservient to instruction and knowledge, it will be convenient to consider,

First: To what it is that names, in the use of language, are immediately applied.

Secondly: Since all (except proper) names are general, and so stand not particularly for this or that single thing, but for sorts and ranks of things, it will be necessary to consider, in the next place, what the sorts and kinds, or, if you rather like the Latin names, what the species and genera of things are, wherein they consist, and how they come to be made. These being (as they ought) well looked into, we shall the better come to find the right use of words, the natural advantages and defects of lan-

guage, and the remedies that ought to be used to avoid the inconveniences of obscurity or uncertainty in the signification of words; without which it is impossible to discourse with any clearness or order concerning knowledge: which being conversant about propositions, and those most commonly universal ones, has greater connexion with words than perhaps is suspected.

II. OF THE SIGNIFICATION OF WORDS

Words are sensible signs necessary for communication.—Man, though he have great variety of thoughts, and such from which others as well as himself might receive profit and delight, yet they are all within his own breast, invisible, and hidden from others, nor can of themselves be made to appear. The comfort and advantage of society not being to be had without communication of thoughts, it was necessary that man should find out some external sensible signs, whereby those invisible ideas which his thoughts are made up of might be made known to others. For this purpose nothing was so fit, either for plenty or quickness, as those articulate sounds which, with so much ease and variety, he found himself able to make.

Words are the sensible signs of his ideas who uses them.—The use men have of these marks being either to record their own thoughts for the assistance of their own memory, or, as it were, to bring out their ideas, and lay them before the view of others: words in their primary or immediate signification stand for nothing but the ideas in the mind of him that uses them, how imperfectly soever or carelessly those ideas are collected from the things which they are supposed to represent. When a man speaks to another, it is that he may be understood; and the end of speech is, that those sounds, as marks, may make known his ideas to the hearer. That, then, which words are the marks of are the ideas of the speaker: nor can anyone apply them, as marks, immediately to any thing else but the ideas that he himself hath. For, this would be to make them signs of his own conceptions, and yet apply them to other ideas; which would be to make them signs and not signs of his ideas at the same time; and so, in effect to have no signification at all. Words being voluntary signs, they cannot be voluntary signs imposed by him on things he knows not. That would be to make them signs of nothing, sounds without signification. A man cannot make his words the signs either of qualities in things, or of conceptions in the mind of another, whereof he has none in his own. Till he has some ideas of his own, he cannot suppose them to correspond with the conceptions of another man, nor can he use any signs for them: for thus they would be the signs of he knows not what, which is in truth to be the signs of nothing. But when he represents to himself other men's ideas by some of his own, if he consent to give them the same names that other men do, it is still to his own ideas; to ideas that he has, and not to ideas that he has not.

Words often secretly referred.—But though words, as they are used by men, can properly and immediately signify nothing but the ideas that are in the mind of the speaker, yet they in their thoughts give them a secret reference to two other things.

First: To the ideas in other men's minds.—First: They suppose their words to be marks of the ideas in the minds also of other men, with whom they communicate: for else they should talk in vain, and could not be understood, if the sounds they applied to one idea were such as by the hearer were applied to another, which is to speak two languages.

Secondly: To the reality of things.—Secondly: Because men would not be thought to talk barely of their own imaginations, but of things as really they are; therefore they often suppose their words to stand also for the reality of things.

Their signification perfectly arbitrary.—Words, by long and familiar use, as has been said, come to excite in men certain ideas so constantly and readily, that they are apt to suppose a natural connexion between them. But that they signify only men's peculiar ideas, and that by a perfectly arbitrary imposition, is evident in that they often fail to excite in others (even that use the same language) the same ideas we take them to be the signs of: and every man has so inviolable a liberty to make words stand for what ideas he pleases, that no one hath the power to make others have the same ideas in their minds that he has, when they use the same words that he does.

III. OF GENERAL TERMS

The greatest part of words general.—All things that exist being particulars, it may perhaps be thought reasonable that words, which ought to be conformed to things, should be so too, I mean in their signification: but yet we find the quite contrary. The far greatest part of words, that make all languages, are general terms: which has not been the effect of neglect or chance, but of reason and necessity.

For every particular thing to have a name is impossible.—First: It is impossible that every particular thing should have a distinct peculiar name. For the signification and use of words depending on that connexion which the mind makes between its ideas and the sounds it uses as signs of them, it is necessary, in the application of names to things, that the mind should have distinct ideas of the things, and retain also the particular name that belongs to every one, with its peculiar appropriation to that idea. But it is beyond the power of human capacity to frame and retain distinct ideas of all the particular things we meet with: every bird and

beast men saw, every tree and plant that affected the senses, could not find a place in the most capacious understanding.

And useless.—Secondly: If it were possible, it would yet be useless, because it would not serve to the chief end of language. Men would in vain heap up names of particular things, that would not serve them to communicate their thoughts. Men learn names, and use them in talk with others, only that they may be understood: which is then only done when, by use or consent, the sound I make by the organs of speech excites, in another man's mind who hears it, the idea I apply it to in mine when I speak it. This cannot be done by names applied to particular things, whereof I alone having the ideas in my mind, the names of them could not be significant or intelligible to another who was not acquainted with all those very particular things which had fallen under my notice.

How general words are made.—The next thing to be considered is, how general words come to be made. For, since all things that exist are only particulars, how come we by general terms, or where find we those general natures they are supposed to stand for? Words become general by being made the signs of general ideas: and ideas become general by separating from them the circumstances of time, and place, and any other ideas that may determine them to this or that particular existence. By this way of abstraction they are made capable of representing more individuals than one; each of which, having in it a conformity to that abstract idea, is (as we call it) of that sort.

General and universal are creatures of the understanding.—To return to general words: it is plain, by what has been said, that general and universal belong not to the real existence of things; but are the inventions and creatures of the understanding, made by it for its own use, and concern only signs, whether words or ideas. Words are general, as has been said, when used for signs of general ideas, and so are applicable indifferently to many particular things; and ideas are general when they are set up as the representatives of many particular things: but universality belongs not to things themselves, which are all of them particular in their existence, even those words and ideas which in their signification are general. When therefore we quit particulars, the generals that rest are only creatures of our own making, their general nature being nothing but the capacity they are put into by the understanding of signifying or representing many particulars. For the signification they have is nothing but a relation that by the mind of man is added to them.

IV. OF THE NAMES OF SIMPLE IDEAS

Names of simple ideas, modes, and substances, have each something peculiar.—Though all words, as I have shown, signify nothing immedi-

ately but the ideas in the mind of the speaker, yet, upon a nearer survey, we shall find that the names of simple ideas, mixed modes and natural substances, have each of them something peculiar, and different from the other.

What a definition is.—I think it is agreed, that a definition is nothing else but "the showing the meaning of one word by several other not synonymous terms." The meaning of words being only the ideas they are made to stand for by him that uses them, the meaning of any term is then showed, or the word is defined, when by other words the idea it is made the sign of and annexed to in the mind of the speaker is, as it were, represented or set before the view of another; and thus its signification ascertained. This is the only use and end of definitions; and therefore the only measure of what is or is not a good definition.

Simple ideas, why undefinable.—This being premised, I say, that "the names of simple ideas," and those only, "are capable of being defined." The reason whereof is this, that the several terms of a definition signifying several ideas, they can all together by no means represent an idea which has no composition at all: and therefore a definition (which is properly nothing but the showing the meaning of one word by several others not signifying each the same thing) can in the names of simple ideas have no place.

The names of complex ideas, when to be made intelligible by words.—Simple ideas, as has been showed, can only be got by experience from those objects which are proper to produce in us those perceptions. When by this means we have our minds stored with them, and know the names for them, then we are in a condition to define, and by definition to understand, the names of complex ideas that are made up of them. But when any term stands for a simple idea that a man has never yet had in his mind, it is impossible, by any words, to make known its meaning to him. When any term stands for an idea a man is acquainted with, but is ignorant that that term is the sign of it, there another name, of the same idea which he has been accustomed to, may make him understand its meaning. But in no case whatsoever is any name of any simple idea capable of a definition.

V. OF THE NAMES OF MIXED MODES AND RELATIONS

They stand for abstract ideas, as other general names.—The names of mixed modes being general, they stand, as has been showed, for sorts or species of things, each of which has its peculiar essence. The essences of these species also, as has been showed, are nothing but the abtract ideas in the mind, to which the name is annexed. Thus far the names and

essences of mixed modes have nothing but what is common to them with other ideas: but if we take a little nearer survey of them, we shall find that they have something peculiar, which, perhaps, may deserve our attention.

First: The ideas they stand for are made by the understanding.—The first particularity I shall observe in them is, that the abstract ideas, or, if you please, the essences of the several species of mixed modes, are made by the understanding: wherein they differ from those of simple ideas; in which sort the mind has no power to make any one, but only receives such as are presented to it by the real existence of things operating upon it.

Secondly: Made arbitrarily, and without patterns.—In the next place, these essences of the species of mixed modes are not only made by the mind, but made very arbitrarily, made without patterns, or reference to any real existence; wherein they differ from those of substances, which carry with them the supposition of some real being from which they are taken, and to which they are conformable. But in its complex ideas of mixed modes, the mind takes a liberty not to follow the existence of things exactly. It unites and retains certain collections as so many distinct specific ideas; whilst others, that as often occur in nature, and are as plainly suggested by outward things, pass neglected without particular names or specifications. Nor does the mind, in these of mixed modes, as in the complex ideas of substances, examine them by the real existence of things, or verify them by patterns containing such peculiar compositions in nature.

But still subservient to the end of language.—But though these complex ideas, or essences of mixed modes, depend on the mind, and are made by it with great liberty; yet they are not made at random, and jumbled together without any reason at all. Though these complex ideas be not always copied from nature, yet they are always suited to the end for which abstract ideas are made: and though they be combinations made of ideas, that are loose enough, and have as little union in themselves, as several other, to which the mind never gives a connexion that combines them into one idea: yet, they are always made for the convenience of communication, which is the chief end of language. The use of language is by short sounds, to signify with ease and despatch general conceptions; wherein not only abundance of particulars may be contained, but also a great variety of independent ideas collected into one complex one. In the making therefore of the species of mixed modes, men have had regard only to such combinations as they had occasion to mention one to another. Those they have combined into distinct complex ideas, and given names to; whilst others that in nature have as near a union, are left loose and unregarded.

VI. OF THE NAMES OF SUBSTANCES

The common names of substances stand for sorts.—The common names of substances, as well as other general terms, stand for sorts: which is nothing else but the being made signs of such complex ideas, wherein several particular substances do or might agree, by virtue of which they are capable of being comprehended in one common conception, and be signified by one name. I say, "do or might agree": for though there be but one sun existing in the world, yet the idea of it being abstracted, so that more substances might each agree in it; it is as much a sort as if there were as many suns as there are stars. They want not their reasons who think there are, and that each fixed star would answer the idea the name "sun" stands for, to one who were placed in a due distance; which, by the way, may show us how much the sorts, or if you please, genera and species, of things depend on such collections of ideas as men have made, and not on the real nature of things: since it is not impossible but that, in propriety of speech, that might be a sun to one which is a star to another.

The essence of each sort is the abstract idea.—The measure and boundary of each sort or species whereby it is constituted that particular sort and distinguished from others, is that we call its "essence," which is nothing but that abstract idea to which that name is annexed: so that every thing contained in that idea is essential to that sort. This, though it be all the essence of natural substances that we know, or by which we distinguish them into sorts; yet I call it by a peculiar name, the "nominal essence," to distinguish it from that real constitution of substances upon which depends this nominal essence, and all the properties of that sort; which therefore, as has been said, may be called the "real essence."

Nothing essential to individuals.—That "essence," in the ordinary use of the word, relates to sorts, and that it is considered in particular beings no farther than they are ranked into sorts, appears from hence: that take but away the abstract ideas by which we sort individuals, and rank them under common names, and then the thought of anything essential to any of them instantly vanishes: we have no notion of the one without the other; which plainly shows their relation. It is necessary for me to be as I am: God and nature has made me so: but there is nothing I have is essential to me.

The nominal essence bounds the species.—The next thing to be considered is, by which of those essences it is that substances are determined into sorts or species; and that, it is evident, is by the nominal essence. For it is that alone that the name, which is the mark of the sort, signifies. It is impossible therefore that any thing should determine the sorts of things

which we rank under general names, but that idea which that name is designed as a mark for; which is that, as has been shown, which we call the "nominal essence." Why do we say, "This is a horse, and that a mule; this is an animal, that an herb"? How comes any particular thing to be of this or that sort, but because it has that nominal essence, or, which is all one, agrees to that abstract idea that name is annexed to? And I desire anyone but to reflect on his own thoughts when he hears or speaks any of those or other names of substances, to know what sort of essences they stand for.

And that the species of things to us are nothing but the ranking them under distinct names, according to the complex ideas in us, and not according to precise, distinct, real essences in them, is plain from hence, that we find many of the individuals that are ranked into one sort, called by one common name, and so received as being of one species, have yet qualities depending on their real constitutions, as far different one from another as from others from which they are accounted to differ specifically. This, as it is easy to be observed by all who have to do with natural bodies, so chymists especially are often, by sad experience, convinced of it, when they, sometimes in vain, seek for the same qualities in one parcel of sulphur, antimony, or vitriol, which they have found in others. For though they are bodies of the same species, having the same nominal essence, under the same name; yet do they often, upon severe ways of examination, betray qualities so different one from another as to frustrate the expectation and labour of very wary chymists. But if things were distinguished into species according to their real essences, it would be as impossible to find different properties in any two individual substances of the same species, as it is to find different properties in two circles or two equilateral triangles. That is properly the essence to us which determines every particular to this or that classis; or, which is the same thing, to this or that general name: and what can that be else but that abstract idea to which that name is annexed? and so has, in truth, a reference, not so much to the being of particular things as to their general denominations.

Difficulties against a certain number of real essences.—To distinguish substantial beings into species, according to the usual supposition, that there are certain precise essences or forms of things whereby all the individuals existing are by nature distinguished into species, these things are necessary:

First: To be assured that nature, in the production of things, always designs them to partake of certain regulated, established essences, which are to be the models of all things to be produced. This, in that crude sense it is usually proposed, would need some better explication before it can fully be assented to.

Secondly: It would be necessary to know whether nature always at-

tains that essence it designs in the production of things. The irregular and monstrous births that in divers sorts of animals have been observed, will always give us reason to doubt of one or both of these.

Thirdly: It ought to be determined whether those we call "monsters" be really a distinct species according to the scholastic notion of the word "species"; since it is certain that every thing that exists has its particular constitution: and yet we find, that some of these monstrous productions have few or none of those qualities which are supposed to result from and accompany the essence of that species from whence they derive their originals, and to which by their descent they seem to belong.

Our nominal essences of substances, not perfect collections of properties.—Fourthly: The real essences of those things which we distinguish into species, and as so distinguished we name, ought to be known; i.e., we ought to have ideas of them. But since we are ignorant in these four points, the supposed real essences of things stand us not instead for the distinguishing substances into species.

Fifthly: The only imaginable help in this case would be, that having framed perfect complex ideas of the properties of things, flowing from their different real essences, we should thereby distinguish them into species. But neither can this be done: for, being ignorant of the real essence itself, it is impossible to know all those properties that flow from it, and are so annexed to it that, any one of them being away, we may certainly conclude that that essence is not there, and so the thing is not of that species. We can never know what are the precise number of properties depending on the real essence of gold; any one of which failing, the real essence of gold, and consequently gold, would not be there, unless we knew the real essence of gold itself, and by that determined that species. By the word "gold" here, I must be understood to design a particular piece of matter, v.g., the last guinea that was coined. For if it should stand here in its ordinary signification for that complex idea which I or anyone else calls "gold," i.e., for the nominal essence of gold, it would be jargon: so hard is it to show the various meaning and imperfection of words, when we have nothing else but words to do it by.

By all which it is clear, that our distinguishing substances into species by names, is not at all founded on their real essences; nor can we pretend to arrange and determine them exactly into species according to internal essential differences.

But such a collection as our name stands for.—But since, as has been remarked, we have need of general words, though we know not the real essences of things; all we can do is to collect such a number of simple ideas as by examination we find to be united together in things existing, and thereof to make one complex idea. Which, though it be not the real essence of any substance that exists, is yet the specific essence to which

our name belongs, and is convertible with it; by which we may at least try the truth of these nominal essences. For example: some there be that say, that the essence of body is extension; if it be so, we can never mistake in putting the essence of any thing for the thing itself. Let us, then, in discourse put extension for body; and when we would say that body moves, let us say that extension moves, and see how it will look. He that should say, that one extension by impulse moves another extension, would, by the bare expression, sufficiently show the absurdity of such a notion. The "essence" of any thing in respect of us, is the whole complex idea comprehended and marked by that name; and in substances, besides the several distinct simple ideas that make them up, the confused one of substance, or of an unknown support and cause of their union, is always a part: and therefore the essence of body is not bare extension, but an extended solid thing; and so to say, "An extended solid thing moves or impels another," is all one, and as intelligible, as to say, "Body moves or impels." Likewise to say that "a rational animal is capable of conversation," is all one as to say, "a man." But no one will say, that rationality is capable of conversation, because it makes not the whole essence to which we give the name "man."

The more general our ideas are, the more incomplete and partial they are.—If the number of simple ideas that make the nominal essence of the lowest species or first sorting of individuals, depends on the mind of man variously collecting them, it is much more evident that they do so in the more comprehensive classes, which by the masters of logic are called genera. These are complex ideas designedly imperfect: and it is visible at first sight that several of those qualities that are to be found in the things themselves, are purposely left out of generical ideas. For as the mind, to make general ideas comprehending several particulars, leaves out those of time, and place, and such other that make them incommunicable to more than one individual; so, to make other yet more general ideas that may comprehend different sorts, it leaves out those qualities that distinguish them, and puts into its new collection only such ideas as are common to several sorts.

The same convenience that made men express several parcels of yellow matter coming from Guinea and Peru under one name, sets them also upon making of one name that may comprehend both gold, and silver, and some other bodies of different sorts. This is done by leaving out those qualities which are peculiar to each sort; and retaining a complex idea made up of those that are common to them all. To which the name "metal" being annexed, there is a genus constituted; the essence whereof being that abstract idea, containing only malleableness and fusibility, with certain degrees of weight and fixedness, wherein some bodies of several kinds agree, leaves out the colour, and other qualities peculiar to gold

and silver, and the other sorts comprehended under the name "metal." Whereby it is plain that men follow not exactly the patterns set them by nature, when they make their general ideas of substances; since there is no body to be found which has barely malleableness and fusibility in it, without other qualities as inseparable as those. But men, in making their general ideas, seeking more the convenience of language and quick despatch by short and comprehensive signs, than the true and precise nature of things as they exist, have, in the framing their abstract ideas, chiefly pursued that end, which was, to be furnished with store of general and variously comprehensive names. So that in this whole business of genera and species, the genus, or more comprehensive, is but a partial conception of what it is in the species, and the species but a partial idea of what is to be found in each individual. If, therefore, anyone will think that a man, and a horse, and an animal, and a plant, &c., are distinguished by real essences made by nature, he must think nature to be very liberal of these real essences, making one for body, another for an animal, and another for a horse, and all these essences liberally bestowed upon Bucephalus. But if we would rightly consider what is done in all these genera and species, or sorts, we should find that there is no new thing made, but only more or less comprehensive signs whereby we may be enabled to express, in a few syllables, great numbers of particular things, as they agree in more or less general conceptions which we have framed to that purpose. In all which we may observe, that the more general term is always the name of a less complex idea; and that each genus is but a partial conception of the species comprehended under it. So that, if these abstract general ideas be thought to be complete, it can only be in respect of a certain established relation between them and certain names which are made use of to signify them; and not in respect of any thing existing, as made by nature.

This all accommodated to the end of speech.—This is adjusted to the true end of speech, which is, to be the easiest and shortest way of communicating our notions. For thus he that would make and discourse of things as they agreed in the complex idea of extension and solidity, needed but use the word "body," to denote all such. He that to these would join others, signified by the words "life," "sense," and "spontaneous motion," needed but use the word "animal," to signify all which partook of those ideas: and he that had made a complex idea of a body, with life, sense, and motion, with the faculty of reasoning, and a certain shape joined to it, needed but use the short monosyllable "man," to express all particulars that correspond to that complex idea. This is the proper business of genus and species; and this men do, without any consideration of real essences or substantial forms, which come not within the reach of our knowledge

when we think of those things; nor within the signification of our words when we discourse with others.

VII. OF ABSTRACT AND CONCRETE TERMS

Abstract terms not predicable one of another, and why.—The ordinary words of language, and our common use of them, would have given us light into the nature of our ideas, if they had been but considered with attention. The mind, as has been shown, has a power to abstract its ideas, and so they become essences, general essences, whereby the sorts of things are distinguished. Now each abstract idea being distinct, so that of any two the one can never be the other, the mind will, by its intuitive knowledge, perceive their difference; and therefore in propositions no two whole ideas can ever be affirmed one of another. All our affirmations, then, are only inconcrete, which is the affirming not one abstract idea to be another, but one abstract idea to be joined to another; which abstract ideas, in substances, may be of any sort; in all the rest, are little else but of relations; and in substances the most frequent are of powers.

They show the difference of our ideas.—This distinction of names shows us also the difference of our ideas: for if we observe them, we shall find that our simple ideas have all abstract as well as concrete names: the one whereof is (to speak the language of grammarians) a substantive, the other an adjective; as, "whiteness, white, sweetness, sweet." The like also holds in our ideas of modes and relations, as, "justice, just, equality, equal"; only with this difference, that some of the concrete names of relations, amongst men chiefly, are substantives, as paternitas, pater; whereof it were easy to render a reason. But as to our ideas of substances, we have very few or no abstract names at all.

VIII. OF THE IMPERFECTION OF WORDS

Words are used for recording and communicating our thoughts.—From what has been said in the foregoing chapters, it is easy to perceive what imperfection there is in language, and how the very nature of words makes it almost unavoidable for many of them to be doubtful and uncertain in their significations. To examine the perfection or imperfection of words, it is necessary first to consider their use and end: for as they are more or less fitted to attain that, so they are more or less perfect. We have, in the former part of this discourse, often, upon occasion, mentioned a double use of words.

First: One for the recording of our own thoughts.

Secondly: The other for the communicating of our thoughts to others. Any words will serve for recording.—As to the first of these, for the recording our own thoughts for the help of our own memories, whereby, as it were, we talk to ourselves, any words will serve the turn. For, since sounds are voluntary and indifferent signs of any ideas, a man may use what words he pleases to signify his own ideas to himself: and there will be no imperfection in them, if he constantly use the same sign for the same idea: for then he cannot fail of having his meaning understood, wherein consists the right use and perfection of language.

Communication by words civil or philosophical.—Secondly: As to communication of words, that too has a double use.

I. Civil.

II. Philosophical.

First: By their civil use, I mean such a communication of thoughts and ideas by words as may serve for the upholding common conversation and commerce about the ordinary affairs and conveniences of civil life, in the societies of men one amongst another.

Secondly: By the philosophical use of words, I mean such an use of them as may serve to convey the precise notions of things, and to express, in general propositions, certain and undoubted truths which the mind may rest upon and be satisfied with, in its search after true knowledge. These two uses are very distinct; and a great deal less exactness will serve in the one than in the other, as we shall see in what follows.

The imperfection of words is the doubtfulness of their signification.— The chief end of language in communication being to be understood, words serve not well for that end, neither in civil nor philosophical discourse, when any word does not excite in the hearer the same idea which it stands for in the mind of the speaker. Now since sounds have no natural connexion with our ideas, but have all their signification from the arbitrary imposition of men, the doubtfulness and uncertainty of their signification, which is the imperfection we here are speaking of, has its cause more in the ideas they stand for, than in any incapacity there is in one sound more than in another to signify any idea: for in that regard, they are all equally perfect.

That then which makes doubtfulness and uncertainty in the signification of some more than other words, is the difference of ideas they stand for.

With this imperfection, they may serve for civil, but not well for philosophical, use.—It is true, as to civil and common conversation, the general names of substances, regulated in their ordinary signification by some obvious qualities (as by the shape and figure in things of known seminal propagation, and in other substances for the most part by colour, joined with some other sensible qualities) do well enough to design the

things men would be understood to speak of: and so they usually conceive well enough the substances meant by the word "gold" or "apple," to distinguish the one from the other. But in philosophical inquiries and debates, where general truths are to be established, and consequences drawn from positions laid down, there the precise signification of the names of substances will be found not only not to be well established, but also very hard to be so. For example: He that shall make malleableness, or a certain degree of fixedness, a part of his complex idea of gold, may make propositions concerning gold, and draw consequences from them, that will truly and clearly follow from gold taken in such a signification: but yet such as another man can never be forced to admit, nor be convinced of their truth, who makes not malleableness, or the same degree of fixedness, part of that complex idea that the name "gold," in his use of it, stands for.

The names of simple ideas the least doubtful.—From what has been said it is easy to observe, what has been before remarked, viz., that the names of simple ideas are, of all others, the least liable to mistakes, and that for these reasons: first, because the ideas they stand for, being each but one single perception, are much easier got and more clearly retained than the more complex ones; and therefore are not liable to the uncertainty which usually attends those compounded ones of substances and mixed modes, in which the precise number of simple ideas that make them up are not easily agreed, and so readily kept in the mind. And, secondly, because they are never referred to any other essence but barely that perception they immediately signify: which reference is that which renders the significations of the names of substances naturally so perplexed, and gives occasion to so many disputes. Men that do not perversely use their words, or on purpose set themselves to cavil, seldom mistake, in any language which they are acquainted with, the use and signification of the names of simple ideas: white and sweet, yellow and bitter, carry a very obvious meaning with them, which everyone precisely comprehends, or easily perceives he is ignorant of, and seeks to be informed. But what precise collection of simple ideas modesty or frugality stand for in another's use, is not so certainly known. And, however we are apt to think we well enough know what is meant by "gold" or "iron," yet the precise complex idea others make them the signs of is not so certain; and I believe it is very seldom that in speaker and hearer they stand for exactly the same collection. Which must needs produce mistakes and disputes, when they are made use of in discourses wherein men have to do with universal propositions, and would settle in their minds universal truths, and consider the consequences that follow from them.

This should teach us moderation in imposing our own sense of old authors.—Sure I am, that the signification of words, in all languages, depending very much on the thoughts, notions, and ideas of him that uses

them, must unavoidably be of great uncertainty to men of the same lanouage and country. This is so evident in the Greek authors, that he that shall peruse their writings will find, in almost every one of them, a distinct language, though the same words. But when to this natural difficulty in every country there shall be added different countries and remote ages, wherein the speakers and writers had very different notions, tempers, customs, ornaments and figures of speech, &c., every one of which influenced the signification of their words then, though to us now they are jost and unknown, it would become us to be charitable one to another in our interpretations or misunderstanding of those ancient writings; which, though of great concernment to be understood, are liable to the unavoidable difficulties of speech, which (if we except the names of simple ideas, and some very obvious things) is not capable, without a constant defining the terms, of conveying the sense and intention of the speaker without any manner of doubt and uncertainty to the hearer. And in discourses of religion, law, and morality, as they are matters of the highest concernment, so there will be the greatest difficulty.

IX. OF THE ABUSE OF WORDS

Abuse of words.—Besides the imperfection that is naturally in language, and the obscurity and confusion that is so hard to be avoided in the use of words, there are several wilful faults and neglects which men are guilty of in this way of communication, whereby they render these signs less clear and distinct in their signification than naturally they need to be.

First: Words without any, or without clear, ideas.—First: In this kind, the first and most palpable abuse is, the using of words without clear and distinct ideas; or, which is worse, signs without any thing signified. Of these there are two sorts:—

I. One may observe, in all languages, certain words that, if they be examined, will be found, in their first original and their appropriated use, not to stand for any clear and distinct ideas. These, for the most part, the several sects of philosophy and religion have introduced. For their authors or promoters, either affecting something singular, and out of the way of common apprehensions, or to support some strange opinions, or cover some weakness of their hypothesis, seldom fail to coin new words, and such as, when they come to be examined, may justly be called "insignificant terms." For, having either had no determinate collection of ideas annexed to them when they were first invented, or at least such as, if well examined, will be found inconsistent, it is no wonder if afterwards, in the vulgar use of the same party, they remain empty sounds with little or no signification, amongst those who think it enough to have them often

in their mouths, as the distinguishing characters of their church or school, without much troubling their heads to examine what are the precise ideas they stand for.

II. Others there be who extend this abuse yet farther, who take so little care to lay by words which, in their primary notation, have scarce any clear and distinct ideas which they are annexed to, that, by an unpardonable negligence, they familiarly use words which the propriety of language has affixed to very important ideas, without any distinct meaning at all.

Secondly: Unsteady application of them.—Secondly: Another great abuse of words is inconsistency in the use of them. It is hard to find a discourse written of any subject, especially of controversy, wherein one shall not observe, if he read with attention, the same words (and those commonly the most material in the discourse, and upon which the argument turns) used sometimes for one collection of simple ideas, and sometimes for another, which is a perfect abuse of language. Words being intended for signs of my ideas, to make them known to others, not by any natural signification, but by a voluntary imposition, it is plain cheat and abuse when I make them stand sometimes for one thing and sometimes for another: the wilful doing whereof can be imputed to nothing but great folly or greater dishonesty.

Thirdly: Affected obscurity by wrong application.—Another abuse of language is an affected obscurity, by either applying old words to new and unusual significations, or introducing new and ambiguous terms without defining either: or else putting them so together as may confound their ordinary meaning. Though the peripatetic philosophy has been most eminent in this way, yet other sects have not been wholly clear of it. There is scarce any of them that are not cumbered with some difficulties (such is the imperfection of human knowledge), which they have been fain to cover with obscurity of terms and to confound the signification of words, which, like a mist before people's eyes, might hinder their weak parts from being discovered.

Fourthly: Taking them for things.—Fourthly: Another great abuse of words is the taking them for things. This, though it, in some degree, concerns all names in general, yet more particularly affects those of substances. To this abuse those men are most subject who confine their thoughts to any one system, and give themselves up into a firm belief of the perfection of any received hypothesis: whereby they come to be persuaded, that the terms of that sect are so suited to the nature of things that they perfectly correspond with their real existence.

Fifthly: Setting them for what they cannot signify.—Fifthly: Another abuse of words is the setting them in the place of things which they do [not] or can by no means signify. We may observe, that, in the general

names of substances, whereof the nominal essences are only known to us when we put them into propositions, and affirm or deny any thing about them, we do most commonly tacitly suppose or intend they should stand for the real essence of a certain sort of substances.

Sixthly: A supposition that words have a certain and evident signification.—Sixthly: There remains yet another more general, though perhaps less observed, abuse of words; and that is, that men having by a long and familiar use annexed to them certain ideas, they are apt to imagine so near and necessary a connexion between the names and the signification they use them in, that they forwardly suppose one cannot but understand what their meaning is, and therefore one ought to acquiesce in the words delivered; as if it were past doubt that, in the use of those common received sounds, the speaker and hearer had necessarily the same precise ideas. Whence, presuming that when they have in discourse used any term, they have thereby, as it were, set before others the very thing they talk of; and so likewise taking the words of others as naturally standing for just what they themselves have been accustomed to apply them to: they never trouble themselves to explain their own or understand clearly others' meaning. From whence commonly proceeds noise and wrangling, without improvement or information; whilst men take words to be the constant, regular marks of agreed notions, which, in truth, are no more but the voluntary and unsteady signs of their own ideas. And vet men think it strange if, in discourse or (where it is often absolutely necessary) in dispute, one sometimes asks the meaning of their terms; though the arguings one may every day observe in conversation make it evident that there are few names of complex ideas which any two men use for the same just precise collection.

Seventhly: Figurative speech also an abuse of language.-Since wit and fancy finds easier entertainment in the world than dry truth and real knowledge, figurative speeches and allusion in language will hardly be admitted as an imperfection or abuse of it. I confess, in discourses where we seek rather pleasure and delight, than information and improvement, such ornaments as are borrowed from them can scarce pass for faults. But yet, if we would speak of things as they are, we must allow that all the art of rhetoric, besides order and clearness, all the artificial and figurative application of words eloquence hath invented, are for nothing else but to insinuate wrong ideas, move the passions, and thereby mislead the judgment; and so indeed are perfect cheats: and therefore, however laudable or allowable oratory may render them in harangues and popular addresses, they are certainly, in all discourses that pretend to inform or instruct, wholly to be avoided; and, where truth and knowledge are concerned, cannot but be thought a great fault either of the language or person that makes use of them.

X. OF THE REMEDIES OF THE FOREGOING IMPERFECTIONS AND ABUSES

To remedy the defects of speech before mentioned to some degree, and to prevent the inconveniences that follow from them, I imagine the observation of these following rules may be of use, till somebody better able shall judge it worth his while to think more maturely on this matter, and oblige the world with his thoughts on it.

First remedy: To use no word without an idea.—First: A man should take care to use no word without a signification, no name without an idea for which he makes it stand. This rule will not seem altogether needless to anyone who shall take the pains to recollect how often he has met with such words as "instinct," "sympathy," and "antipathy," &c., in the discourse of others, so made use of as he might easily conclude, that those that used them had no ideas in their minds to which they applied them; but spoke them only as sounds, which usually served instead of reasons on the like occasions. Not but that these words and the like have very proper significations in which they may be used; but there being no natural connexion between any words and any ideas, these and any other may be learned by rote, and pronounced or writ by men, who have no ideas in their minds to which they have annexed them, and for which they make them stand; which is necessary they should, if men would speak intelligibly even to themselves alone.

Secondly: To have distinct ideas annexed to them in modes.—Secondly: It is not enough a man uses his words as signs of some ideas: those ideas he annexes them to, if they be simple, must be clear and distinct; if complex, must be determinate; i.e., the precise collection of simple ideas settled in the mind, with that sound annexed to it as the sign of that precise determined collection, and no other. This is very necessary in names of modes, and especially moral words; which, having no settled objects in nature from whence their ideas are taken as from their original, are apt to be very confused. "Justice" is a word in every man's mouth, but most commonly with a very undetermined, loose signification: which will always be so unless a man has in his mind a distinct comprehension of the component parts that complex idea consists of: and if it be decompounded, must be able to resolve it still on till he at last comes to the simple ideas that make it up: and unless this be done, a man makes an ill use of the word, let it be "justice," for example, or any other. I do not say, a man needs stand to recollect, and make this analysis at large, every time the word "justice" comes in his way: but this, at least, is necessary, that he have so examined the signification of that name, and settled the idea of all its parts in his mind, that he can do it when he pleases. If one who makes this complex idea of justice to be such a treatment of the person or goods of another as is according to law, hath not a clear and distinct idea what law is, which makes a part of his complex idea of justice, it is plain his idea of justice itself will be confused and imperfect. This exactness will, perhaps, be judged very troublesome; and therefore most men will think they may be excused from settling the complex ideas of mixed modes so precisely in their minds. But yet I must say, till this be done it must not be wondered that they have a great deal of obscurity and confusion in their own minds, and a great deal of wrangling in their discourses with others.

And conformable in substances.—In the names of substances, for a right use of them something more is required than barely determined ideas. In these the names must also be conformable to things as they exist: but of this, I shall have occasion to speak more at large by and by. This exactness is absolutely necessary in inquiries after philosophical knowledge, and in controversies about truth. And though it would be well, too, if it extended itself to common conversation and the ordinary affairs of life; yet, I think, that is scarce to be expected. Vulgar notions suit vulgar discourses: and both, though confused enough, yet serve pretty well the market and the wake. Merchants and lovers, cooks and tailors, have words wherewithal to despatch their ordinary affairs; and so, I think, might philosophers and disputants too, if they had a mind to understand, and to be clearly understood.

Thirdly: Propriety.—Thirdly: It is not enough that men have ideas, determined ideas, for which they make these signs stand; but they must also take care to apply their words, as near as may be, to such ideas as common use has annexed them to. For, words, especially of languages already framed, being no man's private possession, but the common measure of commerce and communication, it is not for anyone, at pleasure, to change the stamp they are current in, nor alter the ideas they are affixed to; or at least when there is a necessity to do so, he is bound to give notice of it. Men's intentions in speaking are, or at least should be, to be understood; which cannot be without frequent explanations, demands, and other the like incommodious interruptions, where men do not follow common use. Propriety of speech is that which gives our thoughts entrance into other men's minds with the greatest ease and advantage; and therefore deserves some part of our care and study, especially in the names of moral words.

Fourthly: To make known their meaning.—Fourthly: But because common use has not so visibly annexed any signification to words, as to make men know always certainly what they precisely stand for; and because men in the improvement of their knowledge come to have ideas

different from the vulgar and ordinary received ones, for which they must either make new words (which men seldom venture to do, for fear of being thought guilty of affectation or novelty), or else must use old ones in a new signification; therefore after the observation of the foregoing rules, it is sometimes necessary for the ascertaining the signification of words, to declare their meaning; where either common use has left it uncertain and loose (as it has in most names of very complex ideas), or where the term, being very material in the discourse, and that upon which it chiefly turns, is liable to any doubtfulness or mistake.

Book Four

I. OF KNOWLEDGE IN GENERAL

Our knowledge conversant about our ideas.—Since the mind, in all its thoughts and reasonings, hath no other immediate object but its own ideas, which it alone does or can contemplate, it is evident that our knowledge is only conversant about them.

Knowledge is the perception of the agreement or disagreement of two ideas.—Knowledge then seems to me to be nothing but the perception of the connexion and agreement, or disagreement and repugnancy, of any of our ideas. In this alone it consists. Where this perception is, there is knowledge; and where it is not, there, though we may fancy, guess, or believe, yet we always come short of knowledge.

This agreement fourfold.—But, to understand a little more distinctly, wherein this agreement or disagreement consists, I think we may reduce it all to these four sorts: (1.) Identity, or diversity. (2.) Relation. (3.) Co-existence, or necessary connexion. (4.) Real existence.

First: Of identity or diversity.—First: As to the first sort of agreement or disagreement, viz., identity or diversity. It is the first act of the mind, when it has any sentiments or ideas at all, to perceive its ideas, and, so far as it perceives them, to know each what it is, and thereby also to perceive their difference, and that one is not another. This is so absolutely necessary, that without it there could be no knowledge, no reasoning, no imagination, no distinct thoughts at all. By this the mind clearly and infallibly perceives each idea to agree with itself, and to be what it is; and all distinct ideas to disagree, i.e., the one not to be the other: and this it does without pains, labour, or deduction, but at first view, by its natural power of perception and distinction.

Secondly: Relative.—Secondly: The next sort of agreement or dis-

agreement the mind perceives in any of its ideas may, I think, be called "relative," and is nothing but the perception of the relation between any two ideas, of what kind soever, whether substances, modes, or any other. For, since all distinct ideas must eternally be known not to be the same, and so be universally and constantly denied one of another: there could be no room for any positive knowledge at all, if we could not perceive any relation between our ideas, and find out the agreement or disagreement they have one with another, in several ways the mind takes of comparing them.

Thirdly: Of co-existence.—Thirdly: The third sort of agreement or disagreement to be found in our ideas, which the perception of the mind is employed about, is co-existence, or non-co-existence in the same subject; and this belongs particularly to substances.

Fourthly: Of real existence.—Fourthly: The fourth and last sort is that of actual real existence agreeing to any idea. Within these four sorts of agreement or disagreement is, I suppose, contained all the knowledge we have or are capable of; for, all the inquiries that we can make concerning any of our ideas, all that we know or can affirm concerning any of them, is, that it is or is not the same with some other; that it does or or does not always co-exist with some other idea in the same subject; that it has this or that relation to some other idea; or that it has a real existence without the mind.

Knowledge actual or habitual.—There are several ways wherein the mind is possessed of truth, each of which is called "knowledge."

First: There is "actual knowledge," which is the present view the mind has of the agreement or disagreement of any of its ideas, or of the relation they have one to another.

Secondly: A man is said to know any proposition which having been once laid before his thoughts, he evidently perceived the agreement or disagreement of the ideas whereof it consists; and so lodged it in his memory, that whenever that proposition comes again to be reflected on, he, without doubt or hesitation, embraces the right side, assents to and is certain of the truth of it. This, I think, one may call "habitual knowledge"; and thus a man may be said to know all those truths which are lodged in his memory by a foregoing clear and full perception, whereof the mind is assured past doubt as often as it has occasion to reflect on them.

Habitual knowledge twofold.—Of habitual knowledge there are also, vulgarly speaking, two degrees:—

First: The one is of such truths laid up in the memory as, whenever they occur to the mind, it actually perceives the relation is between those ideas. And this is in all those truths whereof we have an intuitive knowledge, where the ideas themselves, by an immediate view, discover their agreement or disagreement one with another.

Secondly: The other is of such truths, whereof the mind having been convinced, it retains the memory of the conviction without the proofs.

II. OF THE DEGREES OF OUR KNOWLEDGE

Intuitive.—All our knowledge consisting, as I have said, in the view the mind has of its own ideas, which is the utmost light and greatest certainty we, with our faculties and in our way of knowledge, are capable of, it may not be amiss to consider a little the degrees of its evidence. The different clearness of our knowledge seems to me to lie in the different way of perception the mind has of the agreement or disagreement of any of its ideas. For if we will reflect on our own ways of thinking, we shall find that sometimes the mind perceives the agreement or disagreement of two ideas immediately by themselves, without the intervention of any other: and this, I think, we may call "intuitive knowledge." For in this the mind is at no pains of proving or examining, but perceives the truth, as the eye doth light, only by being directed towards it.

Demonstrative.—The next degree of knowledge is, where the mind perceives the agreement or disagreement of any ideas, but not immediately. Though wherever the mind perceives the agreement or disagreement of any of its ideas, there be certain knowledge; yet it does not always happen that the mind sees that agreement or disagreement which there is between them, even where it is discoverable; and in that case remains in ignorance, and at most gets no farther than a probable conjecture. The reason why the mind cannot always perceive presently the agreement or disagreement of two ideas, is, because those ideas concerning whose agreement or disagreement the inquiry is made, cannot by the mind be so put together as to show it. In this case then, when the mind cannot so bring its ideas together as, by their immediate comparison and, as it were, juxtaposition or application one to another, to perceive their agreement or disagreement, it is fain, by the intervention of other ideas (one or more, as it happens), to discover the agreement or disagreement which it searches; and this is that which we call "reasoning."

Sensitive knowledge of particular existence.—These two, viz., intuition and demonstration, are the degrees of our knowledge; whatever comes short of one of these, with what assurance soever embraced, is but faith or opinion, but not knowledge, at least in all general truths. There is, indeed, another perception of the mind employed about the particular existence of finite beings without us; which, going beyond bare probability, and yet not reaching perfectly to either of the foregoing degrees of certainty, passes under the name of "knowledge." There can be nothing more certain, than that the idea we receive from an external object is in

our minds; this is intuitive knowledge. But whether there be any thing more than barely that idea in our minds, whether we can thence certainly infer the existence of any thing without us which corresponds to that idea, is that whereof some men think there may be a question made; because men may have such ideas in their minds when no such thing exists, no such object affects their senses. But yet here, I think, we are provided with an evidence that puts us past doubting; for I ask anyone, whether he be not invincibly conscious to himself of a different perception when he looks on the sun by day, and thinks on it by night; when he actually tastes wormwood, or smells a rose, or only thinks on that savour or odour? We as plainly find the difference there is between any idea revived in our minds by our own memory, and actually coming into our minds by our senses, as we do between any two distinct ideas.

III. OF THE EXTENT OF HUMAN KNOWLEDGE

Knowledge, as has been said, lying in the perception of the agreement or disagreement of any of our ideas, it follows from hence, that,

First: No farther than we have ideas.—First: We can have knowledge no farther than we have ideas.

Secondly: No farther than we can perceive their agreement or disagreement.—Secondly: That we can have no knowledge farther than we can have perception of that agreement or disagreement: which perception being, (1.) either by intuition, or the immediate comparing any two ideas; or, (2.) by reason, examining the agreement or disagreement of two ideas by the intervention of some others; or, (3.) by sensation, perceiving the existence of particular things; hence it also follows,

Thirdly: Intuitive knowledge extends itself not to all the relations of all our ideas.—Thirdly: That we cannot have an intuitive knowledge that shall extend itself to all our ideas, and all that we would know about them; because we cannot examine and perceive all the relations they have one to another by juxtaposition, or an immediate comparison one with another.

Fourthly: Nor demonstrative knowledge.—Fourthly: It follows also, from what is above observed, that our rational knowledge cannot reach to the whole extent of our ideas: because between two different ideas we would examine, we cannot always find such mediums as we can connect one to another with an intuitive knowledge, in all the parts of the deduction; and wherever that fails, we come short of knowledge and demonstration.

Fifthly: Sensitive knowledge narrower than either.—Fifthly: Sensitive knowledge, reaching no farther than the existence of things actually present to our senses, is yet much narrower than either of the former.

Sixthly: Our knowledge therefore narrower than our ideas.—From all which it is evident, that the extent of our knowledge comes not only short of the reality of things, but even of the extent of our own ideas.

How far our knowledge reaches.—The affirmations or negations we make concerning the ideas we have, may, as I have before intimated in general, be reduced to these four sorts, viz., identity, co-existence, relation, and real existence. I shall examine how far our knowledge extends in each of these:—

First: Our knowledge of identity and diversity, as far as our ideas.— First: As to identity and diversity, in this way of the agreement or disagreement of ideas, our intuitive knowledge is as far extended as our ideas themselves; and there can be no idea in the mind which does not presently, by an intuitive knowledge, perceive to be what it is, and to be different from any other.

Secondly: Of co-existence, a very little way.—Secondly: As to the second sort, which is the agreement or disagreement of our ideas in co-existence, in this our knowledge is very short, though in this consists the greatest and most material part of our knowledge concerning substances.

Thirdly: Of other relations, it is not easy to say how far.—As to the third sort of our knowledge, viz., the agreement or disagreement of any of our ideas in any other relation: this, as it is the largest field of our knowledge, so it is hard to determine how far it may extend: because the advances that are made in this part of knowledge depending on our sagacity in finding intermediate ideas that may show the relations and habitudes of ideas, whose co-existence is not considered, it is a hard matter to tell when we are at an end of such discoveries, and when reason has all the helps it is capable of for the finding of proofs, or examining the agreement or disagreement of remote ideas.

Fourthly: Of real existence. We have an INTUITIVE knowledge of our own, DEMONSTRATIVE of God's, SENSITIVE of some few other things.—As to the fourth sort of our knowledge, viz., of the real actual existence of things, we have an intuitive knowledge of our own existence; a demonstrative knowledge of the existence of a God; of the existence of anything else, we have no other but a sensitive knowledge, which extends not beyond the objects present to our senses.

Our ignorance great.—Our knowledge being so narrow, as I have showed, it will, perhaps, give us some light into the present state of our minds, if we look a little into the dark side, and take a view of our ignorance: which, being infinitely larger than our knowledge, may serve much to the quieting of disputes and improvement of useful knowledge, if, discovering how far we have clear and distinct ideas, we confine our thoughts within the contemplation of those things that are within the

reach of our understandings, and launch not out into that abyss of darkness out of a presumption that nothing is beyond our comprehension. But to be satisfied of the folly of such a conceit, we need not go far. He that knows any thing, knows this in the first place, that he need not seek long for instances of his ignorance. The meanest and most obvious things that come in our way have dark sides, that the quickest sight cannot penetrate into. The clearest and most enlarged understandings of thinking men find themselves puzzled and at a loss in every particle of matter. We shall the less wonder to find it so when we consider the causes of our ignorance, which, from what has been said, I suppose, will be found to be chiefly these three:

First: Want of ideas.

SECONDLY: Want of a discoverable connexion between the ideas we have.

THIRDLY: Want of tracing and examining our ideas.

First: One cause of it, want of ideas, either such as we have no conception of.—First: There are some things, and those not a few, that we are ignorant of for want of ideas.

First: All the simple ideas we have are confined to those we receive from corporeal objects by sensation, and from the operations of our own minds as the objects of reflection. But how much these few and narrow inlets are disproportionate to the vast whole extent of all beings, will not be hard to persuade those who are not so foolish as to think their span the measure of all things.

Or want of such ideas as particularly we have not, because of their remoteness.—Secondly: Another great cause of ignorance is the want of ideas we are capable of. As the want of ideas which our faculties are not able to give us shuts us wholly from those views of things which it is reasonable to think other beings, perfecter than we, have, of which we know nothing; so the want of ideas I now speak of keeps us in ignorance of things we conceive capable of being known to us. Bulk, figure, and motion, we have ideas of. But though we are not without ideas of these primary qualities of bodies in general, yet not knowing what is the particular bulk, figure, and motion of the greatest part of the bodies of the universe, we are ignorant of the several powers, efficacies, and ways of operation, whereby the effects which we daily see are produced. These are hid from us in some things by being too remote; and, in others, by being too minute.

Secondly: Want of a discoverable connexion between ideas we have.

—Secondly: What a small part of the substantial beings that are in the universe the want of ideas leaves open to our knowledge, we have seen. In the next place, another cause of ignorance of no less moment is a want of a discoverable connexion between those ideas which we have. For

wherever we want that, we are utterly uncapable of universal and certain knowledge; and are, as in the former case, left only to observation and experiment; which how narrow and confined it is, how far from general knowledge, we need not be told.

Thirdly: Want of tracing our ideas.—Thirdly: Where we have adequate ideas, and where there is a certain and discoverable connexion between them, yet we are often ignorant for want of tracing those ideas which we have or may have; and for want of finding out those intermediate ideas which may show us what habitude of agreement or disagreement they have one with another. And thus many are ignorant of mathematical truths, not out of any imperfection of their faculties, or uncertainty in the things themselves; but for want of application in acquiring, examining, and by due ways comparing those ideas. That which has most contributed to hinder the due tracing of our ideas, and finding out their relations and agreements or disagreements one with another has been, I suppose, the ill use of words. It is impossible that men should ever truly seek, or certainly discover, the agreement or disagreement of ideas themselves, whilst their thoughts flutter about, or stick only in sounds of doubtful and uncertain significations.

IV. OF THE REALITY OF HUMAN KNOWLEDGE

IT IS EVIDENT the mind knows not things immediately, but only by the intervention of the ideas it has of them. Our knowledge therefore is real only so far as there is a conformity between our ideas and the reality of things. But what shall be here the criterion? How shall the mind, when it perceives nothing but its own ideas, know that they agree with things themselves? This, though it seems not to want difficulty, yet I think there be two sorts of ideas that we may be assured agree with things.

As, first, all simple ideas do.—First: The first are simple ideas, which since the mind, as has been showed, can by no means make to itself, must necessarily be the product of things operating on the mind in a natural way, and producing therein those perceptions which by the wisdom and will of our Maker they are ordained and adapted to. From whence it follows, that simple ideas are not fictions of our fancies, but the natural and regular productions of things without us really operating upon us; and so carry with them all the conformity which is intended, or which our state requires; for they represent to us things under those appearances which they are fitted to produce in us, whereby we are enabled to distinguish the sorts of particular substances, to discern the states they are in, and so to take them for our necessities, and apply them to our uses.

Secondly: All complex ideas except of substances.—Secondly: All our

complex ideas except those of substances being archetypes of the mind's own making, not intended to be the copies of any thing, nor referred to the existence of any thing, as to their originals, cannot want any conformity necessary to real knowledge. For that which is not designed to represent any thing but itself, can never be capable of a wrong representation, nor mislead us from the true apprehension of any thing by its dislikeness to it; and such, excepting those of substances, are all our complex ideas: which, as I have showed in another place, are combinations of ideas which the mind by its free choice puts together without considering any connexion they have in nature. And hence it is, that in all these sorts the ideas themselves are considered as the archetypes, and things no otherwise regarded but as they are conformable to them. So that we cannot but be infallibly certain, that all the knowledge we attain concerning these ideas is real, and reaches things themselves; because in all our thoughts, reasonings, and discourses of this kind, we intend things no farther than as they are conformable to our ideas. So that in these we cannot miss of a certain and undoubted reality.

V. OF TRUTH IN GENERAL

What truth is.—"What is truth?" was an inquiry many ages since; and it being that which all mankind either do or pretend to search after, it cannot but be worth our while carefully to examine wherein it consists; and so acquaint ourselves with the nature of it, as to observe how the mind distinguishes it from falsehood.

A right joining or separating of signs; i.e., ideas or words.—Truth then seems to me, in the proper import of the word, to signify nothing but the joining or separating of signs, as the things signified by them do agree or disagree one with another. The joining or separating of signs here meant, is what by another name we call "proposition." So that truth properly belongs only to propositions: whereof there are two sorts, viz., mental and verbal; as there are two sorts of signs commonly made use of, viz., ideas and words.

Which make mental or verbal propositions.—To form a clear notion of truth, it is very necessary to consider truth of thought, and truth of words, distinctly one from another: but yet it is very difficult to treat them asunder; because it is unavoidable, in treating of mental propositions, to make use of words; and then the instances given of mental propositions cease immediately to be barely mental, and become verbal. For, a mental proposition being nothing but a bare consideration of the ideas as they are in our minds stripped of names, they lose the nature of purely mental propositions as soon as they are put into words.

Mental propositions are very hard to be treated of.—And that which makes it yet harder to treat of mental and verbal propositions separately, is, that most men, if not all, in their thinking and reasonings within themselves, make use of words instead of ideas, at least when the subject of their meditation contains in it complex ideas. Which is a great evidence of the imperfection and uncertainty of our ideas of that kind, and may, if attentively made use of, serve for a mark to show us what are those things we have clear and perfect established ideas of, and what not.

When mental propositions contain real truth, and when verbal.— Everyone's experience will satisfy him that the mind, either by perceiving or supposing the agreement or disagreement of any of its ideas, does tacitly within itself put them into a kind of proposition affirmative or negative, which I have endeavoured to express by the terms "putting together" and "separating." But this action of the mind, which is so familiar to every thinking and reasoning man, is easier to be conceived by reflecting on what passes in us when we affirm or deny, than to be explained by words. When ideas are so put together or separated in the mind, as they or the things they stand for do agree or not, that is, as I may call it "mental truth." But truth of words is something more, and that is the affirming or denying of words one of another, as the ideas they stand for agree or disagree: and this again is twofold; either purely verbal and trifling, which I shall speak of, or real and instructive, which is the object of that real knowledge which we have spoken of already.

Moral and metaphysical truth.—Besides truth taken in the strict sense before mentioned, there are other sorts of truths; as, (1.) Moral truth, which is speaking things according to the persuasion of our own minds, though the proposition we speak agree not to the reality of things. (2.) Metaphysical truth, which is nothing but the real existence of things conformable to the ideas to which we have annexed their names. This, though it seems to consist in the very beings of things, yet when considered a little nearly will appear to include a tacit proposition, whereby the mind joins that particular thing to the idea it had before settled with a name to it.

VI. OF UNIVERSAL PROPOSITIONS, THEIR TRUTH AND CERTAINTY

Treating of words necessary to knowledge.—Though the examining and judging of ideas by themselves, their names being quite laid aside, be the best and surest way to clear and distinct knowledge; yet, through the prevailing custom of using sounds for ideas, I think it is very seldom practised. Everyone may observe how common it is for names to be made

use of instead of the ideas themselves, even when men think and reason within their own breasts; especially if the ideas be very complex, and made up of a great collection of simple ones. This makes the consideration of words and propositions so necessary a part of the treatise of knowledge, that it is very hard to speak intelligibly of the one without explaining the other.

General truths hardly to be understood but in verbal propositions.—
All the knowledge we have being only of particular or general truths, it is evident that whatever may be done in the former of these, the latter, which is that which with reason is most sought after, can never be well made known, and is very seldom apprehended, but as conceived and expressed in words. It is not therefore out of our way, in the examination of our knowledge, to inquire into the truth and certainty of universal propositions.

Certainty twofold, of truth and of knowledge.—But that we may not be misled in this case by that which is the danger everywhere, I mean by the doubtfulness of terms, it is fit to observe that certainty is twofold; certainty of truth, and certainty of knowledge. Certainty of truth is, when words are so put together in propositions as exactly to express the agreement or disagreement of the ideas they stand for, as really it is. Certainty of knowledge is, to perceive the agreement or disagreement of ideas, as expressed in any proposition. This we usually call "knowing," or "being certain of the truth of any proposition."

No proposition can be known to be true, where the essence of each species mentioned is not known.—Now, because we cannot be certain of the truth of any general proposition unless we know the precise bounds and extent of the species its terms stand for, it is necessary we should know the essence of each species, which is that which constitutes and bounds it. This, in all simple ideas and modes, is not hard to do. For in these the real and nominal essence being the same, or, which is all one, the abstract idea, which the general term stands for, being the sole essence and boundary that is or can be supposed of the species, there can be no doubt how far the species extends, or what things are comprehended under each term: which it is evident are all that have an exact conformity with the idea it stands for, and no other. But in substances, wherein a real essence distinct from the nominal is supposed to constitute, determine, and bound the species, the extent of the general word is very uncertain: because, not knowing this real essence, we cannot know what is or is not of that species, and consequently what may or may not with certainty be affirmed of it.

Because co-existence of ideas in few cases is to be known.—The complex ideas that our names of the species of substances properly stand for, are collections of such qualities as have been observed to co-exist in

an unknown substratum which we call "substance"; but what other qualities necessarily co-exist with such combinations, we cannot certainly know, unless we can discover their natural dependence; which in their primary qualities we can go but a very little way in; and in all their secondary qualities we can discover no connexion at all, for the reasons mentioned, viz., (1.) Because we know not the real constitutions of substances, on which each secondary quality particularly depends. (2.) Did we know that it would serve us only for experimental (not universal) knowledge; and reach with certainty no farther than that bare instance; because our understandings can discover no conceivable connexion between any secondary quality, and any modification whatsoever of any of the primary ones. And therefore there are very few general propositions to be made concerning substances which can carry with them undoubted certainty.

As far as any such co-existence can be known, so far universal propositions may be certain. But this will go but a little way, because—The more, indeed, of these co-existing qualities we unite into one complex idea, under one name, the more precise and determinate we make the signification of that word; but yet never make it thereby more capable of universal certainty in respect of other qualities not contained in our complex idea; since we perceive not their connexion or dependence one on another, being ignorant both of that real constitution in which they are all founded, and also how they flow from it. For the chief part of our knowledge concerning substances is not, as in other things, barely of the relation of two ideas that may exist separately; but, is of the necessary connexion and co-existence of several distinct ideas in the same subject, or of their repugnances so to co-exist. Could we begin at the other end, and discover what it was wherein that colour consisted, what made a body lighter or heavier, what texture of parts made it malleable, fusible, and fixed, and fit to be dissolved in this sort of liquor, and not in another; if (I say) we had such an idea as this of bodies, and could perceive wherein all sensible qualities originally consist, and how they are produced, we might frame such abstract ideas of them as would furnish us with matter of more general knowledge, and enable us to make universal propositions that should carry general truth and certainty with them. But whilst our complex ideas of the sorts of substances are so remote from that internal real constitution on which their sensible qualities depend, and are made up of nothing but an imperfect collection of those apparent qualities our senses can discover, there can be very few general propositions concerning substances, of whose real truth we can be certainly assured; since there are but few simple ideas of whose connexion and necessary coexistence we can have certain and undoubted knowledge.

Wherein lies the general certainty of propositions.—To conclude:

general propositions, of what kind soever, are then only capable of certainty, when the terms used in them stand for such ideas whose agreement or disagreement as there expressed, is capable to be discovered by us. And we are then certain of their truth or falsehood, when we perceive the ideas the terms stand for to agree or not agree, according as they are affirmed or denied one of another. Whence we may take notice, that general certainty is never to be found but in our ideas. Whenever we go to seek it elsewhere in experiment or observations without us, our knowledge goes not beyond particulars. It is the contemplation of our own abstract ideas that alone is able to afford us general knowledge.

VII. OF MAXIMS

They are self-evident.—There are a sort of propositions which, under the name of "maxims and axioms," have passed for principles of science: and, because they are self-evident, have been supposed innate, although nobody ever went about to show the reason and foundation of their clearness or cogency.

Wherein that self-evidence consists.—Knowledge, as has been shown, consists in the perception of the agreement or disagreement of ideas: now where that agreement or disagreement is perceived immediately by itself, without the intervention or help of any other, there our knowledge is self-evident. This will appear to be so to anyone who will but consider any of those propositions which, without any proof, he assents to at first sight; for in all of them he will find that the reason of his assent is from that agreement or disagreement which the mind, by an immediate comparing them, finds in those ideas, answering the affirmation or negation in the proposition.

These axioms do not much influence our other knowledge.—In the next place let us consider what influence these received maxims have upon the other parts of our knowledge. The rules established in the schools, that all reasonings are ex pracognitis et praconcessis, seem to lay the foundation of all other knowledge in these maxims, and to suppose them to be pracognita; whereby I think are meant these two things: first, that these axioms are those truths that are first known to the mind; and, secondly, that upon them the other parts of our knowledge depend.

Because they are not the truths we first knew.—First: That they are not the truths first known to the mind is evident to experience, as we have shown in another place.

Who perceives not, that a child certainly knows that a stranger is not its mother, that its sucking-bottle is not the rod, long before he knows that it is impossible for the same thing to be, and not to be? And how

many truths are there about numbers which it is obvious to observe that the mind is perfectly acquainted with, and fully convinced of, before it ever thought on these general maxims to which mathematicians in their arguings do sometimes refer them! Whereof the reason is very plain; for, that which makes the mind assent to such propositions being nothing else but the perception it has of the agreement or disagreement of its ideas. according as it finds them affirmed or denied one of another in words it understands, and every idea being known to be what it is, and every two distinct ideas being known not to be the same, it must necessarily follow, that such self-evident truths must be first known which consist of ideas that are first in the mind; and the ideas first in the mind, it is evident, are those of particular things, from whence, by slow degrees, the understanding proceeds to some few general ones; which, being taken from the ordinary and familiar objects of sense, are settled in the mind with general names to them. Thus particular ideas are first received and distinguished. and so knowledge got about them; and next to them the less general or specific, which are next to particular: for, abstract ideas are not so obvious or easy to children or the yet unexercised mind, as particular ones. If they seem so to grown men, it is only because by constant and familiar use they are made so; for when we nicely reflect upon them, we shall find that general ideas are fictions and contrivances of the mind, that carry difficulty with them, and do not so easily offer themselves as we are apt to imagine.

Because on them the other parts of our knowledge do not depend.— Secondly: From what has been said, it plainly follows that these magnified maxims are not the principles and foundations of all our other knowledge. For, if there be a great many other truths which have as much self-evidence as they, and a great many that we know before them, it is impossible they should be the principles from which we deduce all other truths.

What use these general maxims have.—What shall we then say? Are these general maxims of no use? By no means; though perhaps their use is not that which it is commonly taken to be. But since doubting in the least of what hath been by some men ascribed to these maxims may be apt to be cried out against, as overturning the foundations of all the sciences, it may be worth while to consider them with respect to other parts of our knowledge, and examine more particularly to what purposes they serve.

To come therefore to the use that is made of maxims.

- (1.) They are of use, as has been observed, in the ordinary methods of teaching sciences as far as they are advanced: but of little or none in advancing them farther.
- (2.) They are of use in disputes, for the silencing of obstinate wranglers, and bringing those contests to some conclusion.

Maxims, if care be not taken in the use of words, may prove contradictions.—One thing farther, I think, it may not be amiss to observe con-

cerning these general maxims; that they are so far from improving or establishing our minds in true knowledge, that if our notions be wrong, loose, or unsteady, and we resign up our thoughts to the sound of words, rather than fix them on settled determined ideas of things; I say, these general maxims will serve to confirm us in mistakes; and in such a way of use of words which is most common, will serve to prove contradictions.

VIII. OF TRIFLING PROPOSITIONS

Some propositions bring no increase to our knowledge.—Whether the maxims treated of in the foregoing chapter be of that use to real knowledge as is generally supposed, I leave to be considered. This, I think, may confidently be affirmed, that there are universal propositions which, though they be certainly true, yet they add no light to our understandings, bring no increase to our knowledge. Such are,

As, first, identical propositions.—First: All purely identical propositions. These obviously and at first blush appear to contain no instruction in them: for when we affirm the said term of itself, whether it be barely verbal, or whether it contains any clear and real idea, it shows us nothing but what we must certainly knew before, whether such a proposition be either made by or proposed to us.

Secondly: When a part of any complex idea is predicated of the whole.—Secondly: Another sort of trifling propositions is, when a part of the complex idea is predicated of the name of the whole; a part of the definition, of the word defined. Such propositions can only serve to show the disingenuity of one who will go from the definition of his own terms, by reminding him sometimes of it; but carry no knowledge with them but of the signification of words, however certain they be.

Thirdly: Using words variously is trifling with them.—Though yet concerning most words used in discourses, especially argumentative and controversial, there is this more to be complained of, which is the worst sort of trifling, and which sets us yet farther from the certainty of knowledge we hope to attain by them, or find in them, viz., that most writers are so far from instructing us in the nature and knowledge of things, that they use their words loosely and uncertainly, and do not, by using them constantly and steadily in the same significations, make plain and clear deductions of words one from another, and make their discourses coherent and clear (how little soever it were instructive); which were not difficult to do, did they not find it convenient to shelter their ignorance or obstinacy under the obscurity and perplexedness of their terms: to which, perhaps, inadvertency and ill custom do in many men much contribute.

IX. OF OUR KNOWLEDGE OF EXISTENCE

General certain propositions concern not existence.—Hitherto we have only considered the essences of things, which, being only abstract ideas, and thereby removed in our thoughts from particular existence, give us no knowledge of real existence at all. Where, by the way, we may take notice, that universal propositions, of whose truth or falsehood we can have certain knowledge, concern not existence; and farther, that all particular affirmations or negations that would not be certain if they were made general, are only concerning existence; they declaring only the accidental union or separation of ideas in things existing, which in their abstract natures have no known necessary union or repugnancy.

A threefold knowledge of existence.—But leaving the nature of propositions, and different ways of predication, to be considered more at large in another place, let us proceed now to inquire concerning our knowledge of the existence of things, and how we come by it. I say then, that we have the knowledge of our own existence by intuition; of the existence of God by demonstration; and of other things by sensation.

Our knowledge of our own existence is intuitive.—As for our own existence, we perceive it so plainly and so certainly that it neither needs nor is capable of any proof. For nothing can be more evident to us than our own existence.

X. OF OUR KNOWLEDGE OF THE EXISTENCE OF A GOD

We are capable of knowing certainly that there is a God.—Though God has given us no innate ideas of himself; though he has stamped no original characters on our minds, wherein we may read his being; yet, having furnished us with those faculties our minds are endowed with, he hath not left himself without witness; since we have sense, perception, and reason, and cannot want a clear proof of him as long as we carry ourselves about us. Nor can we justly complain of our ignorance in this great point, since he has so plentifully provided us with the means to discover and know him, so far as is necessary to the end of our being, and the great concernment of our happiness. But though this be the most obvious truth that reason discovers, and though its evidence be (if I mistake not) equal to mathematical certainty; yet it requires thought and attention, and the mind must apply itself to a regular deduction of it from some part of our intuitive knowledge, or else we shall be as uncertain and ignorant of this as of other propositions which are in themselves capable of clear demon-

stration. To show, therefore, that we are capable of knowing, i.e., being certain, that there is a God, and how we may come by this certainty, I think we need go no farther than ourselves, and that undoubted knowledge we have of our own existence.

Man knows that he himself is.—I think it is beyond question, that man has a clear perception of his own being; he knows certainly that he exists, and that he is something. He that can doubt whether he be any thing or no, I speak not to; no more than I would argue with pure nothing, or endeavour to convince nonentity that it were something.

He knows also that nothing cannot produce a being, therefore something eternal.—In the next place, man knows by an intuitive certainty that bare nothing can no more produce any real being, than it can be equal to two right angles. If a man knows not that nonentity, or the absence of all being, cannot be equal to two right angles, it is impossible he should know any demonstration in Euclid. If therefore we know there is some real being, and that nonentity cannot produce any real being, it is an evident demonstration, that from eternity there has been something; since what was not from eternity had a beginning; and what had a beginning must be produced by something else.

That Eternal Being must be most powerful.—Next, it is evident, that what had its being and beginning from another, must also have all that which is in and belongs to its being from another too. All the powers it has, must be owing to and received from the same source. This eternal source, then, of all being, must also be the source and original of all power; and so this Eternal Being must be also the most powerful.

And most knowing.—Again: a man finds in himself perception and knowledge. We have then got one step farther; and we are certain now that there is not only some being, but some knowing, intelligent being in the world.

And therefore God.—Thus from the consideration of ourselves, and what we infallibly find in our own constitutions, our reason leads us to the knowledge of this certain and evident truth, that there is an eternal, most powerful, and most knowing Being; which whether anyone will please to call "God," it matters not. The thing is evident; and from this idea, duly considered, will easily be deduced all those other attributes which we ought to ascribe to this Eternal Being.

From what has been said, it is plain to me we have a more certain knowledge of the existence of a God, than of any thing our senses have not immediately discovered to us. Nay, I presume I may say, that we more certainly know that there is a God, than that there is any thing else without us. When I say "we know," I mean there is such a knowledge within our reach which we cannot miss, if we will but apply our minds to that as we do to several other inquiries.

XI. OF OUR KNOWLEDGE OF THE EXISTENCE OF OTHER THINGS

It is to be had only by sensation.—The knowledge of our own being we have by intuition. The existence of a God reason clearly makes known to us, as has been shown.

The knowledge of the existence of any other thing, we can have only by sensation: for, there being no necessary connexion of real existence with any idea a man hath in his memory, nor of any other existence but that of God with the existence of any particular man, no particular man can know the existence of any other being, but only when by actual operating upon him it makes itself perceived by him. For, the having the idea of any thing in our mind no more proves the existence of that thing than the picture of a man evidences his being in the world, or the visions of a dream make thereby a true history.

This, though not so certain as demonstration, yet may be called "knowledge," and proves the existence of things without us.—The notice we have by our senses of the existing of things without us, though it be not altogether so certain as our intuitive knowledge, or the deductions of our reason employed about the clear abstract ideas of our own minds; yet it is an assurance that deserves the name of knowledge. If we persuade ourselves that our faculties act and inform us right concerning the existence of those objects that affect them, it cannot pass for an ill-grounded confidence: for I think nobody can, in earnest, be so sceptical as to be uncertain of the existence of those things which he sees and feels. At least, he that can doubt so far (whatever he may have with his own thoughts) will never have any controversy with me: since he can never be sure I say any thing contrary to his opinion. As to myself, I think God has given me assurance enough of the existence of things without me: since, by their different application, I can produce in myself both pleasure and pain, which is one great concernment of my present state. This is certain, the confidence that our faculties do not herein deceive us is the greatest assurance we are capable of concerning the existence of material beings. For we cannot act any thing but by our faculties, nor talk of knowledge itself but by the help of those faculties which are fitted to apprehend even what knowledge is. But, besides the assurance we have from our senses themselves, that they do not err in the information they give us of the existence of things without us, when they are affected by them, we are farther confirmed in this assurance by other concurrent reasons.

First: Because we cannot have them but by the inlet of the senses.— First: It is plain those perceptions are produced in us by exterior causes affecting our senses, because those that want the organs of any sense never can have the ideas belonging to that sense produced in their minds. This is too evident to be doubted: and therefore we cannot but be assured that they come in by the organs of that sense, and no other way.

Secondly: Because an idea from actual sensation and another from memory are very distinct perceptions.—Secondly: Because sometimes I find that I cannot avoid the having those ideas produced in my mind: for though when my eyes are shut, or windows fast, I can at pleasure recall to my mind the ideas of light or the sun, which former sensations had lodged in my memory; so I can at pleasure lay by that idea, and take into my view that of the smell of a rose, or taste of sugar. But if I turn my eyes at noon towards the sun, I cannot avoid the ideas which the light or sun then produces in me. So that there is a manifest difference between the ideas laid up in my memory (over which, if they were there only, I should have constantly the same power to dispose of them, and lay them by at pleasure), and those which force themselves upon me and I cannot avoid having. And therefore it must needs be some exterior cause, and the brisk acting of some objects without me, whose efficacy I cannot resist, that produces those ideas in my mind, whether I will or no.

Thirdly: Pleasure or pain, which accompanies actual sensation, accompanies not the returning of those ideas without the external objects.—Thirdly: Add to this, that many of those ideas are produced in us with pain, which afterwards we remember without the least offence.

Fourthly: Our senses assist one another's testimony of the existence of outward things.—Fourthly: Our senses, in many cases, bear witness to the truth of each other's report concerning the existence of sensible things without us. He that sees a fire may, if he doubt whether it be any thing more than a bare fancy, feel it too, and be convinced by putting his hand in it; which certainly could never be put into such exquisite pain by a bare idea or phantom, unless that the pain be a fancy too; which yet he cannot, when the burn is well, by raising the idea of it, bring upon himself again.

XII. OF THE IMPROVEMENT OF OUR KNOWLEDGE

Knowledge is not from maxims.—It having been the common received opinion amongst men of letters, that maxims were the foundation of all knowledge; and that the sciences were each of them built upon certain pracognita, from whence the understanding was to take its rise, and by which it was to conduct itself in its inquiries into the matters belonging to that science; the beaten road of the Schools has been to lay down in the beginning one or more general propositions as foundations whereon to build the knowledge that was to be had of that subject. These doctrines

thus laid down for foundations of any science were called "principles," as the beginnings from which we must set out, and look no farther backwards in our inquiries, as we have already observed.

But from the comparing clear and distinct ideas.—But if any one will consider, he will find that the great advancement and certainty of real knowledge, which men arrived to in these sciences, was not owing to the influence of these principles, nor derived from any peculiar advantage they received from two or three general maxims laid down in the beginning; but from the clear, distinct, complete ideas their thoughts were employed about, and the relation of equality and excess so clear between some of them, that they had an intuitive knowledge, and by that a way to discover it in others, and this without the help of those maxims.

XIII. SOME FARTHER CONSIDERATIONS CONCERNING OUR KNOWLEDGE

Our knowledge partly necessary, partly voluntary.—Our knowledge, as in other things, so in this, has a great conformity with our sight, that it is neither wholly necessary, nor wholly voluntary. If our knowledge were altogether necessary, all men's knowledge would not only be alike, but every man would know all that is knowable; and if it were only voluntary, some men so little regard or value it, that they would have extreme little or none at all. Men that have senses cannot choose but receive some ideas by them; and if they have memory, they cannot but retain some of them; and if they have any distinguishing faculty, cannot but perceive the agreement or disagreement of some of them one with another; as he that has eyes, if he will open them by day, cannot but see some objects, and perceive a difference in them. But though a man with his eyes open in the light cannot but see, yet there be certain objects which he may choose whether he will turn his eyes to; there may be in his reach a book containing pictures and discourses, capable to delight and instruct him, which yet he may never have the will to open, never take the pains to look into.

The application voluntary; but we know as things are, not as we please.—There is also another thing in a man's power; and that is, though he turns his eyes sometimes towards an object, yet he may choose whether he will curiously survey it, and with an intent application endeavour to observe accurately all that is visible in it. But yet what he does see, he cannot see otherwise than he does. Just thus is it with our understanding; all that is voluntary in our knowledge is the employing or withholding any of our faculties from this or that sort of objects, and a more or less accurate survey of them; but, they being employed, our will hath no power to determine the knowledge of the mind one way or other; that is done

only by the objects themselves, as far as they are clearly discovered. And therefore as far as men's senses are conversant about external objects, the mind cannot but receive those ideas which are presented by them, and be informed of the existence of things without; and so far as men's thoughts converse with their own determined ideas, they cannot but in some measure observe the agreement and disagreement that is to be found amongst some of them, which is so far knowledge: and if they have names for those ideas which they have thus considered, they must needs be assured of the truth of those propositions which express that agreement or disagreement they perceive in them, and be undoubtedly convinced of those truths. For what a man sees, he cannot but see; and what he perceives, he cannot but know that he perceives.

XIV. OF JUDGMENT

Our knowledge being short, we want something else.—The understanding faculties being given to man, not barely for speculation, but also for the conduct of his life, man would be at a great loss if he had nothing to direct him but what has the certainty of true knowledge. For, that being very short and scanty, as we have seen, he would be often utterly in the dark, and in most of the actions of his life perfectly at a stand, had he nothing to guide him in the absence of clear and certain knowledge.

Judgment supplies the want of knowledge.—The faculty which God has given man to supply the want of clear and certain knowledge, in cases where that cannot be had, is judgment: whereby the mind takes its ideas to agree or disagree; or, which is the same, any proposition to be true or false, without perceiving a demonstrative evidence in the proofs. The mind sometimes exercises this judgment out of necessity, where demonstrative proofs and certain knowledge are not to be had; and sometimes out of laziness, unskilfulness, or haste, even where demonstrative and certain proofs are to be had.

Judgment is the presuming things to be so without perceiving it.— Thus the mind has two faculties conversant about truth and falsehood,—

First: Knowledge, whereby it certainly perceives, and is undoubtedly satisfied of the agreement or disagreement of any ideas.

Secondly: Judgment, which is the putting ideas together, or separating them from one another in the mind, when their certain agreement or disagreement is not perceived, but presumed to be so; which is, as the word imports, taken to be so before it certainly appears. And if it so unites or separates them as in reality things are, it is right judgment.

XV. OF PROBABILITY

Probability is the appearance of agreement upon fallible proofs.—As demonstration is the showing the agreement or disagreement of two ideas by the intervention of one or more proofs, which have a constant, immutable, and visible connexion one with another; so probability is nothing but the appearance of such an agreement or disagreement by the intervention of proofs, whose connexion is not constant and immutable, or at least is not perceived to be so; but is, or appears for the most part to be so, and is enough to induce the mind to judge the proposition to be true or false, rather than the contrary.

It is to supply the want of knowledge.—Our knowledge, as has been shown, being very narrow, and we not happy enough to find certain truth in every thing which we have occasion to consider, most of the propositions we think, reason, discourse, nay, act upon, are such as we cannot have undoubted knowledge of their truth; yet some of them border so near upon certainty, that we make no doubt at all about them, but assent to them as firmly, and act according to that assent as resolutely, as if they were infallibly demonstrated, and our knowledge of them was perfect and certain. But, these being degrees herein, from the very neighbourhood of certainty and demonstration, quite down to improbability and unlikeliness, even to the confines of impossibility; and also degrees of assent from full assurance and confidence, quite down to conjecture, doubt, and distrust; I shall come now (having, as I think, found out the bounds of human knowledge and certainty) in the next place, to consider the several degrees and grounds of probability, and assent or faith.

Being that which makes us presume things to be true before we know them to be so.—Probability is likeliness to be true; the very notation of the word signifying such a proposition for which there be arguments or proofs to make it pass, or be received, for true. The entertainment the mind gives this sort of propositions is called "belief," "assent," or "opinion," which is the admitting or receiving any proposition for true, upon arguments or proofs that are found to persuade us to receive it as true, without certain knowledge that it is so. And herein lies the difference between probability and certainty, faith and knowledge, that in all the parts of knowledge there is intuition; each immediate idea, each step has its visible and certain connexion: in belief not so. That which makes me believe, is something extraneous to the thing I believe; something not evidently joined on both sides to, and so not manifestly showing the agreement or disagreement of, those ideas that are under consideration.

The grounds of probability are two; conformity with our own experi-

ence, or the testimony of others' experience.—Probability, then, being to supply the defect of our knowledge, and to guide us where that fails, is always conversant about propositions whereof we have no certainty, but only some inducements to receive them for true. The grounds of it are, in short, these two following:—

First: The conformity of any thing with our own knowledge, observation and experience.

Secondly: The testimony of others, vouching their observation and experience. In the testimony of others, is to be considered, (1.) The number. (2.) The integrity. (3.) The skill of the witnesses. (4.) The design of the author, where it is a testimony out of a book cited. (5.) The consistency of the parts and circumstances of the relation. (6.) Contrary testimonies.

XVI. OF THE DEGREES OF ASSENT

Our assent ought to be regulated by the grounds of probability.—The grounds of probability we have laid down in the foregoing chapter, as they are the foundations on which our assent is built, so are they also the measure whereby its several degrees are or ought to be regulated: only we are to take notice, that whatever grounds of probability there may be, they yet operate no further on the mind, which searches after truth and endeavours to judge right, than they appear at least in the first judgment or search that the mind makes, I confess, in the opinions men have and firmly stick to in the world, their assent is not always from an actual view of the reasons that at first prevailed with them; it being in many cases almost impossible, and in most very hard, even for those who have very admirable memories, to retain all the proofs which upon a due examination made them embrace that side of the question. It suffices that they have once with care and fairness sifted the matter as far as they could; and that they have searched into all the particulars that they could imagine to give any light to the question, and with the best of their skill cast up the account upon the whole evidence: and thus, having once found on which side the probability appeared to them after as full and exact an inquiry as they can make, they lay up the conclusion in their memories as a truth they have discovered; and for the future they remain satisfied with the testimony of their memories, that this is the opinion that, by the proofs they have once seen of it, deserves such a degree of their assent as they afford it.

These cannot always be actually in view, and then we must content ourselves with the remembrance that we once saw ground for such a degree of assent.—This is all that the greatest part of men are capable of doing in regulating their opinions and judgments, unless a man will exact of them

either to retain distinctly in their memories all the proofs concerning any probable truth, and that too in the same order and regular deduction of consequences in which they have formerly placed or seen them; which sometimes is enough to fill a large volume upon one single question: or else they must require a man, for every opinion that he embraces, every day to examine the proofs: both which are impossible. It is unavoidable therefore that the memory be relied on in the case, and that men be persuaded of several opinions whereof the proofs are not actually in their thoughts; nay, which perhaps they are not able actually to recall. Without this the greatest part of men must be either very sceptics, or change every moment, and yield themselves up to whoever, having lately studied the question, offers them arguments; which, for want of memory, they are not able presently to answer.

The ill consequence of this, if our former judgment were not rightly made.—I cannot but own that men's sticking to their past judgment, and adhering firmly to conclusions formerly made, is often the cause of great obstinacy in error and mistake. But the fault is not, that they rely on their memories for what they have before well judged, but because they judged before they had well examined.

Probability is either of matter-of-fact or speculation.—But, to return to the grounds of assent, and the several degrees of it: we are to take notice that the propositions we receive upon inducements of probability are of two sorts; either concerning some particular existence, or, as it is usually termed, "matter-of-fact," which, falling under observation, is capable of human testimony; or else concerning things which, being beyond the discovery of our senses, are not capable of any such testimony.

The concurrent experience of all other men with ours, produces assurance approaching to knowledge.—Concerning the first of these, viz., particular matter-of-fact:—

First: Where any particular thing, consonant to the constant observation of ourselves and others in the like case, comes attested by the concurrent reports of all that mention it, we receive it as easily and build as firmly upon it as if it were certain knowledge; and we reason and act thereupon with as little doubt as if it were perfect demonstration.

Unquestionable testimony and experience for the most part produce confidence.—Secondly: The next degree of probability is, when I find by my own experience, and the agreement of all others that mention it, a thing to be for the most part so; and that the particular instance of it is attested by many and undoubted witnesses; v.g., history giving us such an account of men in all ages, and my own experience, as far as I had an opportunity to observe, confirming it, that most men prefer their private advantage to the public; if all historians that write of Tiberius say, that Tiberius did so, it is extremely probable. And in this case, our assent has

a sufficient foundation to raise itself to a degree which we may call "confidence."

Fair testimony, and the nature of the thing indifferent, produce also confident belief.—Thirdly: In things that happen indifferently, as "that a bird should fly this or that way," "that it should thunder on a man's right or left hand," &c., when any particular matter-of-fact is vouched by the concurrent testimony of unsuspected witnesses, there our assent is also unavoidable.

XVII. OF REASON

Wherein reasoning consists.—If general knowledge, as has been shown, consists in a perception of the agreement or disagreement of our own ideas, and the knowledge of the existence of all things without us be had only by our senses; what room then is there for the exercise of any other faculty but outward sense and inward perception? What need is there of reason? Very much; both for the enlargement of our knowledge and regulating our assent: for it hath to do both in knowledge and opinion, and is necessary and assisting to all our other intellectual faculties, and indeed contains two of them, viz., sagacity and illation. By the one it finds out, and by the other it so orders, the intermediate ideas as to discover what connexion there is in each link of the chain, whereby the extremes are held together; and thereby, as it were, to draw into view the truth sought for, which is that we call "illation" or "inference," and consists in nothing but the perception of the connexion there is between the ideas in each step of the deduction, whereby the mind comes to see either the certain agreement or disagreement of any two ideas, as in demonstration, in which it arrives at knowledge; or their probable connexion, on which it gives or withholds its assent, as in opinion. Sense and intuition reach but a very little way. The greatest part of our knowledge depends upon deductions and intermediate ideas: and in those cases where we are fain to substitute assent instead of knowledge, and take propositions for true without being certain they are so, we have need to find out, examine, and compare the grounds of their probability. In both these cases the faculty which finds out the means, and rightly applies them to discover certainty in the one and probability in the other, is that which we call "reason." For, as reason perceives the necessary and indubitable connexion of all the ideas or proofs one to another in each step of any demonstration that produces knowledge, so it likewise perceives the probable connexion of all the ideas or proofs one to another, in every step of a discourse to which it will think assent due. This is the lowest degree of that which can be truly called "reason." For, where the mind does not perceive this probable connexion, where it does not discern whether there be any such connexion or no, there

men's opinions are not the product of judgment or the consequence of reason, but the effects of chance and hazard, of a mind floating at all adventures, without choice and without direction.

Its four parts.—So that we may in reason consider these four degrees: The first and highest is the discovering and finding out of proofs; the second, the regular and methodical disposition of them, and laying them in a clear and fit order, to make their connexion and force be plainly and easily perceived; the third is the perceiving their connexion; and the fourth, a making a right conclusion. These several degrees may be observed in any mathematical demonstration: it being one thing, to perceive the connexion of each part as the demonstration is made by another; another, to perceive the dependence of the conclusion on all the parts; a third, to make out a demonstration clearly and neatly one's self; and something different from all these, to have first found out those intermediate ideas or proofs by which it is made.

XVIII. OF FAITH AND REASON, AND THEIR DISTINCT PROVINCES

Necessary to know their boundaries.—It has been above shown, (1.) That we are of necessity ignorant, and want knowledge of all sorts where we want ideas. (2.) That we are ignorant, and want rational knowledge where we want proofs. (3.) That we want general knowledge and certainty as far as we want clear and determined specific ideas. (4.) That we want probability to direct our assent in matters where we have neither knowledge of our own nor testimony of other men to bottom our reason upon.

From these things thus premised, I think we may come to lay down the measures and boundaries between faith and reason; the want whereof may possibly have been the cause, if not of great disorders, yet at least of great disputes, and perhaps mistakes, in the world: for till it be resolved how far we are to be guided by reason, and how far by faith, we shall in vain dispute and endeavour to convince one another in matters of religion.

Faith and reason what, as contradistinguished.—I find every sect, as far as reason will help them, make use of it gladly; and, where it fails them, they cry out, "It is matter of faith, and above reason." And I do not see how they can argue with anyone, or ever convince a gainsayer, who makes use of the same plea, without setting down strict boundaries between faith and reason, which ought to be the first point established in all questions where faith has anything to do.

•Reason therefore here, as contradistinguished to faith, I take to be the discovery of the certainty or probability of such propositions or truths which the mind arrives at by deduction made from such ideas which it has got by the use of its natural faculties, viz., by sensation or reflection.

Faith, on the other side, is the assent to any proposition, not thus made out by the deductions of reason, but upon the credit of the proposer, as coming from God in some extraordinary way of communication. This way of discovering truths to men we call "revelation."

If the boundaries be not set between faith and reason, no enthusiasm or extravagancy in religion can be contradicted.—If the provinces of faith and reason are not kept distinct by these boundaries, there will, in matter of religion, be no room for reason at all; and those extravagant opinions and ceremonies that are to be found in the several religions of the world will not deserve to be blamed; for to this crying up of faith in opposition to reason, we may, I think, in good measure, ascribe those absurdities that fill almost all the religions which possess and divide mankind. For men, having been principled with an opinion that they must not consult reason in the things of religion, however apparently contradictory to common sense and the very principles of all their knowledge, have let loose their fancies and natural superstition; and have been by them led into so strange opinions and extravagant practices in religion, that a considerate man cannot but stand amazed at their follies, and judge them so far from being acceptable to the great and wise God, that he cannot avoid thinking them ridiculous and offensive to a sober, good man. So that, in effect, religion, which should most distinguish us from beasts, and ought most peculiarly to elevate us as rational creatures above brutes, is that wherein men often appear most irrational, and more senseless than beasts themselves.

XIX. OF ENTHUSIASM V

Love of truth necessary.—He that would seriously set upon the search of truth, ought in the first place, to prepare his mind with a love of it; for he that loves it not will not take much pains to get it, nor be much concerned when he misses it. There is nobody in the commonwealth of learning who does not profess himself a lover of truth; and there is not a rational creature that would not take it amiss to be thought otherwise of. And yet, for all this, one may truly say, there are very few lovers of truth for truth's sake, even amongst those who persuade themselves that they are so. How a man may know whether he be so in earnest, is worth inquiry: and I think there is this one unerring mark of it, viz., the not entertaining any proposition with greater assurance than the proofs it is built upon will warrant. Whoever goes beyond this measure of assent, it is plain, receives not truth in the love of it; loves not truth for truth's sake, but for some other by-end.

Force of enthusiasm.—Upon this occasion I shall take the liberty to consider a third ground of assent, which, with some men, has the same authority and is as confidently relied on, as either faith or reason: I mean enthusiasm: which, laying by reason, would set up revelation without it; whereby in effect it takes away both reason and revelation, and substitutes in the room of it the ungrounded fancies of a man's own brain, and assumes them for a foundation both of opinion and conduct.

Reason and revelation.—Reason is natural revelation, whereby the eternal Father of light, and Fountain of all knowledge, communicates to mankind that portion of truth which he has laid within the reach of their natural faculties. Revelation is natural reason enlarged by a new set of discoveries communicated by God immediately, which reason vouches the truth of by the testimony and proofs it gives that they come from God. So that he that takes away reason to make way for revelation, puts out the light of both; and does much-what the same as if he would persuade a man to put out his eyes, the better to receive the remote light of an invisible star by a telescope.

Enthusiasm mistaken for seeing and feeling.—Though the odd opinions and extravagant actions enthusiasm has run men into were enough to warn them against this wrong principle, so apt to misguide them both in their belief and conduct; yet the love of something extraordinary, the ease and glory it is to be inspired and be above the common and natural ways of knowledge, so flatters many men's laziness, ignorance, and vanity, that when once they are got into this way of immediate revelation, of illumination without search, and of certainty without proof and without examination, it is a hard matter to get them out of it. Reason is lost upon them; they are above it: they see the light infused into their understandings, and cannot be mistaken; it is clear and visible there like the light of bright sunshine; shows itself, and needs no other proof but its own evidence; they feel the hand of God moving them within, and the impulses of the Spirit, and cannot be mistaken in what they feel. Thus they support themselves, and are sure reason hath nothing to do with what they see and feel in themselves; what they have a sensible experience of, admits no doubt, needs no probation.

XX. OF WRONG ASSENT, OR ERROR

Causes of error.—Knowledge being to be had only of visible certain truth, error is not a fault of our knowledge, but a mistake of our judgment, giving assent to that which is not true.

But if assent be grounded on likelihood, if the proper object and motive of our assent be probability, and that probability consists in what is laid down in the foregoing chapters, it will be demanded, how men come to give their assents contrary to probability? For there is nothing more common than contrariety of opinions; nothing more obvious than that one man wholly disbelieves what another only doubts of, and a third steadfastly believes and firmly adheres to. The reasons whereof, though they may be very various yet, I suppose, may be all reduced to these four: (1.) Want of proofs. (2.) Want of ability to use them. (3.) Want of will to use them. (4.) Wrong measures of probability.

First: Want of proofs.—First: By "want of proofs," I do not mean only the want of those proofs which are nowhere extant, and so are nowhere to be had; but the want even of those proofs which are in being, or might be procured. And thus men want proofs who have not the convenience or opportunity to make experiments and observations themselves, tending to the proof of any proposition; nor likewise the convenience to inquire into and collect the testimonies of others: and in this state are the greatest part of mankind who are given up to labour, and enslaved to the necessity of their mean condition, whose lives are worn out only in the provisions for living.

Secondly: Want of skill to use them.—Secondly: Those who want skill to use those evidences they have of probabilities, who cannot carry a train of consequences in their heads, nor weigh exactly the preponderancy of contrary proofs and testimonies making every circumstance its due allowance, may be easily misled to assent to positions that are not probable. There are some men of one, some but of two syllogisms, and no more; and others that can but advance one step farther. These cannot always discern that side on which the strongest proofs lie, cannot constantly follow that which in itself is the more probable opinion.

Thirdly: Want of will to use them.—Thirdly: There are another sort of people that want proofs, not because they are out of their reach, but because they will not use them; who, though they have riches and leisurc enough, and want neither parts nor other helps, are yet never the better for them. Their hot pursuit of pleasure, or constant drudgery in business, engages some men's thoughts elsewhere; laziness and oscitancy in general, or a particular aversion for books, study, and meditation, keep others from any serious thoughts at all; and some, out of fear that an impartial inquiry would not favour those opinions which best suit their prejudices, lives, and designs, content themselves, without examination, to take upon trust what they find convenient and in fashion.

Fourthly: Wrong measures of probability, whereof.—Fourthly: There remains yet the last sort, who, even where the real probabilities appear, and are plainly laid before them, do not admit of the conviction, nor yield unto manifest reasons, but do either suspend their assent, or give it to the less probable opinion. And to this danger are those exposed who have

taken up wrong measures of probability, which are, (1.) Propositions that are not in themselves certain and evident, but doubtful and false, taken up for principles. (2.) Received hypotheses. (3.) Predominant passions or inclinations. (4.) Authority.

XXI. OF THE DIVISION OF THE SCIENCES

Three sorts.—All that can fall within the compass of human understanding being either, first, the nature of things as they are in themselves, their relations, and their manner of operation: or, secondly, that which man himself ought to do, as a rational and voluntary agent, for the attainment of any end, especially happiness: or, thirdly, the ways and means whereby the knowledge of both the one and the other of these is attained and communicated: I think science may be divided properly into these three sorts:—

First: Physica.—First: The knowledge of things as they are in their own proper beings, their constitutions, properties, and operations, whereby I mean not only matter and body, but spirits also, which have their proper natures, constitutions, and operations, as well as bodies. The end of this is bare speculative truth: and whatsoever can afford the mind of man any such falls under this branch, whether it be God himself, angels, spirits, bodies, or any of their affections, as number, and figure, &c.

Secondly: Practica.—Secondly: The skill of right applying our own powers and actions for the attainment of things good and useful. The most considerable under this head is ethics, which is the seeking out those rules and measures of human actions which lead to happiness, and the means to practise them. The end of this is not bare speculation and the knowledge of truth; but right, and a conduct suitable to it.

Thirdly: Thirdly: The third branch may be called the "doctrine of signs," the most usual whereof being words; the business whereof is to consider the nature of signs the mind makes use of for the understanding of things, or conveying its knowledge to others. For, since the things the mind contemplates are none of them, besides itself, present to the understanding, it is necessary that something else, as a sign or representation of the thing it considers, should be present to it: and these are ideas. And because the scene of ideas that make one man's thoughts cannot be laid open to the immediate view of another, nor laid up anywhere but in the memory, a not very sure repository; therefore, to communicate our thoughts to one another, as well as record them for our own use, signs of our ideas are also necessary. Those which men have found most convenient, and therefore generally make use of, are articulate sounds. The consideration, then, of ideas and words as the great instruments of knowl-

edge, makes no despicable part of their contemplation who would take a view of human knowledge in the whole extent of it. And perhaps, if they were distinctly weighed and duly considered, they would afford us another sort of logic and critic than what we have been hitherto acquainted with.

This is the first division of the objects of knowledge.—This seems to me the first and most general, as well as natural, division of the objects of our understanding. For a man can employ his thoughts about nothing but either the contemplation of things themselves for the discovery of truth; or about the things in his own power, which are his own actions, for the attainment of his own ends; or the signs the mind makes use of, both in the one and the other, and the right ordering of them for its clearer information. All which three, viz., things as they are in themselves knowable, actions as they depend on us in order to happiness, and the right use of signs in order to knowledge, being toto cælo different, they seemed to me to be the three great provinces of the intellectual world, wholly separate and distinct one from another.

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THE CRITIQUE OF PURE REASON

by

IMMANUEL KANT

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IMMANUEL KANT

1724-1804

IMMANUEL KANT was born at Königsberg, East Prussia, on April 22, 1724, and never traveled more than forty miles from his birthplace during the entire eighty years of his life.

The grandfather of Kant was an emigrant from Scotland who spelled his name "Cant," a name not uncommon in the north of Scotland. His son, the father of the philosopher, changed the spelling to Kant, since the "C" was often pronounced "S" by the East Prussians.

Kant's father was a fairly prosperous saddler of Königsberg. Both he and Immanuel's mother were devotees of the Pietistic movement which was then strong in their section of the country. At Königsberg the Pietists were kind and gentle and believed that life's tragedies should be met with simple faith in the rightness of things. They emphasized the spiritual rather than the material side of life. The strong influence of this attitude is seen in Kant's later thinking and writing.

When, however, in his tenth year Kant entered the Collegium Fredericianum, another side of Pietism was revealed to him. This consisted of formalism and intellectual restraint—fixed hours of prayer and a compulsory morality which resulted in hypocrisy and affectation.

During his early schooling Kant planned to enter the ministry. He studied theology diligently, but he soon found his chief interest to lie in the classics. He became the school's most proficient Latin scholar. This interest lingered with him throughout his life, and his mastery of the Latin writers is evident in much of his published work.

At sixteen Kant entered the University of Königsberg, where he turned from the classics to physics and mathematics. By this time he had definitely decided that his future was not in the Church. Because of the death of his father in 1746, Kant was forced to earn his living as a private tutor. Although he disliked the drudgery of teaching, he felt that his association with youngsters of noble birth would polish off the rough edges of his personality and his style.

In 1755, through the influence of a friend named Richter, Kant was enabled to resume his university studies. In the fall of that year he was graduated as doctor and qualified as *Privat-dozent*—a man permitted to teach at the university for fees. For fifteen years Kant continued in this capacity at the university. Twice he failed to gain an appointment as professor at Königsberg. Other offers were made him, but he refused them all, determined to remain at home. His lectures were gaining in popularity, and his reputation was growing all the time. At first he confined his teaching largely to physics, but gradually he expanded his scholastic activities until they embraced nearly all the phases of philosophy.

Kant's principles of teaching were few but definite. He insisted that his students should obtain a firm foundation of their subject before they began to speculate. He would never give his hearers a ready-made philosophy, since for him no such philosophy existed. Rather he would so teach his students that they might be able to build their own systems of philosophy. Kant concentrated his attention upon the average minds among his pupils. In defense of this attitude he argued that the geniuses would take care of themselves, the dunces were beyond remedy, and those of the middle group alone needed help if they were to succeed.

In 1770 Kant was given the chair of logic and metaphysics at Königsberg, and eleven years later he gave to the world one of the greatest books in the history of human thought—the Critique of Pure Reason. This was followed in 1783 by the Prolegomena, an attempt to state the argument of the Critique in more readable form and to amplify some of the more obscure arguments. Then, in 1787, a second edition of the Critique, with some modifications, appeared. This is the edition which is condensed in this volume.

The publication of the *Critique of Pure Reason* made Kant famous. Within ten years after the appearance of the *Critique*, his philosophy was being expounded in all the leading universities of the country. Pupils came from all over Germany to study with him, and scholars made pilgrimages to

Königsberg to see him and to talk with him. Indeed, he was taken as an oracle on almost every phase of human knowledge, from medicine to metaphysics.

And he received honors on every side. The prime minister of Frederick the Great, Count Zedlitz, to whom Kant had dedicated his *Critique*, brought it to the attention of persons powerful in the state. While Zedlitz remained in office, Kant enjoyed every favor of the court.

But this was not to last. Upon the death of Frederick the Great, Frederick William II came to the throne. He was a dissipated man of weak character, entranced by spiritualism and mysticism. The liberating forces that had brought about the French Revolution terrified him. Zedlitz was dismissed, and Wöllner, a bigot, was placed at the head of the department of religion and education. Also, a board of censors was appointed. This group sought to prohibit Kant from writing, but did not succeed.

In 1794, when Kant was about ready to publish his Religion within the Boundaries of Pure Reason, he first sought advice from the theological faculty of Königsberg. They told him to go ahead with the publication, and he did so. But immediately a royal mandate was issued and he was prohibited from writing or speaking on theology. Kant accepted this prohibition as "the duty of a subject" during the lifetime of the ruler. Upon his death and the coming to power of his successor, a man of more liberal ideas, Kant published an account of the controversy and again turned his attention to religious matters.

This struggle with the ruling powers, however, seems to have taken all the ambition out of Kant. In 1794 he withdrew largely from society, and in 1795 he gave up all his classes save one on logic and metaphysics. Then, in 1797, after forty-two years of academic work, he retired from the university. The spirit of the man was broken.

From this point on, Kant declined in strength and his mind began to disintegrate. His memory failed him, strings of words and melodies from his childhood raced through his mind, his nights were disturbed by horrifying dreams and his days with a strange restlessness.

On February 12, 1804, Kant died affirming that, despite all that had happened to him and the many injustices which a bigoted and none too intelligent ruler had heaped upon him, "I have not lost my feeling for humanity." Besides the Critique of Pure Reason, Kant completed two other works of major importance in the history of philosophy. These are the Critique of Practical Reason and the Critique of Judgment. These works form a trinity of Kant's thought. The first is an analysis of pure reason showing its limits and its possibilities. The second carries over this method to the field of ethics, while in the third Kant discusses the problems growing out of the beauty and purposiveness of Nature.

The world we live in, observes Kant, cannot be understood through our senses; but it can be understood through our intellect, or reason. We can "see" the world only with our "inner" eye. And what do we see when we thus focus our inner eye upon the mystery of the world? We see that we cannot be positive about anything, that we must dispose of all definite assertions about man and nature, life and death, body and soul, matter and mind, and spirit and God.

At this point, however, Kant hesitates. His kindly soul, as Heine points out, is unable to deprive his old servant Lampe of his belief in God. "For without his God, the poor fellow cannot be happy; and people really ought to be happy in this world." And so Kant acknowledges the necessity of God in this world. Accept a belief in God because you need such a belief. For, if you believe in God, you thereby assume a moral obligation—Kant calls it the categorical imperative—in accordance with God's will.

This belief in God and the consequent acceptance of a moral obligation, continues Kant, leads us to the belief that we have a free will to choose between what is morally right and morally wrong. And it leads us to the further belief that after what we call "death" there is a continuance of life in which the consequences of our right and wrong actions will be finally adjudged.

These "truths"—asserts Kant—can be revealed not only to the philosopher but even to the layman if he directs the inner eye of his mind upon the two great mysteries of the world—"the starry heavens above, and the moral law within."

And then, having made all these positive assertions, Kant finishes his argument upon a note of doubt. The pity of the poet within him gives way to the impartiality of the philosopher. "All this is what I think. But how do I know that what I think is right?"

THE CRITIQUE OF PURE REASON

INTRODUCTION

That all our knowledge begins with experience there can be no doubt. But, though all our knowledge begins with experience, it by no means follows, that all arises out of experience. For, on the contrary, it is quite possible that our empirical knowledge is a compound of that which we receive through impressions, and that which the faculty of cognition supplies from itself (sensuous impressions giving merely the occasion), an addition which we cannot distinguish from the original element given by sense, till long practice has made us attentive to, and skilful in separating it. It is, therefore, a question which requires close investigation, and is not to be answered at first sight—whether there exists a knowledge altogether independent of experience, and even of all sensuous impressions? Knowledge of this kind is called a priori, in contradistinction to empirical knowledge, which has its sources a posteriori, that is, in experience.

By the term 'knowledge a priori' we shall in the sequel understand, not such as is independent of this or that kind of experience, but such as is absolutely so of all experience. Opposed to this is empirical knowledge, or that which is possible only a posteriori, that is, through experience. Knowledge a priori is either pure or impure. Pure knowledge a priori is that with which no empirical element is mixed up.

2

The question now is as to a criterion, by which we may securely distinguish a pure from an empirical cognition. Now, in the first place, if we have a proposition which contains the idea of necessity in its very conception, it is a judgment a priori; if, moreover, it is not derived from any other proposition, unless from one equally involving the idea of necessity, it is absolutely a priori. Secondly, an empirical judgment never exhibits strict and absolute, but only assumed and comparative universality; therefore, the most we can say is—so far as we have hitherto observed, there is no exception to this or that rule. If, on the other hand, a judgment carries with it strict and absolute universality, that is, admits of no pos-

sible exception, it is not derived from experience, but is valid absolutely a priori.

Not only in judgments, however, but even in conceptions, is an a priori origin manifest. For example, if we take away by degrees from our conceptions of a body all that can be referred to mere sensuous experience—colour, hardness or softness, weight, even impenetrability—the body will then vanish; but the space which it occupied still remains, and this it is utterly impossible to annihilate in thought. Again, if we take away, in like manner, from our empirical conception of any object, corporeal or incorporeal, all properties which mere experience has taught us to connect with it, still we cannot think away those through which we cogitate it as substance, or adhering to substance, although our conception of substance is more determined than that of an object. Compelled, therefore, by that necessity with which the conception of substance forces itself upon us, we must confess that it has its seat in our faculty of cognition a priori.

3

Of far more importance than all that has been above said, is the consideration that certain of our cognitions rise completely above the sphere of all possible experience, and by means of conceptions, to which there exists in the whole extent of experience no corresponding object, seem to extend the range of our judgments beyond its bounds. And just in this transcendental or supersensible sphere, where experience affords us neither instruction nor guidance, lie the investigations of Reason, which, on account of their importance, we consider far preferable to, and as having a far more elevated aim than, all that the understanding can achieve within the sphere of sensuous phenomena. These unavoidable problems of mere pure reason are God, Freedom (of will), and Immortality. The science which, with all its preliminaries, has for its especial object the solution of these problems is named metaphysics—a science which is at the very outset dogmatical, that is, it confidently takes upon itself the execution of this task without any previous investigation of the ability or inability of reason for such an undertaking.

Instead of thus trying to build without a foundation, it is rather to be expected that we should long ago have put the question, how the understanding can arrive at these *a priori* cognitions, and what is the extent, validity, and worth which they may possess?

4

In all judgments wherein the relation of a subject to the predicate is cogitated, this relation is possible in two different ways. Either the predi-

cate B belongs to the subject A, as somewhat which is contained in the conception A; or the predicate B lies completely out of the conception A, although it stands in connection with it. In the first instance, I term the judgment analytical, in the second, synthetical. Analytical judgments are therefore those in which the connection of the predicate with the subject is cogitated through identity; those in which this connection is cogitated without identity, are called synthetical judgments. The former may be called explicative, the latter augmentative judgments; because the former add in the predicate nothing to the conception of the subject, but only analyse it into its constituent conceptions, which were thought already in the subject, although in a confused manner; the latter add to our conceptions of the subject a predicate which was not contained in it, and which no analysis could ever have discovered therein.

Judgments of experience, as such, are always synthetical. For it would be absurd to think of grounding an analytical judgment on experience, because in forming such a judgment I need not go out of the sphere of my conceptions, and therefore recourse to the testimony of experience is quite unnecessary.

But to synthetical judgments a priori, such aid is entirely wanting. If I go out of and beyond the conception A, in order to recognize another B as connected with it, what foundation have I to rest on, whereby to render the synthesis possible? I have here no longer the advantage of looking out in the sphere of experience for what I want.

5

Mathematical judgments are always synthetical. Hitherto this fact, though incontestably true and very important in its consequences, seems to have escaped the analysts of the human mind, nay, to be in complete opposition to all their conjectures.

Before all, be it observed, that proper mathematical propositions are always judgments a priori, and not empirical, because they carry along with them the conception of necessity, which cannot be given by experience. If this be demurred to, it matters not; I will then limit my assertion to pure mathematics, the very conception of which implies that it consists of knowledge altogether non-empirical and a priori.

The science of Natural Philosophy contains in itself synthetical judgments a priori, as principles. I shall adduce two propositions. For instance, the proposition, 'In all changes of the material world, the quantity of matter remains unchanged'; or, that, 'In all communication of motion, action and reaction must always be equal.' In both of these, not only is the necessity, and therefore their origin a priori clear, but also that they are synthetical propositions. For in the conception of matter, I do not cogitate

its permanency, but merely its presence in space, which it fills. I therefore really go out of and beyond the conception of matter, in order to think on to it something a priori, which I did not think in it.

As to Metaphysics, even if we look upon it merely as an attempted science, yet, from the nature of human reason, an indispensable one, we find that it must contain synthetical propositions a priori. It is not merely the duty of metaphysics to dissect, and thereby analytically to illustrate the conceptions which we form a priori of things; but we seek to widen the range of our a priori knowledge. For this purpose, we must avail ourselves of such principles as add something to the original conception—something not identical with, nor contained in it, and by means of synthetical judgments a priori, leave far behind us the limits of experience; for example, in the proposition, 'the world must have a beginning,' and such like. Thus metaphysics, according to the proper aim of the science, consists merely of synthetical propositions a priori.

6

It is extremely advantageous to be able to bring a number of investigations under the formula of a single problem. For in this manner, we not only facilitate our own labour, inasmuch as we define it clearly to ourselves, but also render it more easy for others to decide whether we have done justice to our undertaking. The proper problem of pure reason, then, is contained in the question: 'How are synthetical judgments a priori possible?'

That metaphysical science has hitherto remained in so vacillating a state of uncertainty and contradiction, is only to be attributed to the fact, that this great problem, and perhaps even the difference between analytical and synthetical judgments, did not sooner suggest itself to philosophers. Upon the solution of this problem, or upon sufficient proof of the impossibility of synthetical knowledge a priori, depends the existence or downfall of the science of metaphysics.

In the solution of the above problem is at the same time comprehended the possibility of the use of pure reason in the foundation and construction of all sciences which contain theoretical knowledge a priori of objects, that is to say, the answer to the following questions:

How is pure mathematical science possible?

How is pure natural science possible?

Respecting these sciences, as they do certainly exist, it may with propriety be asked, how they are possible?—for that they must be possible, is shown by the fact of their really existing. But as to metaphysics, the miserable progress it has hitherto made, and the fact that of no one system yet brought forward, as far as regards its true aim, can it be said

that this science really exists, leaves any one at liberty to doubt with reason the very possibility of its existence.

We may and must, therefore, regard the attempts hitherto made to establish metaphysical science dogmatically as non-existent. For what of analysis, that is, mere dissection of conceptions, is contained in one or other, is not the aim of, but only a preparation for metaphysics proper, which has for its object the extension, by means of synthesis, of our a priori knowledge. And for this purpose, mere analysis is of course useless, because it only shows what is contained in these conceptions, but not how we arrive, a priori, at them; and this it is her duty to show, in order to be able afterwards to determine their valid use in regard to all objects of experience, to all knowledge in general.

7

From all that has been said, there results the idea of a particular science, which may be called the *Critique of Pure Reason*. For reason is the faculty which furnishes us with the principles of knowledge a priori. Hence, pure reason is the faculty which contains the principles of cognizing anything absolutely a priori. I apply the term transcendental to all knowledge which is not so much occupied with objects as with the mode of our cognition of these objects, so far as this mode of cognition is possible a priori. A system of such conceptions would be called *Transcendental Philosophy*.

Transcendental philosophy is the idea of a science, for which the Critique of Pure Reason must sketch the whole plan architectonically, that is, from principles, with a full guarantee for the validity and stability of all the parts which enter into the building. It is the system of all the principles of pure reason. If this Critique itself does not assume the title of transcendental philosophy, it is only because, to be a complete system, it ought to contain a full analysis of all human knowledge a priori.

To the Critique of Pure Reason, therefore, belongs all that constitutes transcendental philosophy; and it is the complete idea of transcendental philosophy, but still not the science itself; because it only proceeds so far with the analysis as is necessary to the power of judging completely of our synthetical knowledge a priori.

Transcendental Doctrine of Elements

PART FIRST: TRANSCENDENTAL AESTHETIC

Introductory

IN WHATEVER MODE, or by whatsoever means, our knowledge may relate to objects, it is at least quite clear, that the only manner in which it immediately relates to them, is by means of an intuition. To this as the indispensable groundwork, all thought points. But an intuition can take place only in so far as the object is given to us. This, again, is only possible, to man at least, on condition that the object affect the mind in a certain manner. The capacity for receiving representations (receptivity) through the mode in which we are affected by objects, is called sensibility. By means of sensibility, therefore, objects are given to us, and it alone furnishes us with intuitions; by the understanding they are thought, and from it arise conceptions. But all thought must directly, or indirectly, by means of certain signs, relate ultimately to intuitions; consequently, with us, to sensibility, because in no other way can an object be given to us.

The effect of an object upon the faculty of representation, so far as we are affected by the said object, is sensation. That sort of intuition which relates to an object by means of sensation, is called an empirical intuition. The undetermined object of an empirical intuition, is called *phenomenon*. That which in the phenomenon corresponds to the sensation, I term its *matter*; but that which effects that the content of the phenomenon can be arranged under certain relations, I call its *form*. But that in which our sensations are merely arranged, and by which they are susceptible of assuming a certain form, cannot be itself sensation. It is, then, the matter of all phenomena that is given to us a posteriori; the form must lie ready a priori for them in the mind, and consequently can be regarded separately from all sensation.

I call all representations *pure*, in the transcendental meaning of the word, wherein nothing is met with that belongs to sensation. And accordingly we find existing in the mind *a priori*, the pure form of sensuous intuitions in general, in which all the manifold content of the phenomenal world is arranged and viewed under certain relations. This pure form of sensibility I shall call pure intuition. Thus, if I take away from our representation of a body, all that the understanding thinks as belonging to it,

as substance, force, divisibility, etc., and also whatever belongs to sensation, as impenetrability, hardness, colour, etc.; yet there is still something left us from this empirical intuition, namely, extension and shape. These belong to pure intuition, which exists a priori in the mind, as a mere form of sensibility, and without any real object of the senses or any sensation.

The science of all the principles of sensibility a priori, I call Transcendental Aesthetic. There must then, be such a science forming the first part of the transcendental doctrine of elements, in contradistinction to that part which contains the principles of pure thought, and which is called transcendental logic.

I. OF SPACE

Metaphysical Exposition of This Conception

By MEANS of the external sense, we represent to ourselves objects as without us, and these all in space. Therein alone are their shapes, dimensions, and relations to each other determined or determinable. The internal sense, by means of which the mind contemplates itself or its internal state, gives, indeed, no intuition of the soul as an object; yet there is nevertheless a determinate form, under which alone the contemplation of our internal state is possible, so that all which relates to the inward determinations of the mind is represented in relations of time. Of time we cannot have any external intuition, any more than we can have an internal intuition of space.

Space is not a conception which has been derived from outward experiences. For, in order that certain sensations may relate to something without me; in like manner, in order that I may represent them not merely as without of and near to each other, but also in separate places, the representation of space must already exist as a foundation. Consequently, the representation of space cannot be borrowed from the relations of external phenomena through experience; but, on the contrary, this external experience is itself only possible through the said antecedent representation.

Space then is a necessary representation a priori, which serves for the foundation of all external intuitions. We never can imagine or make a representation to ourselves of the non-existence of space, though we may easily enough think that no objects are found in it. It must, therefore, be considered as the condition of the possibility of phenomena, and by no means as a determination dependent on them, and is a representation a priori, which necessarily supplies the basis for external phenomena.

Space is no discursive, or as we say, general conception of the relations of things, but a pure intuition. For in the first place, we can only represent to ourselves one space, and when we talk of divers spaces, we mean only parts of one and the same space. Moreover, these parts cannot antecede this one all-embracing space, as the component parts from which the aggregate can be made up, but can be cogitated only as existing in it. Space is essentially one, and multiplicity in it, consequently the general notion of spaces, of this or that space, depends solely upon limitations. Hence it follows that an a priori intuition lies at the root of all our conceptions of space.

Space is represented as an infinite given quantity. Now every conception must indeed be considered as a representation which is contained in an infinite multitude of different possible representations, which, therefore, comprises these under itself; but no conception, as such, can be so conceived, as if it contained within itself an infinite multitude of representations. Nevertheless, space is so conceived of, for all parts of space are equally capable of being produced to infinity. Consequently, the original representation of space is an intuition a priori, and not a conception.

Conclusions

Space does not represent any property of objects as things in themselves, nor does it represent them in their relations to each other.

Space is nothing else than the form of all phenomena of the external sense, that is, the subjective condition of the sensibility, under which alone external intuition is possible.

II. OF TIME

Metaphysical Exposition of This Conception

TIME is not an empirical conception. For neither co-existence nor succession would be perceived by us, if the representation of time did not exist as a foundation *a priori*. Without this presupposition we could not represent to ourselves that things exist together at one and the same time, or at different times.

Time is a necessary representation, lying at the foundation of all our intuitions. With regard to phenomena in general, we cannot think away time from them, and represent them to ourselves as out of and unconnected with time, but we can quite well represent to ourselves time void of phenomena. Time is therefore given a priori.

On this necessity a priori is also founded the possibility of apodeictic principles of the relations of time, or axioms of time in general, such as: "Time has only one dimension," 'Different times are not co-existent but successive.' These principles cannot be derived from experience, for it would give neither strict universality nor apodeictic certainty.

Time is not a discursive, or as it is called, general conception, but a pure form of the sensuous intuition. Different times are merely parts of one and the same time.

The infinity of time signifies nothing more than that every determined quantity of time is possible only through limitations of one time lying at the foundation. Consequently, the original representation, time, must be given as unlimited.

Conclusions

Time is not something which subsists of itself, or which inheres in things as an objective determination, and therefore remains, when abstraction is made of the subjective conditions of the intuition of things.

Time is nothing else than the form of the internal sense, that is, of the intuitions of self and of our internal state. For time cannot be any determination of outward phenomena. It has to do neither with shape nor position; on the contrary, it determines the relation of representations in our internal state.

Time is the formal condition a priori of all phenomena whatsoever. Space, as the pure form of external intuition, is limited as a condition a priori to external phenomena alone. On the other hand, because all representations, whether they have or have not external things for their objects, still in themselves, as determinations of the mind, belong to our internal state; and because this internal state is subject to the formal condition of the internal intuition, that is, to time—time is a condition a priori of all phenomena whatsoever—the immediate condition of all internal, and thereby the mediate condition of all external phenomena.

PART SECOND: TRANSCENDENTAL LOGIC

INTRODUCTION: IDEA OF A TRANSCENDENTAL LOGIC

Of Logic in General

Our knowledge springs from two main sources in the mind, the first of which is the faculty or power of receiving representations; the second is the power of cognizing by means of these representations. Through

the first an object is given to us; through the second, it is, in relation to the representation, thought. Intuition and conceptions constitute, therefore, the elements of all our knowledge, so that neither conceptions without an intuition in some way corresponding to them, nor intuition without conceptions, can afford us a cognition. Both are either pure or empirical. They are empirical, when sensation is contained in them; and pure, when no sensation is mixed with the representation. Sensations we may call the matter of sensuous cognition. Pure intuition consequently contains merely the form under which something is intuited, and pure conception only the form of the thought of an object. Only pure intuitions and pure conceptions are possible a priori; the empirical only a posteriori.

We apply the term sensibility to the receptivity of the mind for impressions, in so far as it is in some way affected; and, on the other hand, we call the faculty of spontaneously producing representations, or the spontaneity of cognition, understanding. Our nature is so constituted, that intuition with us never can be other than sensuous, that is, it contains only the mode in which we are affected by objects. On the other hand, the faculty of thinking the object of sensuous intuition, is the understanding. Neither of these faculties has a preference over the other. Without the sensuous faculty no object would be given to us, and without the understanding no object would be thought. Thoughts without content are void; intuitions without conceptions, blind. Hence it is as necessary for the mind to make its conceptions sensuous, as to make its intuitions intelligible, Neither of these faculties can exchange its proper function. Understanding cannot intuit, and the sensuous faculty cannot think. In no other way than from the united operation of both, can knowledge arise. But no one ought, on this account, to overlook the difference of the elements contributed by each; we have rather great reason carefully to separate and distinguish them. We therefore distinguish the science of the laws of sensibility, that is, Aesthetic, from the science of the laws of the understanding, that is, Logic.

Of Transcendental Logic

General logic, as we have seen, makes abstraction of all content of cognition, that is, of all relation of cognition to its object, and regards only the logical form in the relation of cognitions to each other, that is, the form of thought in general. But as we have both pure and empirical intuitions, in like manner a distinction might be drawn between pure and empirical thought. In this case, there would exist a kind of logic, in which we should not make abstraction of all content of cognition; for that logic which should comprise merely the laws of pure thought, would of course

exclude all those cognitions which were of empirical content. This kind of logic would also examine the origin of our cognitions of objects, so far as that origin cannot be ascribed to the objects themselves; while, on the contrary, general logic has nothing to do with the origin of our cognitions, but contemplates our representations, be they given primitively a priori in ourselves, or be they only of empirical origin, solely according to the laws which the understanding observes in employing them in the process of thought, in relation to each other. Consequently, general logic treats of the form of the understanding only, which can be applied to representations, from whatever source they may have arisen.

And here I shall make a remark, which the reader must bear well in mind in the course of the following considerations, to wit, that not every cognition a priori, but only those through which we cognize that and how certain representations (intuitions or conceptions) are applied or are possible only a priori; that is to say, the a priori possibility of cognition and the a priori use of it are transcendental. Therefore neither is space, nor any a priori geometrical determination of space, a transcendental representation, but only the knowledge that such a representation is not of empirical origin, and the possibility of its relating to objects of experience, although itself a priori, can be called transcendental. So also, the application of space to objects in general, would be transcendental; but if it be limited to objects of sense, it is empirical. Thus, the distinction of the transcendental and empirical belongs only to the critique of cognitions, and does not concern the relation of these to their object.

Of the Division of Transcendental Logic into Transcendental Analytic and Dialectic

In transcendental logic we isolate the understanding and select from our cognition merely that part of thought which has its origin in the understanding alone. The exercise of this pure cognition, however, depends upon this as its condition, that objects to which it may be applied be given to us in intuition, for without intuition the whole of our cognition is without objects, and is therefore quite void. That part of transcendental logic, then, which treats of the elements of pure cognition of the understanding, and of the principles without which no object at all can be thought, is transcendental analytic, and at the same time a logic of truth. For no cognition can contradict it, without losing at the same time all content, that is, losing all reference to an object, and therefore all truth. But because we are very easily seduced into employing these pure cognitions and principles of the understanding by themselves, and that even beyond the boundaries of experience, which yet is the

only source whence we can obtain matter on which those pure conceptions may be employed—understanding runs the risk of making, by means of empty sophisms, a material and objective use of the mere formal principles of the pure understanding, and of passing judgments on obiects without distinction—objects which are not given to us, nay, perhaps cannot be given to us in any way. Now, as it ought properly to be only a canon for judging of the empirical use of the understanding, this kind of logic is misused when we seek to employ it as an organon of the universal and unlimited exercise of the understanding, and attempt with the pure understanding alone to judge synthetically, affirm, and determine respecting objects in general. In this case the exercise of the pure understanding becomes dialectical. The second part of our transcendental logic must therefore be a critique of dialectical illusion, and this critique we shall term Transcendental Dialectic-not meaning it as an art of producing dogmatically such illusion, but as a critique of understanding and reason in regard to their hyperphysical use. This critique will expose the groundless nature of the pretensions of these two faculties, and invalidate their claims to the discovery and enlargement of our cognitions merely by means of transcendental principles, and show that the proper employment of these faculties is to test the judgments made by the pure understanding, and to guard it from sophistical delusion.

TRANSCENDENTAL LOGIC

FIRST DIVISION: TRANSCENDENTAL ANALYTIC

Transcendental analytic is the dissection of the whole of our a priori knowledge into the elements of the pure cognition of the understanding. In order to effect our purpose, it is necessary: (1) That the conceptions be pure and not empirical; (2) That they belong not to intuition and sensibility, but to thought and understanding; (3) That they be elementary conceptions, and as such, quite different from deduced or compound conceptions; (4) That our table of these elementary conceptions be complete, and fill up the whole sphere of the pure understanding. Now this completeness of a science cannot be accepted with confidence on the guarantee of a mere estimate of its existence in an aggregate formed only by means of repeated experiments and attempts. The completeness which we require is possible only by means of an idea of the totality of the a priori cognition of the understanding, and through the thereby determined division of the conceptions which form the said whole; consequently, only by means of their connection in a system.

Book One: Analytic of Conceptions

BY THE TERM 'Analytic of Conceptions,' I do not understand the analysis of these, or the usual process in philosophical investigations of dissecting the conceptions which present themselves, according to their content, and so making them clear; but I mean the hitherto little attempted dissection of the faculty of understanding itself, in order to investigate the possibility of conceptions a priori, by looking for them in the understanding alone, as their birthplace, and analysing the pure use of this faculty.

I. OF THE TRANSCENDENTAL CLUE TO THE DISCOVERY OF ALL PURE CONCEPTIONS OF THE UNDERSTANDING

Of the Logical Use of the Understanding in General

THE UNDERSTANDING was defined above only negatively, as a non-sensuous faculty of cognition. Now, independently of sensibility, we cannot possibly have any intuition; consequently, the understanding is no faculty of intuition. But besides intuition there is no other mode of cognition, except through conceptions; consequently, the cognition of every, at least of every human, understanding is a cognition through conceptions -not intuitive, but discursive. All intuitions, as sensuous, depend on affections; conceptions, therefore, upon functions. By the word function I understand the unity of the act of arranging diverse representations under one common representation. Conceptions, then, are based on the spontaneity of thought, as sensuous intuitions are on the receptivity of impressions. Now, the understanding cannot make any other use of these conceptions than to judge by means of them. As no representation, except an intuition, relates immediately to its object, a conception never relates immediately to an object, but only to some other representation thereof, be that an intuition or itself a conception. A judgment, therefore, is the mediate cognition of an object, consequently the representation of a representation of it. In every judgment there is a conception which applies to, and is valid for many other conceptions, and which among these comprehends also a given representation, this last being immediately connected with an object. All judgments, accordingly, are functions of unity in our representations, inasmuch as, instead of an immediate, a

higher representation, which comprises this and various others, is used for our cognition of the object, and thereby many possible cognitions are collected into one. But we can reduce all acts of the understanding to judgments, so that understanding may be represented as the faculty of judging. For it is, according to what has been said above, a faculty of thought. Now thought is cognition by means of conceptions. But conceptions, as predicates of possible judgments, relate to some representation of a yet undetermined object. All the functions of the understanding therefore can be discovered, when we can completely exhibit the functions of unity in judgments. And that this may be effected very easily, the following section will show.

Of the Logical Function of the Understanding in Judgments

If we abstract all the content of a judgment, and consider only the intellectual form thereof, we find that the function of thought in a judgment can be brought under four heads, of which each contains three momenta. These may be conveniently represented in the following table:

Quantity of judgments
Universal
Particular

Singular

Quality
Affirmative
Negative
Infinite

Relation
Categorical
Hypothetical
Disjunctive

Modality
Problematical
Assertorical
Apodeictical

Of the Pure Conceptions of the Understanding, or Categories

General logic, as has been repeatedly said, makes abstraction of all content of cognition, and expects to receive representations from some other quarter, in order, by means of analysis, to convert them into con-

ceptions. On the contrary, transcendental logic has lying before it the manifold content of a priori sensibility, which transcendental aesthetic presents to it in order to give matter to the pure conceptions of the understanding, without which transcendental logic would have no content, and be therefore utterly void. Now space and time contain an infinite diversity of determinations of pure a priori intuition, but are nevertheless the condition of the mind's receptivity, under which alone it can obtain representations of objects, and which, consequently, must always affect the conception of these objects. But the spontancity of thought requires that this diversity be examined after a certain manner, received into the mind, and connected, in order afterwards to form a cognition out of it. This process I call synthesis.

By the word synthesis, in its most general signification, I understand the process of joining different representations to each other, and of comprehending their diversity in one cognition. This synthesis is pure when the diversity is not given empirically but a priori. Our representations must be given previously to any analysis of them; and no conceptions can arise, quoad their content, analytically. But the synthesis of a diversity is the first requisite for the production of a cognition, which in its beginning, indeed, may be crude and confused, and therefore in need of analysis—still, synthesis is that by which alone the elements of our cognitions are collected and united into a certain content, consequently it is the first thing on which we must fix our attention, if we wish to investigate the origin of our knowledge.

Synthesis, generally speaking, is, as we shall afterwards see, the mere operation of the imagination—a blind but indispensable function of the soul, without which we should have no cognition whatever, but of the working of which we are seldom even conscious. But to reduce this synthesis to conceptions is a function of the understanding, by means of which we attain to cognition, in the proper meaning of the term.

Pure synthesis, represented generally, gives us the pure conception of the understanding. But by this pure synthesis, I mean that which rests upon a basis of *a priori* synthetical unity. Thus, our numeration is a synthesis according to conceptions, because it takes place according to a common basis of unity. By means of this conception, therefore, the unity in the synthesis of the manifold becomes necessary.

By means of analysis different representations are brought under one conception—an operation of which general logic treats. On the other hand, the duty of transcendental logic is to reduce to conceptions, not representations, but the pure synthesis of representations. The first thing which must be given to us in order to the *a priori* cognition of all objects, is the diversity of the pure intuition; the synthesis of this diversity by means of the imagination is the second; but this gives, as yet, no cognition. The

conceptions which give unity to this pure synthesis, and which consist solely in the representation of this necessary synthetical unity, furnish the third requisite for the cognition of an object, and these conceptions are given by the understanding.

Of the Pure Conceptions of the Understanding, or Categories

In this manner, there arise exactly so many pure conceptions of the understanding, applying a priori to objects of intuition in general, as there are logical functions in all possible judgments. For there is no other function or faculty existing in the understanding besides those enumerated in that table. These conceptions we shall, with Aristotle, call categories, our purpose being originally identical with his, notwithstanding the great difference in the execution.

TABLE OF THE CATEGORIES

of Quantity
Unity
Plurality
Totality

Of Quality
Reality
Negation
Limitation

3 Of Relation

Of Consider and Describer (substantia et accidens)

Of Causality and Dependence (cause and effect)

Of Community (reciprocity between the agent and patient)

4 Of Modality Possibility—Impossibility Existence—Non-existence Necessity—Contingence

This, then, is a catalogue of all the originally pure conceptions of the synthesis which the understanding contains a priori, and these conceptions alone entitle it to be called a pure understanding; inasmuch as only by them it can render the manifold of intuition conceivable, in other words, think an object of intuition.

II. Of the Deduction of the Pure Conceptions of the Understanding

Of the Principles of a Transcendental Deduction in General

Among the many conceptions which make up the very variegated web of human cognition, some are destined for pure use a priori, independent of all experience; and their title to be so employed always requires a deduction, inasmuch as, to justify such use of them, proofs from experience are not sufficient; but it is necessary to know how these conceptions can apply to objects without being derived from experience. I term, therefore, an explanation of the manner in which conceptions can apply a priori to objects, the transcendental deduction of conceptions, and I distinguish it from the empirical deduction, which indicates the mode in which a conception is obtained through experience and reflection thereon; consequently, does not concern itself with the right, but only with the fact of our obtaining conceptions in such and such a manner. We have already seen that we are in possession of two perfectly different kinds of conceptions, which nevertheless agree with each other in this, that they both apply to objects completely a priori. These are the conceptions of space and time as forms of sensibility, and the categories as pure conceptions of the understanding. To attempt an empirical deduction of either of these classes would be labour in vain, because the distinguishing characteristic of their nature consists in this, that they apply to their objects, without having borrowed anything from experience towards the representation of them. Consequently, if a deduction of these conceptions is necessary, it must always be transcendental.

But although it is admitted that the only possible deduction of pure a priori cognition is a transcendental deduction, it is not, for that reason, perfectly manifest that such a deduction is absolutely necessary. We have already traced to their sources the conceptions of space and time, by means of a transcendental deduction, and we have explained and determined their objective validity a priori. Geometry, nevertheless, advances steadily and securely in the province of pure a priori cognitions, without needing to ask from Philosophy any certificate as to the pure and legitimate origin of its fundamental conception of space. But the use of the conception in this science extends only to the external world of sense, the pure form of the intuition of which is space; and in this world, therefore, all geometrical cognition, because it is founded upon a priori intuition, possesses immediate evidence, and the objects of this cognition are given a priori in intuition by and through the cognition itself. With the pure conceptions of Understanding, on the contrary, commences the absolute neces-

sity of seeking a transcendental deduction, not only of these conceptions themselves, but likewise of space, because, inasmuch as they make affirmations concerning objects not by means of the predicates of intuition and sensibility, but of pure thought a priori, they apply to objects without any of the conditions of sensibility. Besides, not being founded on experience, they are not presented with any object in a priori intuition upon which, antecedently to experience, they might base their synthesis. Hence results, not only doubt as to the objective validity and proper limits of their use, but that even our conception of space is rendered equivocal; inasmuch as we are very ready, with the aid of the categories, to carry the use of this conception beyond the conditions of sensuous intuition—and for this reason, we have already found a transcendental deduction of it needful.

Of the Possibility of a Conjunction of the Manifold Representations Given by Sense

The manifold content in our representations can be given in an intuition which is merely sensuous—in other words, is nothing but susceptibility; and the form of this intuition can exist a priori in our faculty of representation, without being anything else but the mode in which the subject is affected. But the conjunction of a manifold in intuition never can be given us by the senses; it cannot therefore be contained in the pure form of sensuous intuition, for it is a spontaneous act of the faculty of representation. And as we must, to distinguish it from sensibility, entitle this faculty understanding; so all conjunction—whether conscious or unconscious, be it of the manifold in intuition, sensuous or non-sensuous, or of several conceptions—is an act of the understanding. To this act we shall give the general appellation of synthesis, thereby to indicate, at the same time, that we cannot represent anything as conjoined in the object without having previously conjoined it ourselves. Of all mental notions, that of conjunction is the only one which cannot be given through objects, but can be originated only by the subject itself, because it is an act of its purely spontaneous activity. The reader will easily enough perceive that the possibility of conjunction must be grounded in the very nature of this act, and that it must be equally valid for all conjunction; and that analysis, which appears to be its contrary, must, nevertheless, always presuppose it; for where the understanding has not previously conjoined, it cannot dissect or analyse, because only as conjoined by it, must that which is to be analysed have been given to our faculty of representation.

But the conception of conjunction includes, besides the conception of the manifold and of the synthesis of it, that of the unity of it also. Conjunction is the representation of the synthetical unity of the manifold.

This idea of unity, therefore, cannot arise out of that of conjunction; much rather does that idea, by combining itself with the representation of the manifold, render the conception of conjunction possible. This unity, which a priori precedes all conceptions of conjunction, is not the category of unity; for all the categories are based upon logical functions of judgment, and in these functions we already have conjunction, and consequently unity of given conceptions. It is therefore evident that the category of unity presupposes conjunction. We must therefore look still higher for this unity in that, namely, which contains the ground of the unity of diverse conceptions in judgments, the ground, consequently, of the possibility of the existence of the understanding, even in regard to its logical use.

Of the Originally Synthetical Unity of Apperception

The I think must accompany all my representations, for otherwise something would be represented in me which could not be thought; in other words, the representation would either be impossible, or at least be, in relation to me, nothing. That representation which can be given previously to all thought, is called intuition. All the diversity or manifold content of intuition has, therefore, a necessary relation to the I think, in the subject in which this diversity is found. But this representation, I think, is an act of spontaneity; that is to say, it cannot be regarded as belonging to mere sensibility. I call it pure apperception, in order to distinguish it from empirical or primitive apperception, because it is a self-consciousness which, whilst it gives birth to the representation I think, must necessarily be capable of accompanying all our representations. It is in all acts of consciousness one and the same, and unaccompanied by it, no representation can exist for me. The unity of this apperception I call the transcendental unity of self-consciousness, in order to indicate the possibility of a priori cognition arising from it. For the manifold representations which are given in an intuition would not all of them be my representations, if they did not all belong to one self-consciousness, that is, as my representations they must conform to the condition under which alone they can exist together in a common self-consciousness, because otherwise they would not all without exception belong to me.

The Principle of the Synthetical Unity of Apperception Is the Highest Principle of All Exercise of the Understanding

The supreme principle of the possibility of all intuition in relation to sensibility was, according to our transcendental aesthetic, that all the manifold in intuition be subject to the formal conditions of Space and Time. The supreme principle of the possibility of it in relation to the Understanding is: that all the manifold in it be subject to conditions of the originally synthetical Unity of Apperception. To the former of these two principles are subject all the various representations of Intuition, in so far as they are given to us; to the latter, in so far as they must be capable of conjunction in one consciousness; for without this nothing can be thought or cognized, because the given representations would not have in common the act of the apperception I think; and therefore could not be connected in one self-consciousness.

Understanding is, to speak generally, the faculty of Cognitions. These consist in the determined relation of given representations to an object. But an object is that, in the conception of which the manifold in a given intuition is united. Now all union of representations requires unity of consciousness in the synthesis of them. Consequently, it is the unity of consciousness alone that constitutes the possibility of representations relating to an object, and therefore of their objective validity, and of their becoming cognitions, and consequently, the possibility of the existence of the understanding itself.

The Logical Form of All Judgments Consists in the Objective Unity of Apperception of the Conceptions Contained Therein

I could never satisfy myself with the definition which logicians give of a judgment. It is, according to them, the representation of a relation between two conceptions. I shall not dwell here on the faultiness of this definition, in that it suits only for categorical and not for hypothetical or disjunctive judgments, these latter containing a relation not of conceptions but of judgments themselves—a blunder from which many evil results have followed. It is more important for our present purpose to observe that this definition does not determine in what the said relation consists.

But if I investigate more closely the relation of given cognitions in every judgment, and distinguish it, as belonging to the understanding, from the relation which is produced according to laws of the reproductive imagination, I find that a judgment is nothing but the mode of bringing given cognitions under the objective unity of apperception. This is plain from our use of the term of relation is in judgments, in order to distinguish the objective unity of given representations from the subjective unity. For this term indicates the relation of these representations to the original apperception, and also their necessary unity, even although the judgment is empirical, therefore contingent, as in the judgment: 'All bodies are

heavy.' I do not mean by this, that these representations do necessarily belong to each other in empirical intuition, but that by means of the necessary unity of apperception they belong to each other in the synthesis of intuitions, that is to say, they belong to each other according to principles of the objective determination of all our representations, in so far as cognition can arise from them, these principles being all deduced from the main principle of the transcendental unity of apperception. In this way alone can there arise from this relation a judgment, that is, a relation which has objective validity, and is perfectly distinct from that relation of the very same representations which has only subjective validity—a relation, to wit, which is produced according to laws of association. According to these laws, I could only say: 'When I hold in my hand or carry a body, I feel an impression of weight'; but I could not say: 'It, the body, is heavy'; for this is tantamount to saying both these representations are conjoined in the object, that is, without distinction as to the condition of the subject, and do not merely stand together in my perception, however frequently the perceptive act may be repeated.

All Sensuous Intuitions Are Subject to the Categories, as Conditions under Which Alone the Manifold Content of Them Can Be United in One Consciousness

The manifold content given in a sensuous intuition comes necessarily under the original synthetical unity of apperception, because thereby alone is the unity of intuition possible. But that act of the understanding, by which the manifold content of given representations is brought under one apperception, is the logical function of judgments. All the manifold, therefore, in so far as it is given in one empirical intuition, is determined in relation to one of the logical functions of judgment, by means of which it is brought into union in one consciousness. Now the categories are nothing else than these functions of judgment, so far as the manifold in a given intuition is determined in relation to them. Consequently, the manifold in a given intuition is necessarily subject to the categories of the understanding.

In Cognition, Its Application to Objects of Experience Is the Only Legitimate Use of the Category

To think an object and to cognize an object are by no means the same thing. In cognition there are two elements: firstly, the conception, whereby an object is cogitated; and, secondly, the intuition, whereby the

object is given. For supposing that to the conception a corresponding intuition could not be given, it would still be a thought as regards its form, but without any object, and no cognition of anything would be possible by means of it, inasmuch as, so far as I knew, there existed and could exist nothing to which my thought could be applied. Now all intuition possible to us is sensuous; consequently, our thought of an object by means of a pure conception of the understanding can become cognition for us only in so far as this conception is applied to objects of the senses. Sensuous intuition is either pure intuition or empirical intuition—of that which is immediately represented in space and time by means of sensation as real. Through the determination of pure intuition we obtain a priori cognitions of objects, as in mathematics, but only as regards their form as phenomena; whether there can exist things which must be intuited in this form is not thereby established. All mathematical conceptions, therefore, are not per se cognition, except in so far as we presuppose that there exist things which can only be represented conformably to the form of our pure sensuous intuition.

Book Two

Introduction: Of the Transcendental Faculty of Judgment in General

If understanding in general be defined as the faculty of laws or rules, the faculty of judgment may be termed the faculty of subsumption under these rules; that is, of distinguishing whether this or that does or does not stand under a given rule. General logic contains no directions or precepts for the faculty of judgment, nor can it contain any such. For as it makes abstraction of all content of cognition, no duty is left for it, except that of exposing analytically the mere form of cognition in conceptions, judgments, and conclusions, and of thereby establishing formal rules for all exercise of the understanding. Now if this logic wished to give some general direction how we should subsume under these rules, that is, how we should distinguish whether this or that did or did not stand under them, this again could not be done otherwise than by means of a rule. But this rule, precisely because it is a rule, requires for itself direction from the faculty of judgment. Thus, it is evident that the understanding is capable of being instructed by rules, but that the judgment is a peculiar talent, which does not, and cannot require tuition, but only exercise.

But although general logic cannot give directions to the faculty of judgment, the case is very different as regards transcendental logic, inso-

much that it appears to be the especial duty of the latter to secure and direct, by means of determinate rules, the faculty of judgment in the employment of the pure understanding. For, as a doctrine, that is, as an endeavour to enlarge the sphere of the understanding in regard to pure a priori cognitions, philosophy is worse than useless, since from all the attempts hitherto made, little or no ground has been gained. But, as a critique, in order to guard against the mistakes of the faculty of judgment in the employment of the few pure conceptions of the understanding which we possess, although its use is in this case purely negative, philosophy is called upon to apply all its acuteness and penetration.

I. OF THE SCHEMATISM OF THE PURE CONCEPTIONS OF THE UNDERSTANDING

In ALL SUBSUMPTIONS of an object under a conception, the representation of the object must be homogeneous with the conception; in other words, the conception must contain that which is represented in the object to be subsumed under it. For this is the meaning of the expression: An object is contained under a conception.

But pure conceptions of the understanding, when compared with empirical intuitions, or even with sensuous intuitions in general, are quite heterogeneous, and never can be discovered in any intuition. How then is the *subsumption* of the latter under the former, and consequently the application of the categories to phenomena, possible? This natural and important question forms the real cause of the necessity of a transcendental doctrine of the faculty of judgment, with the purpose, to wit, of showing how pure conceptions of the understanding can be applied to phenomena. In all other sciences, where the conceptions by which the object is thought in the general are not so different and heterogeneous from those which represent the object in concreto—as it is given, it is quite unnecessary to institute any special inquiries concerning the application of the former to the latter.

Now it is quite clear that there must be some third thing, which on the one side is homogeneous with the category, and with the phenomenon on the other, and so makes the application of the former to the latter possible. This mediating representation must be pure, and yet must on the one side be *intellectual*, on the other *sensuous*. Such a representation is the *transcendental schema*.

The conception of the understanding contains pure synthetical unity of the manifold in general. Time, as the formal condition of the manifold of the internal sense, consequently of the conjunction of all representations, contains a priori a manifold in the pure intuition. Now a transcendental determination of time is so far homogeneous with the category, which

constitutes the unity thereof, that it is universal, and rests upon a rule a priori. On the other hand, it is so far homogeneous with the phenomenon, inasmuch as time is contained in every empirical representation of the manifold. Thus an application of the category to phenomena becomes possible, by means of the transcendental determination of time, which, as the schema of the conceptions of the understanding, mediates the subsumption of the latter under the former.

The schema is, in itself, always a mere product of the imagination. But as the synthesis of imagination has for its aim no single intuition, but merely unity in the determination of sensibility, the schema is clearly distinguishable from the image.

In truth, it is not images of objects, but schemata, which lie at the foundation of our pure sensuous conceptions. No image could ever be adequate to our conception of a triangle in general. For the generalness of the conception it never could attain to, as this includes under itself all triangles, whether right-angled, acute-angled, etc., whilst the image would always be limited to a single part of this sphere. The schema of the triangle can exist nowhere else than in thought, and it indicates a rule of the synthesis of the imagination in regard to pure figures in space. Still less is an object of experience, or an image of the object, ever adequate to the empirical conception. On the contrary, the conception always relates immediately to the schema of the imagination, as a rule for the determination of our intuition, in conformity with a certain general conception.

II. SYSTEM OF ALL PRINCIPLES OF THE PURE UNDERSTANDING

Of the Supreme Principle of All Analytical Judgments

Whatever may be the content of our cognition, and in whatever manner our cognition may be related to its object, the universal, although only negative condition of all our judgments is that they do not contradict themselves; otherwise these judgments are in themselves nothing. But although there may exist no contradiction in our judgment, it may nevertheless connect conceptions in such a manner, that they do not correspond to the object, or without any grounds either a priori or a posteriori for arriving at such a judgment, and thus, without being self-contradictory, a judgment may nevertheless be either false or groundless.

Now, the proposition: 'No subject can have a predicate that contradicts it,' is called the principle of contradiction, and is a universal but purely negative criterion of all truth. But it belongs to logic alone, because it is valid of cognitions, merely as cognitions, and without respect to their content, and declares that the contradiction entirely nullifies them. We can

also, however, make a positive use of this principle, that is, not merely to banish falsehood and error, but also for the cognition of truth. For if the judgment is analytical, be it affirmative or negative, its truth must always be recognizable by means of the principle of contradiction. For the contrary of that which lies and is cogitated as conception in the cognition of the object will be always properly negatived, but the conception itself must always be affirmed of the object, inasmuch as the contrary thereof would be in contradiction to the object.

We must therefore hold the principle of contradiction to be the universal and fully sufficient principle of all analytical cognition. But as a sufficient criterion of truth, it has no further utility or authority. For the fact that no cognition can be at variance with this principle without nullifying itself, constitutes this principle the sine qua non, but not the determining ground of the truth of our cognition.

Of the Supreme Principle of All Synthetical Judgments

The explanation of the possibility of synthetical judgments is a task with which general Logic has nothing to do; indeed she needs not even be acquainted with its name. But in transcendental Logic it is the most important matter to be dealt with—indeed the only one, if the question is of the possibility of synthetical judgments a priori, the conditions and extent of their validity. For when this question is fully decided, it can reach its aim with perfect ease, the determination, to wit, of the extent and limits of the pure understanding.

In an analytical judgment I do not go beyond the given conception, in order to arrive at some decision respecting it. If the judgment is affirmative, I predicate of the conception only that which was already cogitated in it; if negative, I merely exclude from the conception its contrary. But in synthetical judgments, I must go beyond the given conception, in order to cogitate, in relation with it, something quite different from that which was cogitated in it, a relation which is consequently never one either of identity or contradiction, and by means of which the truth or error of the judgment cannot be discerned merely from the judgment itself.

Granted, then, that we must go out beyond a given conception, in order to compare it synthetically with another, a third thing is necessary, in which alone the synthesis of two conceptions can originate. It is only a complex, in which all our representations are contained, the internal sense to wit, and its form a priori, Time.

The synthesis of our representations rests upon the imagination; their synthetical unity, upon the unity of apperception. In this, therefore, is to be sought the possibility of synthetical judgments, and as all three con-

tain the sources of a priori representations, the possibility of pure synthetical judgments also; nay, they are necessary upon these grounds, if we are to possess a knowledge of objects, which rests solely upon the synthesis of representations.

If a cognition is to have objective reality, that is, to relate to an object, and possess sense and meaning in respect to it, it is necessary that the object be given in some way or another. Without this, our conceptions are empty, and we may indeed have thought by means of them, but by such thinking we have not, in fact, cognized anything, we have merely played with representation. To give an object, if this expression be understood in the sense of to present the object, not mediately but immediately in intuition, means nothing else than to apply the representation of it to experience, be that experience real or only possible. Space and time themselves, pure as these conceptions are from all that is empirical, and certain as it is that they are represented fully a priori in the mind, would be completely without objective validity, and without sense and significance, if their necessary use in the objects of experience were not shown. Nay, the representation of them is a mere schema, that always relates to the reproductive imagination, which calls up the objects of experience, without which they have no meaning. And so is it with all conceptions without distinction.

Systematic Representation of All Synthetical Principles Thereof

That principles exist at all is to be ascribed solely to the pure understanding, which is not only the faculty of rules in regard to that which happens, but is even the source of principles according to which everything that can be presented to us as an object is necessarily subject to rules, because without such rules we never could attain to cognition of an object. Even the laws of nature, if they are contemplated as principles of the empirical use of the understanding, possess also a characteristic of necessity, and we may therefore at least expect them to be determined upon grounds which are valid a priori and antecedent to all experience. But all laws of nature, without distinction, are subject to higher principles of the understanding, inasmuch as the former are merely applications of the latter to particular cases of experience. These higher principles alone therefore give the conception, which contains the necessary condition, and, as it were, the exponent of a rule; experience, on the other hand, gives the case which comes under the rule.

The table of the categories is naturally our guide to the table of principles, because these are nothing else than rules for the objective employment of the former. Accordingly, all principles of the pure understanding are:

Axioms of

2
Anticipations
of
Perception

3
Analogies
of
Experience

Postulates of
Empirical Thought
in general

These appellations I have chosen advisedly, in order that we might not lose sight of the distinctions in respect of the evidence and the employment of these principles. It will, however, soon appear that—a fact which concerns both the evidence of these principles, and the a priori determination of phenomena-according to the categories of Quantity and Quality, the principles of these categories are distinguishable from those of the two others, inasmuch as the former are possessed of an intuitive, but the latter of a merely discursive, though in both instances a complete certitude. I shall therefore call the former mathematical and the latter dynamical principles. It must be observed, however, that by these terms I mean, just as little in the one case the principles of mathematics, as those of general dynamics in the other. I have here in view merely the principles of the pure understanding, in their application to the internal sense, by means of which the sciences of mathematics and dynamics become possible. Accordingly, I have named these principles rather with reference to their application, than their content; and I shall now proceed to consider them in the order in which they stand in the table.

I. Axioms of Intuition

The principle of these is: All Intuitions are Extensive Quantities.

Proof

All phenomena contain, as regards their form, an intuition in space and time, which lies a priori at the foundation of all without exception. Phenomena, therefore, cannot be apprehended, that is, received into empirical consciousness, otherwise than through the synthesis of a manifold, through which the representations of a determinate space or time are generated; that is to say, through the composition of the homogeneous, and the consciousness of the synthetical unity of this manifold. Now the consciousness of a homogeneous manifold in intuition, in so far as thereby the representation of an object is rendered possible, is the conception of a quantity. Consequently, even the perception of an object as phenomenon is possible only through the same synthetical unity of the manifold of the given sensuous intuition, through which the unity of the composition of the homogeneous manifold in the conception of a quantity is cogitated; that is to say, all phenomena are quantities, and extensive quantities, because as intuitions in space or time they must be represented by means of the same synthesis, through which space and time themselves are determined.

An extensive quantity I call that wherein the representation of the parts renders possible the representation of the whole. I cannot represent to myself any line, however small, without drawing it in thought, that is, without generating from a point all its parts one after another, and in this way alone producing this intuition. Precisely the same is the case with every, even the smallest portion of time. I cogitate therein only the successive progress from one moment to another, and hence, by means of the different portions of time and the addition of them, a determinate quantity of time is produced. As the pure intuition in all phenomena is either time or space, so is every phenomenon in its character of intuition an extensive quantity, inasmuch as it can only be cognized in our apprehension by successive synthesis (from part to part). All phenomena are, accordingly, to be considered as aggregates, that is, as a collection of previously given parts; which is not the case with every sort of quantities, but only with those which are represented and apprehended by us as extensive.

2. Anticipations of Perception

The principle of these is: In all phenomena the Real, that which is an object of sensation, has Intensive Quantity, that is, has a Degree.

PROOF

Perception is empirical consciousness, that is to say, a consciousness which contains an element of sensation. Phenomena as objects of perception are not pure, that is, merely formal intuitions, like space and time, for they cannot be perceived in themselves. They contain, then, over and

above the intuition, the materials for an object, that is to say, they contain the real of sensation, as a representation merely subjective, which gives us merely the consciousness that the subject is affected, and which we refer to some external object. Now, a gradual transition from empirical consciousness to pure consciousness is possible, inasmuch as the real in this consciousness entirely evanishes, and there remains a merely formal consciousness of the manifold in time and space; consequently there is possible a synthesis also of the production of the quantity of a sensation from its commencement, that is, from the pure intuition—o onwards, up to a certain quantity of the sensation. Now as sensation in itself is not an obiective representation, and in it is to be found neither the intuition of space nor of time, it cannot possess any extensive quantity, and yet there does belong to it a quantity, consequently an intensive quantity. And thus we must ascribe intensive quantity, that is, a degree of influence on sense to all objects of perception, in so far as this perception contains sensation.

3. Analogies of Experience

The principle of these is: Experience is possible only through the representation of a necessary connection of perceptions.

Proof

Experience is an empirical cognition; that is to say, a cognition which determines an object by means of perceptions. It is therefore a synthesis of perceptions, a synthesis which is not itself contained in perception, but which contains the synthetical unity of the manifold of perception in a consciousness; and this unity constitutes the essential of our cognition of objects of the senses, that is, of experience. Now in experience our perceptions come together contingently, so that no character of necessity in their connection appears, or can appear from the perceptions themselves, because apprehension is only a placing together of the manifold of empirical intuition, and no representation of a necessity in the connected existence of the phenomena which apprehension brings together is to be discovered therein. But as experience is a cognition of objects by means of perceptions, it follows that the relation of the existence of the manifold must be represented in experience not as it is put together in time, but as it is objectively in time. And as time itself cannot be perceived, the determination of the existence of objects in time can only take place by means of their connection in time in general, consequently only by means of a priori connecting conceptions. Now as these conceptions always

possess the character of necessity, experience is possible only by means of a representation of the necessary connection of perception.

The three modi of time are permanence, succession, and coexistence. Accordingly, there are three rules of all relations of time in phenomena, according to which the existence of every phenomenon is determined in respect of the unity of all time, and these antecede all experience, and render it possible.

The general principle of all three analogies rests on the necessary unity of apperception in relation to all possible empirical consciousness at every time, consequently, as this unity lies a priori at the foundation of all mental operations, the principle rests on the synthetical unity of all phenomena according to their relation in time. For the original apperception relates to our internal sense, and indeed relates a priori to its form, that is to say, the relation of the manifold empirical consciousness in time. Now this manifold must be combined in original apperception according to relations of time—a necessity imposed by the a priori transcendental unity of apperception, to which is subjected all that can belong to my cognition, and therefore all that can become an object for me. This synthetical and a priori determined unity in relation of perceptions in time is therefore the rule: 'All empirical determinations of time must be subject to rules of the general determination of time'; and the analogies of experience, of which we are now about to treat, must be rules of this nature.

4. THE POSTULATES OF EMPIRICAL THOUGHT

- 1. That which agrees with the formal conditions of experience is possible.
- 2. That which coheres with the material conditions of experience is real.
- 3. That whose coherence with the real is determined according to universal conditions of experience is necessary.

The categories of modality possess this peculiarity, that they do not in the least determine the object, or enlarge the conception to which they are annexed as predicates, but only express its relation to the faculty of cognition. Though my conception of a thing is in itself complete, I am still entitled to ask whether the object of it is merely possible, or whether it is also real, or, if the latter, whether it is also necessary. But hereby the object itself is not more definitely determined in thought, but the question is only in what relation it, including all its determinations, stands to the understanding and its employment in experience, to the empirical faculty of judgment, and to the reason in its application to experience.

For this very reason, too, the categories of modality are nothing more

than explanations of the conceptions of possibility, reality, and necessity, as employed in experience, and at the same time, restrictions of all the categories to empirical use alone, not authorizing the transcendental employment of them. For if they are to have something more than a merely logical significance, and to be something more than a mere analytical expression of the form of thought, and to have a relation to things and their possibility, reality, or necessity, they must concern possible experience and its synthetical unity, in which alone objects of cognition can be given.

The postulate of the possibility of things requires also, that the conception of the things agree with the formal conditions of our experience in general. But this, that is to say, the objective form of experience, contains all the kinds of synthesis which are requisite for the cognition of objects. A conception which contains a synthesis must be regarded as empty and without reference to an object, if its synthesis does not belong to experience—either as borrowed from it, and in this case it is called an empirical conception, or such as is the ground and a priori condition of experience (its form), and in this case it is a pure conception, a conception which nevertheless belongs to experience, inasmuch as its object can be found in this alone. For where shall we find the criterion or character of the possibility of an object which is cogitated by means of an a priori synthetical conception, if not in the synthesis which constitutes the form of empirical cognition of objects? That in such a conception no contradiction exists is indeed a necessary logical condition, but very far from being sufficient to establish the objective reality of the conception, that is, the possibility of such an object as is thought in the conception. Thus, in the conception of a figure which is contained within two straight lines, there is no contradiction, for the conceptions of two straight lines and of their junction contain no negation of a figure. The impossibility in such a case does not rest upon the conception in itself, but upon the construction of it in space, that is to say, upon the conditions of space and its determinations. But these have themselves objective reality, that is, they apply to possible things, because they contain a priori the form of experience in general.

III. Of the Ground of the Division of All Objects Into Phenomena and Noumena

WE HAVE SEEN that everything which the understanding draws from itself, without borrowing from experience, it nevertheless possesses only for the behoof and use of experience. The principles of the pure understanding, whether constitutive a priori, or merely regulative, contain nothing but the

pure schema, as it were, of possible experience. For experience possesses its unity from the synthetical unity which the understanding, originally and from itself, imparts to the synthesis of the imagination in relation to apperception, and in a priori relation to and agreement with which phenomena, as data for a possible cognition, must stand. But although these rules of the understanding are not only a priori true, but the very source of all truth, that is, of the accordance of our cognition with objects, and on this ground, that they contain the basis of the possibility of experience, as the ensemble of all cognition, it seems to us not enough to propound what is true—we desire also to be told what we want to know. If, then, we learn nothing more by this critical examination than what we should have practised in the merely empirical use of the understanding, without any such subtle inquiry, the presumption is, that the advantage we reap from it is not worth the labour bestowed upon it. It may certainly be answered, that no rash curiosity is more prejudicial to the enlargement of our knowledge than that which must know beforehand the utility of this or that piece of information which we seek, before we have entered on the needful investigations, and before one could form the least conception of its utility, even though it were placed before our eyes. But there is one advantage in such transcendental inquiries which can be made comprehensible to the dullest and most reluctant learner this, namely, that the understanding which is occupied merely with empirical exercise, and does not reflect on the sources of its own cognition. may exercise its functions very well and very successfully, but is quite unable to do one thing, and that of very great importance, to determine, namely, the bounds that limit its employment, and to know what lies within or without its own sphere. This purpose can be obtained only by such profound investigations as we have instituted. But if it cannot distinguish whether certain questions lie within its horizon or not, it can never be sure either as to its claims or possessions, but must lay its account with many humiliating corrections, when it transgresses, as it unavoidably will, the limits of its own territory, and loses itself in fanciful opinions and blinding illusions.

That the understanding, therefore, cannot make of its a priori principles, or even of its conceptions, other than an empirical use, is a proposition which leads to the most important results. A transcendental use is made of a conception in a fundamental proposition or principle when it is referred to things in general and considered as things in themselves; an empirical use, when it is referred merely to phenomena, that is, to objects of a possible experience. That the latter use of a conception is the only admissible one, is evident from the reasons following. For every conception are requisite, firstly, the logical form of a conception in general; and, secondly, the possibility of presenting to this an object to which it

may apply. Failing this latter, it has no sense, and is utterly void of content, although it may contain the logical function for constructing a conception from certain data. Now object cannot be given to a conception otherwise than by intuition, and, even if a pure intuition antecedent to the object is a priori possible, this pure intuition can itself obtain objective validity only from empirical intuition, of which it is itself but the form. All conceptions, therefore, and with them all principles, however high the degree of their a priori possibility, relate to empirical intuitions, that is, to data towards a possible experience. Without this they possess no objective validity, but are mere play of imagination or of understanding with images or notions.

TRANSCENDENTAL LOGIC

SECOND DIVISION: TRANSCENDENTAL DIALECTIC

INTRODUCTION

IT IS NOT at present our business to treat of empirical illusory appearance, which occurs in the empirical application of otherwise correct rules of the understanding, and in which the judgment is misled by the influence of imagination. Our purpose is to speak of transcendental illusory appearance, which influences principles—that are not even applied to experience, for in this case we should possess a sure test of their correctness—but which leads us, in disregard of all the warnings of criticism, completely beyond the empirical employment of the categories, and deludes us with the chimera of an extension of the sphere of the pure understanding. We shall term those principles, the application of which is confined entirely within the limits of possible experience, immanent; those, on the other hand, which transgress these limits, we shall call transcendent principles. But by these latter I do not understand principles of the transcendental use or misuse of the categories, which is in reality a mere fault of the judgment when not under due restraint from criticism, and therefore not paying sufficient attention to the limits of the sphere in which the pure understanding is allowed to exercise its functions; but real principles which exhort us to break down all those barriers, and to lay claim to a perfectly new field of cognition, which recognizes no line of demarcation. Thus transcendental and transcendent are not identical terms. The principles of the pure understanding, which we have already propounded, ought to be of empirical and not of transcendental use, that is, they are not applicable to any object beyond the sphere of experience. A principle which removes these limits, nay, which authorizes us to overstep them, is called *transcendent*. If our criticism can succeed in exposing the illusion in these pretended principles, those which are limited in their employment to the sphere of experience may be called, in opposition to the others, *immanent* principles of the pure understanding.

Logical illusion, which consists merely in the imitation of the form of reason, arises entirely from a want of due attention to logical rules. So soon as the attention is awakened to the case before us, this illusion totally disappears. Transcendental illusion, on the contrary, does not cease to exist, even after it has been exposed, and its nothingness clearly perceived by means of transcendental criticism.

Transcendental dialectic will therefore content itself with exposing the illusory appearance in transcendental judgments, and guarding us against it; but to make it, as in the case of logical illusion, entirely disappear and cease to be illusion, is utterly beyond its power. For we have here to do with a natural and unavoidable illusion, which rests upon subjective principles, and imposes these upon us as objective, while logical dialectic, in the detection of sophisms, has to do merely with an error in the logical consequence of the propositions, or with an artificially constructed illusion, in imitation of the natural error. There is, therefore, a natural and unavoidable dialectic of pure reason—not that in which the bungler, from want of the requisite knowledge, involves himself, nor that which the sophist devises for the purpose of misleading, but that which is an inseparable adjunct of human reason, and which, even after its illusions have been exposed, does not cease to deceive, and continually to lead reason into momentary errors, which it becomes necessary continually to remove.

Book One: Of the Conceptions of Pure Reason

THE CONCEPTIONS of pure reason—we do not here speak of the possibility of them—are not obtained by reflection, but by inference or conclusion. The conceptions of understanding are also cogitated a priori antecedently to experience, and render it possible; but they contain nothing but the unity of reflection upon phenomena, in so far as these must necessarily belong to a possible empirical consciousness. Through them alone are cognition and the determination of an object possible. It is from them, accordingly, that we receive material for reasoning, and antecedently to them we possess no a priori conceptions of objects from which they might be deduced. On the other hand, the sole basis of their objective reality consists in the necessity imposed on them, as containing the intellectual

form of all experience, of restricting their application and influence to the sphere of experience.

But the term, conception of reason or rational conception, itself indicates that it does not confine itself within the limits of experience, because its object-matter is a cognition, of which every empirical cognition is but a part—nay, the whole of possible experience may be itself but a part of it—a cognition to which no actual experience ever fully attains, although it does always pertain to it. The aim of rational conceptions is the comprehension, as that of the conceptions of understanding is the understanding of perceptions. If they contain the unconditioned, they relate to that to which all experience is subordinate, but which is never itself an object of experience—that towards which reason tends in all its conclusions from experience, and by the standard of which it estimates the degree of their empirical use, but which is never itself an element in an empirical synthesis. If, notwithstanding, such conceptions possess objective validity, they may be called conceptus ratiocinati; in cases where they do not, they have been admitted on account of having the appearance of being correctly concluded, and may be called conceptus ratiocinantes. But as this can only be sufficiently demonstrated in that part of our treatise which relates to the dialectical conclusions of reason, we shall omit any consideration of it in this place. As we called the pure conceptions of the understanding categories, we shall also distinguish those of pure reason by a new name, and call them transcendental ideas. These terms, however, we must in the first place explain and justify.

Of Ideas in General

Spite of the great wealth of words which European languages possess, the thinker finds himself often at a loss for an expression exactly suited to his conception, for want of which he is unable to make himself intelligible either to others or to himself.

For this reason, when it happens that there exists only a single word to express a certain conception, and this word, in its usual acceptation, is thoroughly adequate to the conception, the accurate distinction of which from related conceptions is of great importance, we ought not to employ the expression improvidently, or, for the sake of variety and elegance of style, use it as a synonym for other cognate words. It is our duty, on the contrary, carefully to preserve its peculiar signification, as otherwise it easily happens that when the attention of the reader is no longer particularly attracted to the expression, and it is lost amid the multitude of other words of very different import, the thought which it conveyed, and which it alone conveyed, is lost with it.

Plato employed the expression *Idea* in a way that plainly showed he meant by it something which is never derived from the senses, but which far transcends even the conceptions of the understanding, inasmuch as in experience nothing perfectly corresponding to them could be found. Ideas are, according to him, archetypes of things themselves, and not merely keys to possible experiences, like the categories.

Of Transcendental Ideas

Transcendental analytic showed us how the mere logical form of our cognition can contain the origin of pure conceptions a priori, conceptions which represent objects antecedently to all experience, or rather, indicate the synthetical unity which alone renders possible an empirical cognition of objects. The form of judgments—converted into a conception of the synthesis of intuitions—produced the categories, which direct the employment of the understanding in experience. This consideration warrants us to expect that the form of syllogisms, when applied to synthetical unity of intuitions, following the rule of the categories, will contain the origin of particular a priori conceptions, which we may call pure conceptions of reason or transcendental ideas, and which will determine the use of the understanding in the totality of experience according to principles.

The function of reason in arguments consists in the universality of a cognition according to conceptions, and the syllogism itself is a judgment which is determined a priori in the whole extent of its condition.

Hence, in the conclusion of a syllogism we restrict a predicate to a certain object, after having thought it in the major in its whole extent under a certain condition. This complete quantity of the extent in relation to such a condition is called universality. To this corresponds totality of conditions in the synthesis of intuitions. The transcendental conception of reason is therefore nothing else than the conception of the totality of the conditions of a given conditioned. Now as the unconditioned alone renders possible totality of conditions, and, conversely, the totality of conditions is itself always unconditioned; a pure rational conception in general can be defined and explained by means of the conception of the unconditioned, in so far as it contains a basis for the synthesis of the conditioned.

To the number of modes of relation which the understanding cogitates by means of the categories, the number of pure rational conceptions will correspond. We must therefore seek for, first, an unconditioned of the categorical synthesis in a subject; secondly, of the hypothetical synthesis of the members of a series; thirdly, of the disjunctive synthesis of parts in a system.

There are exactly the same number of modes of syllogisms, each of

which proceeds through prosyllogisms to the unconditioned—one to the subject which cannot be employed as predicate, another to the presupposition which supposes nothing higher than itself, and the third to an aggregate of the members of the complete division of a conception. Hence the pure rational conceptions of totality in the synthesis of conditions have a necessary foundation in the nature of human reason—at least as modes of elevating the unity of the understanding to the unconditioned. They may have no valid application, corresponding to their transcendental employment, in concreto, and be thus of no greater utility than to direct the understanding how, while extending them as widely as possible, to maintain its exercise and application in perfect consistence and harmony.

Now the transcendental conception of reason has for its object nothing else than absolute totality in the synthesis of conditions, and does not rest satisfied till it has attained to the absolutely, that is, in all respects and relations, unconditioned. For pure reason leaves to the understanding everything that immediately relates to the object of intuition or rather to their synthesis in imagination. The former restricts itself to the absolute totality in the employment of the conceptions of the understanding, and aims at carrying out the synthetical unity which is cogitated in the category, even to the unconditioned. This unity may hence be called the rational unity of phenomena, as the other, which the category expresses, may be termed the unity of the understanding. Reason, therefore, has an immediate relation to the use of the understanding, not indeed in so far as the latter contains the ground of possible experience, but solely for the purpose of directing it to a certain unity, of which the understanding has no conception, and the aim of which is to collect into an absolute whole all acts of the understanding. Hence the objective employment of the pure conceptions of reason is always transcendent, while that of the pure conceptions of the understanding must, according to their nature, be always immanent, inasmuch as they are limited to possible experience.

I understand by idea a necessary conception of reason, to which no corresponding object can be discovered in the world of sense. Accordingly, the pure conceptions of reason at present under consideration are transcendental ideas. They are conceptions of pure reason, for they regard all empirical cognition as determined by means of an absolute totality of conditions. They are not mere fictions, but natural and necessary products of reason, and have hence a necessary relation to the whole sphere of the exercise of the understanding. And finally, they are transcendent, and overstep the limits of all experience, in which, consequently, no object can ever be presented that would be perfectly adequate to a transcendental idea.

System of Transcendental Ideas

We are not at present engaged with a logical dialectic which makes complete abstraction of the content of cognition, and aims only at unveiling the illusory appearance in the form of syllogisms. Our subject is transcendental dialectic, which must contain, completely a priori, the origin of certain cognitions drawn from pure reason, and the origin of certain deduced conceptions, the object of which cannot be given empirically, and which therefore lie beyond the sphere of the faculty of understanding.

Now the most general relations which can exist in our representations are: 1st, the relation to the subject; 2nd, the relation to objects, either as phenomena, or as objects of thought in general. If we connect this subdivision with the main division, all the relations of our representations, of which we can form either a conception or an idea, are threefold: 1. The relation to the subject; 2. The relation to the manifold of the object as a phenomenon; 3. The relation to all things in general.

Now all pure conceptions have to do in general with the synthetical unity of representations; conceptions of pure reason, on the other hand, with the unconditional synthetical unity of all conditions. It follows that all transcendental ideas arrange themselves in three classes, the first of which contains the absolute unity of the thinking subject, the second the absolute unity of the series of the conditions of a phenomenon, the third the absolute unity of the conditions of all objects of thought in general.

The thinking subject is the object-matter of Psychology; the sum total of all phenomena is the object-matter of Cosmology; and the thing which contains the highest condition of the possibility of all that is cogitable is the object-matter of all Theology. Thus pure reason presents us with the idea of a transcendental doctrine of the soul, of a transcendental science of the world, and finally of a transcendental doctrine of God. Understanding cannot originate even the outline of any of these sciences, even when connected with the highest logical use of reason, that is, all cogitable syllogisms—for the purpose of proceeding from one object to all others, even to the utmost limits of the empirical synthesis. They are, on the contrary, pure and genuine products, or problems, of pure reason.

An objective deduction, such as we were able to present in the case of the categories, is impossible as regards these transcendental ideas. For they have, in truth, no relation to any object, in experience, for the very reason that they are only ideas.

Book Two: Of the Dialectical Procedure of Pure Reason

IT MAY BE SAID that the object of a merely transcendental idea is something of which we have no conception, although the idea may be a necessary product of reason according to its original laws. For, in fact, a conception of an object that is adequate to the idea given by reason, is impossible. For such an object must be capable of being presented and intuited in a possible experience. But we should express our meaning better, and with less risk of being misunderstood, if we said that we can have no knowledge of an object, which perfectly corresponds to an idea, although we may possess a problematical conception thereof.

Now the transcendental reality at least of the pure conceptions of reason rests upon the fact that we are led to such ideas by a necessary procedure of reason. There must therefore be syllogisms which contain no empirical premisses, and by means of which we conclude from something that we do know, to something of which we do not even possess a conception, to which we, nevertheless, by an unavoidable illusion, ascribe objective reality. Such arguments are, as regards their result, rather to be termed sophisms than syllogisms, although indeed, as regards their origin, they are very well entitled to the latter name, inasmuch as they are not fictions or accidental products of reason, but are necessitated by its very nature. They are sophisms, not of men, but of pure reason herself, from which the wisest cannot free himself. After long labour he may be able to guard against the error, but he can never be thoroughly rid of the illusion which continually mocks and misleads him.

I. Of the Paralogisms of Pure Reason

THE LOGICAL PARALOGISM consists in the falsity of an argument in respect of its form, be the content what it may. But a transcendental paralogism has a transcendental foundation, and concludes falsely, while the form is correct and unexceptionable. In this manner the paralogism has its foundation in the nature of human reason, and is the parent of an unavoidable, though not insoluble, mental illusion.

The dialectical illusion in rational psychology arises from our confounding an idea of reason with the conception—in every respect undetermined—of a thinking being in general. I cogitate myself in behalf

of a possible experience, at the same time making abstraction of all actual experience; and infer therefrom that I can be conscious of myself apart from experience and its empirical conditions. I consequently confound the possible abstraction of my empirically determined existence with the supposed consciousness of a possible separate existence of my thinking self; and I believe that I cognize what is substantial in myself as a transcendental subject, when I have nothing more in thought than the unity of consciousness, which lies at the basis of all determination of cognition.

The task of explaining the community of the soul with the body does not properly belong to the psychology of which we are here speaking; because it proposes to prove the personality of the soul apart from this communion, and is therefore transcendent in the proper sense of the word, although occupying itself with an object of experience—only in so far, however, as it ceases to be an object of experience. But a sufficient answer may be found to the question in our system. The difficulty which lies in the execution of this task consists, as is well known, in the presupposed heterogeneity of the object of the internal sense and the objects of the external senses; inasmuch as the formal condition of the intuition of the one is time, and of that of the other space also. But if we consider that both kinds of objects do not differ internally, but only in so far as the one appears externally to the other—consequently, that what lies at the basis of phenomena, as a thing in itself, may not be heterogeneous—this difficulty disappears. There then remains no other difficulty than is to be found in the question—how a community of substances is possible; a question which lies out of the region of psychology, and which the reader, after what in our Analytic has been said of primitive forces and faculties, will easily judge to be also beyond the region of human cognition.

II. THE ANTINOMY OF PURE REASON

We showed in the introduction to this part of our work that all transcendental illusion of pure reason arose from dialectical arguments, the schema of which logic gives us in its three formal species of syllogisms—just as the categories find their logical schema in the four functions of all judgments. The first kind of these sophistical arguments related to the unconditioned unity of the subjective conditions of all representations in general, in correspondence with the categorical syllogisms, the major of which, as the principle, enounces the relation of a predicate to a subject. The second kind of dialectical argument will therefore be concerned, following the analogy with hypothetical syllogisms, with the unconditioned unity of the objective conditions in the phenomenon; and, in this way, the theme of the third kind to be treated of in the following chapter, will

be the unconditioned unity of the objective conditions of the possibility of objects in general.

But it is worthy of remark that the transcendental paralogism produced in the mind only a one-sided illusion, in regard to the idea of the subject of our thought; and the conceptions of reason gave no ground to maintain the contrary proposition. The advantage is completely on the side of Pneumatism; although this theory itself passes into naught, in the crucible of pure reason.

Very different is the case when we apply reason to the *objective* synthesis of phenomena. Here, certainly, reason establishes, with much plausibility, its principle of unconditioned unity; but it very soon falls into such contradictions, that it is compelled, in relation to cosmology, to renounce its pretensions.

For here a new phenomenon of human reason meets us—a perfectly natural antithetic, which does not require to be sought for by subtle sophistry, but into which reason of itself unavoidably falls. It is thereby preserved, to be sure, from the slumber of a fancied conviction—which a merely one-sided illusion produces; but it is at the same time compelled, either, on the one hand, to abandon itself to a despairing scepticism, or, on the other, to assume a dogmatical confidence and obstinate persistence in certain assertions, without granting a fair hearing to the other side of the question. Either is the death of a sound philosophy, although the former might perhaps deserve the title of the Euthanasia of pure reason.

System of Cosmological Ideas

That we may be able to enumerate with systematic precision these ideas according to a principle, we must remark, in the first place, that it is from the understanding alone that pure and transcendental conceptions take their origin; that the reason does not properly give birth to any conception, but only frees the conception of the understanding from the unavoidable limitation of a possible experience, and thus endeavours to raise it above the empirical, though it must still be in connection with it. This happens from the fact, that for a given conditioned, reason demands absolute totality on the side of the conditions, and thus makes of the category a transcendental idea. This it does that it may be able to give absolute completeness to the empirical synthesis, by continuing it to the unconditioned. Reason requires this according to the principle: If the conditioned is given, the whole of the conditions, and consequently the absolutely unconditioned, is also given, whereby alone the former was possible. First, then, the transcendental ideas are properly nothing but categories elevated to the unconditioned; and they may be arranged in a

table according to the titles of the latter. But, secondly, all the categories are not available for this purpose, but only those in which the synthesis constitutes a series—of conditions subordinated to, not co-ordinated with, each other.

There are, accordingly, only four cosmological ideas, corresponding with the four titles of the categories. For we can select only such as necessarily furnish us with a series in the synthesis of the manifold.

The absolute Completeness
of the
Composition
of the given totality of all phenomena

The absolute Completeness
of the
DIVISION
of a given totality
in a phenomenon

The absolute Completeness
of the
ORIGINATION
of a phenomenon

The absolute Completeness
of the Dependence of the Existence
of what is changeable in a phenomenon

Antithetic of Pure Reason

Thetic is the term applied to every collection of dogmatical propositions. By antithetic I do not understand dogmatical assertions of the opposite, but the self-contradiction of seemingly dogmatical cognitions, in none of which we can discover any decided superiority. Antithetic is not therefore occupied with one-sided statements, but is engaged in considering the contradictory nature of the general cognitions of reason, and its causes. Transcendental antithetic is an investigation into the antinomy of pure reason, its causes and result. If we employ our reason not merely in the application of the principles of the understanding to objects of experience, but venture with it beyond these boundaries, there arise certain sophistical propositions or theorems. These assertions have the following peculiarities: They can find neither confirmation nor confutation in experience; and each is in itself not only self-consistent, but possesses conditions of its necessity in the very nature of reason—only that, un-

luckily, there exist just as valid and necessary grounds for maintaining the contrary proposition.

The questions which naturally arise in the consideration of this dialectic of pure reason, are therefore: 1st. In what propositions is pure reason unavoidably subject to an antinomy? 2nd. What are the causes of this antinomy? 3rd. Whether and in what way can reason free itself from this self-contradiction?

A dialectical proposition or theorem of pure reason must, according to what has been said, be distinguishable from all sophistical propositions, by the fact that it is not an answer to an arbitrary question, which may be raised at the mere pleasure of any person, but to one which human reason must necessarily encounter in its progress. In the second place, a dialectical proposition, with its opposite, does not carry the appearance of a merely artificial illusion, which disappears as soon as it is investigated, but a natural and unavoidable illusion, which, even when we are no longer deceived by it, continues to mock us, and, although rendered harmless, can never be completely removed.

This dialectical doctrine will not relate to the unity of understanding in empirical conceptions, but to the unity of reason in pure ideas. The conditions of this doctrine are—inasmuch as it must, as a synthesis according to rules, be conformable to the understanding, and at the same time as the absolute unity of the synthesis, to the reason—that, if it is adequate to the unity of reason, it is too great for the understanding, if according with the understanding, it is too small for the reason. Hence arises a mutual opposition, which cannot be avoided, do what we will.

FIRST CONFLICT OF THE TRANSCENDENTAL IDEAS

Thesis

The world has a beginning in time, and is also limited in regard to space.

Proof

Granted, that the world has no beginning in time; up to every given moment of time, an eternity must have elapsed, and therewith passed away an infinite series of successive conditions or states of things in the world. Now the infinity of a series consists in the fact, that it never can

Antithesis

The world has no beginning, and no limits in space, but is, in relation both to time and space, infinite.

PROOF

For let it be granted, that it has a beginning. A beginning is an existence which is preceded by a time in which the thing does not exist. On the above supposition, it follows that there must have been a time in which the world did not exist, that is, a void time. But in a void time be completed by means of a successive synthesis. It follows that an infinite series already elapsed is impossible, and that consequently a beginning of the world is a necessary condition of its existence. And this was the first thing to be proved.

As regards the second, let us take the opposite for granted. In this case, the world must be an infinite given total of coexistent things. Now we cannot cogitate the dimensions of a quantity, which is not given within certain limits of an intuition, in any other way than by means of the synthesis of its parts, and the total of such a quantity only by means of a completed synthesis, or the repeated addition of unity to itself. Accordingly, to cogitate the world, which fills all spaces, as a whole, the successive synthesis of the parts of an infinite world must be looked upon as completed, that is to say, an infinite time must be regarded as having elapsed in the enumeration of all coexisting things; which is impossible. For this reason an infinite aggregate of actual things cannot be considered as a given whole, consequently, not as a contemporaneously given whole. The world is consequently, as regards extension in space, not infinite, but enclosed in limits. And this was the second thing to be proved.

the origination of a thing is impossible; because no part of any such time contains a distinctive condition of being, in preference to that of non-being. Consequently, many series of things may have a beginning in the world, but the world itself cannot have a beginning, and is, therefore, in relation to past time, infinite.

As regards the second statement, let us first take the opposite for granted—that the world is finite and limited in space; it follows that it must exist in a void space, which is not limited. We should therefore meet not only with a relation of things in space, but also a relation of things to space. Now, as the world is an absolute whole, out of and beyond which no object of intuition, and consequently no correlate to which can be discovered, this relation of the world to a void space is merely a relation to no object. But such a relation, and consequently the limitation of the world by void space, is nothing. Consequently, the world, as regards space, is not limited, that is, it is infinite in regard to extension.

SECOND CONFLICT OF THE TRANSCENDENTAL IDEAS

Thesis

Every composite substance in the world consists of simple parts; and there exists nothing that is not either itself simple, or composed of simple parts.

PROOF

For, grant that composite substances do not consist of simple parts; in this case, if all combination or composition were annihilated in thought, no composite part and no simple part would exist. Consequently, no substance; consequently, nothing would exist. Either, then, it is impossible to annihilate composition in thought: or, after such annihilation, there must remain something that subsists without composition, that is, something that is simple. But in the former case the composite could not itself consist of substances, because with substances composition is merely a contingent relation, apart from which they must still exist as self-subsistent beings. Now, as this case contradicts the supposition, the second must contain the truth —that the substantial composite in the world consists of simple parts.

It follows as an immediate inference, that the things in the world are all, without exception, simple beings—that composition is merely an external condition pertaining to them—and that, although we never can separate and isolate the ele-

Antithesis

No composite thing in the world consists of simple parts; and there does not exist in the world any simple substance.

PROOF

Let it be supposed that a composite thing consists of simple parts. Inasmuch as all external relation, consequently all composition of substances, is possible only in space; the space, occupied by that which is composite, must consist of the same number of parts as is contained in the composite. But space does not consist of simple parts, but of spaces. Therefore, every part of the composite must occupy a space. But the absolutely primary parts of what is composite are simple. It follows that what is simple occupies a space. Now, as everything real that occupies a space, contains a manifold the parts of which are external to each other. and is consequently compositeand a real composite, not of accidents, but of substances—it follows that the simple must be a substantial composite, which is selfcontradictory.

The second proposition of the antithesis—that there exists in the world nothing that is simple—is here equivalent to the following: The existence of the absolutely simple cannot be demonstrated

mentary substances from the state of composition, reason must cogitate these as the primary subjects of all composition, and consequently, as prior thereto—and as simple substances. from any experience or perception either external or internal; and the absolutely simple is a mere idea, the objective reality of which cannot be demonstrated in any possible experience; it is consequently, in the exposition of phenomena, without application and object. For, let us take for granted that an object may be found in experience for this transcendental idea; the empirical intuition of such an object must then be recognized to contain absolutely no manifold with its parts external to each other, and connected into unity. Now, as we cannot reason from the non-consciousness of such a manifold to the impossibility of its existence in the intuition of an object, and as the proof of this impossibility is necessary for the establishment and proof of absolute simplicity; it follows, that this simplicity cannot be inferred from any perception whatever. As, therefore, an absolutely simple object cannot be given in any experience, and the world of sense must be considered as the sum total of all possible experiences: nothing simple exists in the world. This second proposition has a more extended aim than the first. The first merely banishes the simple from the intuition of the composite; while the second drives it entirely out of nature. Hence we were unable to demonstrate it from the conception of a given object of external intuition, but we were obliged to prove it from the relation of a given object to a possible experience in general.

THIRD CONFLICT OF TRANSCENDENTAL IDEAS

Thesis

Causality according to the laws of nature, is not the only causality operating to originate the phenomena of the world. A causality of freedom is also necessary to account fully for these phenomena.

PROOF

Let it be supposed, that there is no other kind of causality than that according to the laws of nature. Consequently, everything that happens presupposes a previous condition, which it follows with absolute certainty, in conformity with a rule. But this previous condition must itself be something that has happened, for, if it has always been in existence, its consequence or effect would not thus originate for the first time, but would likewise have always existed. The causality, therefore, of a cause, whereby something happens, is itself a thing that has happened. Now this again presupposes, in conformity with the law of nature, a previous condition and its causality, and this another anterior to the former, and so on. If, then, everything happens solely in accordance with the laws of nature, there cannot be any real first beginning of things, but only a subaltern or comparative beginning. There cannot, therefore, be a completeness of series on the side of the causes which originate the one from the other. But the law of nature is, that

Antithesis

There is no such thing as freedom, but everything in the world happens solely according to the laws of nature.

PROOF

Granted, that there does exist freedom in the transcendental sense. as a peculiar kind of causality, operating to produce events in the world -a faculty, that is to say, of originating a state, and consequently a series of consequences from that state. In this case, not only the series originated by this spontaneity, but the determination of this spontaneity itself to the production of the series, that is to say, the causality itself must have an absolute commencement, such, that nothing can precede to determine this action according to unvarying laws. But every beginning of action presupposes in the acting cause a state of inaction; and a dynamically primal beginning of action presupposes a state, which has no connection—as regards causality-with the preceding state of the cause—which does not, that is, in any wise result from it. Transcendental freedom is therefore opposed to the natural law of cause and effect, and such a conjunction of successive states in effective causes is destructive of the possibility of unity in experience,

nothing can happen without a sufficient a priori determined cause. The proposition, therefore—if all causality is possible only in accordance with the laws of nature—is, when stated in this unlimited and general manner, self-contradictory. It follows that this cannot be the only kind of causality.

From what has been said, it follows that a causality must be admitted, by means of which something happens, without its cause being determined according to necessary laws by some other cause preceding. That is to say, there must exist an absolute spontaneity of cause, which of itself originates a series of phenomena which proceeds according to natural lawsconsequently transcendental freedom, without which even in the course of nature the succession of phenomena on the side of causes is never complete.

and for that reason not to be found in experience—is consequently a mere fiction of thought.

We have, therefore, nothing but nature to which we must look for connection and order in cosmical events. Freedom-independence of the laws of nature—is certainly a deliverance from restraint, but it is also a relinquishing of the guidance of law and rule. For it cannot be alleged, that, instead of the laws of nature, laws of freedom may be introduced into the causality of the course of nature. For, if freedom were determined according to laws. it would be no longer freedom, but merely nature. Nature, therefore, and transcendental freedom are distinguishable as conformity to law and lawlessness. The former imposes upon understanding the difficulty of seeking the origin of events ever higher and higher in the series of causes, inasmuch as causality is always conditioned thereby; while it compensates this labour by the guarantee of a unity complete and in conformity with law. The latter, on the contrary, holds out to the understanding the promise of a point of rest in the chain of causes, by conducting it to an unconditioned causality, which professes to have the power of spontaneous origination, but which, in its own utter blindness, deprives it of the guidance of rules, by which alone a completely connected experience is possible.

FOURTH CONFLICT OF THE TRANSCENDENTAL IDEAS

Thesis

There exists either in, or in connection with the world—either as a part of it, or as the cause of it—an absolutely necessary being.

PROOF

The world of sense, as the sum total of all phenomena, contains a series of changes. For, without such a series, the mental representation of the series of time itself, as the condition of the possibility of the sensuous world, could not be presented to us. But every change stands under its condition, which precedes it in time and renders it necessary. Now the existence of a given condition presupposes a complete series of conditions up to the absolutely unconditioned, which alone is absolutely necessary. It follows that something that is absolutely necessary must exist, if change exists as its consequence. But this necessary thing itself belongs to the sensuous world. For suppose it to exist out of and apart from it, the series of cosmical changes would receive from it a beginning, and yet this necessary cause would not itself belong to the world of sense. But this is impossible. For, as the beginning of a series in time is determined only by that which precedes it in time, the supreme condition of the beginning of a series of changes must exist in the time in which this series itself did not exist:

Antithesis

An absolutely necessary being does not exist, either in the world, or out of it—as its cause.

PROOF

Grant that either the world itself is necessary, or that there is contained in it a necessary existence. Two cases are possible. First, there must either be in the series of cosmical changes a beginning, which is unconditionally necessary, and therefore uncaused—which is at variance with the dynamical law of the determination of all phenomena in time; or secondly, the series itself is without beginning, and, although contingent and conditioned in all its parts, is nevertheless absolutely necessary and unconditioned as a whole-which is self-contradictory. For the existence of an aggregate cannot be necessary, if no single part of it possesses necessary existence.

Grant, on the other hand, that an absolutely necessary cause exists out of and apart from the world. This cause, as the highest member in the series of the causes of cosmical changes, must originate or begin the existence of the latter and their series. In this case it must also begin to act, and its causality would therefore belong to time, and consequently to the sum total of phenomena, that is, to the world. It

for a beginning supposes a time preceding, in which the thing that begins to be was not in existence. The causality of the necessary cause of changes, and consequently the cause itself, must for these reasons belong to time-and to phenomena. time being possible only as the form of phenomena. Consequently, it cannot be cogitated as separated from the world of sense—the sum total of all phenomena. There is, therefore, contained in the world, something that is absolutely necessarywhether it be the whole cosmical series itself, or only a part of it. follows that the cause cannot be out of the world; which is contradictory to the hypothesis. Therefore, neither in the world, nor out of it, does there exist any absolutely necessary being.

Of the Interest of Reason in These Self-Contradictions

We have thus completely before us the dialectical procedure of the cosmological ideas. No possible experience can present us with an object adequate to them in extent. Nay, more, reason itself cannot cogitate them as according with the general laws of experience. And yet they are not arbitrary fictions of thought. On the contrary, reason, in its uninterrupted progress in the empirical synthesis, is necessarily conducted to them, when it endeavours to free from all conditions and to comprehend in its unconditioned totality, that which can only be determined conditionally in accordance with the laws of experience. These dialectical propositions are so many attempts to solve four natural and unavoidable problems of reason. There are neither more, nor can there be less, than this number, because there are no other series of synthetical hypotheses, limiting a priori the empirical synthesis.

The brilliant claims of reason striving to extend its dominion beyond the limits of experience have been represented above only in dry formulae, which contain merely the grounds of its pretensions. They have, besides, in conformity with the character of a transcendental philosophy, been freed from every empirical element; although the full splendour of the promises they hold out, and the anticipations they excite, manifests itself only when in connection with empirical cognitions. In the application of them, however, and in the advancing enlargement of the employment of reason, while struggling to rise from the region of experience and to soar to those sublime ideas, philosophy discovers a value and a dignity,

which, if it could but make good its assertions, would raise it far above all other departments of human knowledge-professing, as it does, to present a sure foundation for our highest hopes and the ultimate aims of all the exertions of reason. The questions: whether the world has a beginning and a limit to its extension in space; whether there exists anywhere, or perhaps, in my own thinking Self, an indivisible and indestructible unity-or whether nothing but what is divisible and transitory exists; whether I am a free agent, or, like other beings, am bound in the chains of nature and fate; whether, finally, there is a supreme cause of the world, or all our thought and speculation must end with nature and the order of external things—are questions for the solution of which the mathematician would willingly exchange his whole science; for in it there is no satisfaction for the highest aspirations and most ardent desires of humanity. Nay, it may even be said that the true value of mathematics -that pride of human reason-consists in this: that she guides reason to the knowledge of nature—in her greater, as well as in her less manifestations-in her beautiful order and regularity-guides her, moreover, to an insight into the wonderful unity of the moving forces in the operations of nature, far beyond the expectations of a philosophy building only on experience; and that she thus encourages philosophy to extend the province of reason beyond all experience, and at the same time provides it with the most excellent materials for supporting its investigations, in so far as their nature admits, by adequate and accordant intuitions.

Of the Necessity Imposed upon Pure Reason of Presenting a Solution of Its Transcendental Problems

To avow an ability to solve all problems and to answer all questions, would be a profession certain to convict any philosopher of extravagant boasting and self-conceit, and at once to destroy the confidence that might otherwise have been reposed in him. There are, however, sciences so constituted, that every question arising within their sphere must necessarily be capable of receiving an answer from the knowledge already possessed, for the answer must be received from the same sources whence the question arose. In such sciences it is not allowable to excuse ourselves on the plea of necessary and unavoidable ignorance; a solution is absolutely requisite. The rule of right and wrong must help us to the knowledge of what is right or wrong in all possible cases; otherwise, the idea of obligation or duty would be utterly null, for we cannot have any obligation to that which we cannot know. On the other hand, in our investigations of the phenomena of nature, much must remain uncertain, and many questions continue insoluble; because what we know of nature

is far from being sufficient to explain all the phenomena that are presented to our observation. Now the question is: Whether there is in transcendental philosophy any question, relating to an object presented to pure reason, which is unanswerable by this reason; and whether we must regard the subject of the question as quite uncertain—so far as our knowledge extends, and must give it a place among those subjects, of which we have just so much conception as is sufficient to enable us to raise a question—faculty or materials failing us, however, when we attempt an answer.

Now I maintain, that among all speculative cognition, the peculiarity of transcendental philosophy is, that there is no question, relating to an object presented to pure reason, which is insoluble by this reason; and that the profession of unavoidable ignorance—the problem being alleged to be beyond the reach of our faculties—cannot free us from the obligation to present a complete and satisfactory answer. For the very conception, which enables us to raise the question, must give us the power of answering it; inasmuch as the object, as in the case of right and wrong, is not to be discovered out of the conception.

Sceptical Exposition of the Cosmological Problems Presented in the Four Transcendental Ideas

We should be quite willing to desist from the demand of a dogmatical answer to our questions, if we understood beforehand that, be the answer what it may, it would only serve to increase our ignorance, to throw us from one incomprehensibility into another, from one obscurity into another still greater, and perhaps lead us into irreconcilable contradictions. If a dogmatical affirmative or negative answer is demanded, is it at all prudent to set aside the probable grounds of a solution which lie before us, and to take into consideration what advantage we shall gain, if the answer is to favour the one side or the other? If it happens that in both cases the answer is mere nonsense, we have in this an irresistible summons to institute a critical investigation of the question, for the purpose of discovering whether it is based on a groundless presupposition, and relates to an idea, the falsity of which would be more easily exposed in its application and consequences, than in the mere representation of its content. This is the great utility of the sceptical mode of treating the questions addressed by pure reason to itself. By this method we easily rid ourselves of the confusions of dogmatism, and establish in its place a temperate criticism, which, as a genuine cathartic, will successfully remove the presumptuous notions of philosophy and their consequence the vain pretension to universal science.

If, then, I could understand the nature of a cosmological idea, and perceive, before I entered on the discussion of the subject at all, that, whatever side of the question regarding the unconditioned of the regressive synthesis of phenomena it favoured, it must either be too great or too small for every conception of the understanding—I would be able to comprehend how the idea, which relates to an object of experience—an experience which must be adequate to and in accordance with a possible conception of the understanding—must be completely void and without significance, inasmuch as its object is inadequate, consider it as we may. And this is actually the case with all cosmological conceptions, which, for the reason above mentioned, involve reason, so long as it remains attached to them, in an unavoidable antinomy. For suppose:

First, that the world has no beginning—in this case it is too large for our conception; for this conception, which consists in a successive regress, cannot overtake the whole eternity that has elapsed. Grant that it has a beginning, it is then too small for the conception of the understanding. For, as a beginning presupposes a time preceding, it cannot be unconditioned; and the law of the empirical employment of the understanding imposes the necessity of looking for a higher condition of time; and the world is, therefore, evidently too small for this law.

Secondly, if every phenomenon in space consists of an infinite number of parts, the regress of the division is always too great for our conception; and if the division of space must cease with some member of the division, it is too small for the idea of the unconditioned. For the member at which we have discontinued our division still admits a regress to many more parts contained in the object.

Thirdly, suppose that every event in the world happens in accordance with the laws of nature; the causality of a cause must itself be an event, and necessitates a regress to a still higher cause, and consequently the unceasing prolongation of the series of conditions a parte priori. Operative nature is therefore too large for every conception we can form in the synthesis of cosmical events.

Fourthly, if we assume the existence of an absolutely necessary being—whether it be the world or something in the world, or the cause of the world; we must place it in a time at an infinite distance from any given moment; for, otherwise, it must be dependent on some other and higher existence. Such an existence is, in this case, too large for our empirical conception, and unattainable by the continued regress of any synthesis.

But if we believe that everything in the world—be it condition or conditioned—is *contingent*; every given existence is too small for our conception. For in this case we are compelled to seek for some other existence upon which the former depends.

Transcendental Idealism as the Key to the Solution of Pure Cosmological Dialectic

In the transcendental aesthetic we proved, that everything intuited in space and time—all objects of a possible experience, are nothing but phenomena, that is, mere representations; and that these, as presented to us—as extended bodies, or as series of changes—have no self-subsistent existence apart from human thought. This doctrine I call *Transcendental Idealism*. The realist in the transcendental sense regards these modifications of our sensibility—these mere representations, as things subsisting in themselves.

Transcendental idealism allows that the objects of external intuition -as intuited in space, and all changes in time-as represented by the internal sense, are real. For, as space is the form of that intuition which we call external, and without objects in space, no empirical representation could be given us; we can and ought to regard extended bodies in it as real. The case is the same with representations in time. But time and space, with all phenomena therein, are not in themselves things. They are nothing but representations, and cannot exist out of and apart from the mind. Nay, the sensuous internal intuition of the mind, the determination of which is represented by the succession of different states in time, is not the real, proper self, as it exists in itself-not the transcendental subject, but only a phenomenon, which is presented to the sensibility of this, to us, unknown being. This internal phenomenon cannot be admitted to be a self-subsisting thing; for its condition is time, and time cannot be the condition of a thing in itself. But the empirical truth of phenomena in space and time is guaranteed beyond the possibility of doubt, and sufficiently distinguished from the illusion of dreams or fancy—although both have a proper and thorough connection in an experience according to empirical laws. The objects of experience then are not things in themselves, but are given only in experience, and have no existence apart from and independently of experience. That there may be inhabitants in the moon, although no one has ever observed them, must certainly be admitted; but this assertion means only, that we may in the possible progress of experience discover them at some future time. For that, which stands in connection with a perception according to the laws of the progress of experience, is real. They are therefore really existent, if they stand in empirical connection with my actual or real consciousness, although they are not in themselves real, that is, apart from the progress of experience.

There is nothing actually given—we can be conscious of nothing as

real, except a perception and the empirical progression from it to other possible perceptions. For phenomena, as mere representations, are real only in perception; and perception is, in fact, nothing but the reality of an empirical representation, that is, a phenomenon. To call a phenomenon a real thing prior to perception, means either that we must meet with this phenomenon in the progress of experience, or it means nothing at all. For I can say only of a thing in itself that it exists without relation to the senses and experience. But we are speaking here merely of phenomena in space and time, both of which are determinations of sensibility, and not of things in themselves. It follows that phenomena are not things in themselves, but are mere representations, which, if not given in us—in perception, are non-existent.

Critical Solution of the Cosmological Problem

The antinomy of pure reason is based upon the following dialectical argument: If that which is conditioned is given, the whole series of its conditions is also given; but sensuous objects are given as conditioned; consequently . . . This syllogism, the major of which seems so natural and evident, introduces as many cosmological ideas as there are different kinds of conditions in the synthesis of phenomena, in so far as these conditions constitute a series. These ideas require absolute totality in the series, and thus place reason in inextricable embarrassment. Before proceeding to expose the fallacy in this dialectical argument, it will be necessary to have a correct understanding of certain conceptions that appear in it.

In the first place, the following proposition is evident, and indubitably certain: If the conditioned is given, a regress in the series of all its conditions is thereby imperatively required. For the very conception of a conditioned is a conception of something related to a condition, and, if this condition is itself conditioned, to another condition—and so on through all the members of the series. This proposition is, therefore, analytical, and has nothing to fear from transcendental criticism. It is a logical postulate of reason: to pursue, as far as possible, the connection of a conception with its conditions.

If, in the second place, both the conditioned and the condition are things in themselves, and if the former is given, not only is the regress to the latter requisite, but the latter is really given with the former. Now, as this is true of all the members of the series, the entire series of conditions, and with them the unconditioned, is at the same time given in the very fact of the conditioned, the existence of which is possible only in and through that series, being given. In this case, the synthesis of the

conditioned with its condition, is a synthesis of the understanding merely, which represents things as they are, without regarding whether and how we can cognize them. But if I have to do with phenomena, which, in their character of mere representations, are not given, if I do not attain to a cognition of them, I am not entitled to say: If the conditioned is given, all its conditions (as phenomena) are also given. I cannot, therefore, from the fact of a conditioned being given, infer the absolute totality of the series of its conditions. For phenomena are nothing but an empirical synthesis in apprehension or perception, and are therefore given only in it. Now, in speaking of phenomena, it does not follow, that, if the conditioned is given, the synthesis which constitutes its empirical condition is also thereby given and presupposed; such a synthesis can be established only by an actual regress in the series of conditions. But we are entitled to say in this case: that a regress to the conditions of a conditioned, in other words, that a continuous empirical synthesis is enjoined; that, if the conditions are not given, they are at least required; and that we are certain to discover the conditions in this regress.

We can now see that the major in the above cosmological syllogism. takes the conditioned in the transcendental signification which it has in the pure category, while the minor speaks of it in the empirical signification which it has in the category as applied to phenomena. There is, therefore, a dialectical fallacy in the syllogism-a sophisma figurae dictionis. But this fallacy is not a consciously devised one, but a perfectly natural illusion of the common reason of man. For, when a thing is given as conditioned, we presuppose in the major its conditions and their series, unperceived, as it were, and unseen; because this is nothing more than the logical requirement of complete and satisfactory premisses for a given conclusion. In this case, time is altogether left out in the connection of the conditioned with the condition; they are supposed to be given in themselves, and contemporaneously. It is, moreover, just as natural to regard phenomena (in the minor) as things in themselves and as objects presented to the pure understanding, as in the major, in which complete abstraction was made of all conditions of intuition. But it is under these conditions alone that objects are given. Now we overlooked a remarkable distinction between the conceptions. The synthesis of the conditioned with its condition, and the complete series of the latter are not limited by time, and do not contain the conception of succession. On the contrary, the empirical synthesis, and the series of conditions in the phenomenal world—subsumed in the minor—are necessarily successive, and given in time alone. It follows that I cannot presuppose in the minor, as I did in the major, the absolute totality of the synthesis and of the series therein represented: for in the major all the members of the series are given as things in themselves—without any limitations or conditions of time, while in the minor they are possible only in and through a successive regress, which cannot exist, except it be actually carried into execution in the world of phenomena.

Regulative Principle of Pure Reason in Relation to the Cosmological Ideas

The cosmological principle of totality could not give us any certain knowledge in regard to the maximum in the series of conditions in the world of sense, considered as a thing in itself. The actual regress in the series is the only means of approaching this maximum. This principle of pure reason, therefore, may still be considered as valid—not as an axiom enabling us to cogitate totality in the object as actual, but as a problem for the understanding, which requires it to institute and to continue, in conformity with the idea of totality in the mind, the regress in the series of the conditions of a given conditioned. For in the world of sense, that is, in space and time, every condition which we discover in our investigation of phenomena is itself conditioned; because sensuous objects are not things in themselves, but are merely empirical representations, the conditions of which must always be found in intuition. The principle of reason is therefore properly a mere rule—prescribing a regress in the series of conditions for given phenomena, and prohibiting any pause or rest on an absolutely unconditioned. It is, therefore, not a principle of the possibility of experience or of the empirical cognition of sensuous objects—consequently not a principle of the understanding; for every experience is confined within certain proper limits determined by the given intuition. Still less is it a constitutive principle of reason authorizing us to extend our conception of the sensuous world beyond all possible experience. It is merely a principle for the enlargement and extension of experience as far as is possible for human faculties. It forbids us to consider any empirical limits as absolute. It is, hence, a principle of reason, which, as a rule, dictates how we ought to proceed in our empirical regress, but is unable to anticipate or indicate prior to the empirical regress what is given in the object itself. I have termed it for this reason a regulative principle of reason; while the principle of the absolute totality of the series of conditions, as existing in itself and given in the object, is a constitutive cosmological principle. This distinction will at once demonstrate the falsehood of the constitutive principle, and prevent us from attributing objective reality to an idea, which is valid only as a rule.

Of the Empirical Use of the Regulative Principle of Reason with Regard to the Cosmological Ideas

We have shown that no transcendental use can be made either of the conceptions of reason or of understanding. We have shown, likewise, that the demand of absolute totality in the series of conditions in the world of sense arises from a transcendental employment of reason, resting on the opinion that phenomena are to be regarded as things in themselves. It follows that we are not required to answer the question respecting the absolute quantity of a series—whether it is in itself limited or unlimited. We are only called upon to determine how far we must proceed in the empirical regress from condition to condition, in order to discover, in conformity with the rule of reason, a full and correct answer to the question proposed by reason itself.

This principle of reason is hence valid only as a rule for the extension of a possible experience—its invalidity as a principle constitutive of phenomena in themselves having been sufficiently demonstrated. And thus, too, the antinomial conflict of reason with itself is completely put an end to; inasmuch as we have not only presented a critical solution of the fallacy lurking in the opposite statements of reason, but have shown the true meaning of the ideas which gave rise to these statements. The dialectical principle of reason has, therefore, been changed into a doctrinal principle. But in fact, if this principle, in the subjective signification which we have shown to be its only true sense, may be guaranteed as a principle of the unceasing extension of the employment of our understanding, its influence and value are just as great as if it were an axiom for the a priori determination of objects. For such an axiom could not exert a stronger influence on the extension and rectification of our knowledge, otherwise than by procuring for the principles of the understanding the most widely expanded employment in the field of experience.

I. SOLUTION OF THE COSMOLOGICAL IDEA OF THE TOTALITY OF THE COMPOSITION OF PHENOMENA IN THE UNIVERSE

Here, as well as in the case of the other cosmological problems, the ground of the regulative principle of reason is the proposition, that in our empirical regress no experience of an absolute limit, and consequently no experience of a condition, which is itself absolutely unconditioned, is discoverable. And the truth of this proposition itself rests upon the consideration, that such an experience must represent to us phenomena as

limited by nothing or the mere void, on which our continued regress by means of perception must abut—which is impossible.

Now this proposition, which declares that every condition attained in the empirical regress must itself be considered empirically conditioned, contains the rule *in terminis*, which requires me, to whatever extent I may have proceeded in the ascending series, always to look for some higher member in the series—whether this member is to become known to me through experience, or not.

Nothing further is necessary, then, for the solution of the first cosmological problem, than to decide whether, in the regress to the unconditioned quantity of the universe, this never limited ascent ought to be called a regressus in infinitum or in indefinitum.

The general representation which we form in our minds of the series of all past states or conditions of the world, or of all the things which at present exist in it, is itself nothing more than a possible empirical regress, which is cogitated—although in an undetermined manner—in the mind, and which gives rise to the conception of a series of conditions for a given object. Now I have a conception of the universe, but not an intuition—that is, not an intuition of it as a whole. Thus I cannot infer the magnitude of the regress from the quantity or magnitude of the world, and determine the former by means of the latter; on the contrary, I must first of all form a conception of the quantity or magnitude of the world from the magnitude of the empirical regress. But of this regress I know nothing more, than that I ought to proceed from every given member of the series of conditions to one still higher. But the quantity of the universe is not thereby determined, and we cannot affirm that this regress proceeds in infinitum. Such an affirmation would anticipate the members of the series which have not yet been reached, and represent the number of them as beyond the grasp of any empirical synthesis; it would consequently determine the cosmical quantity prior to the regress—which is impossible. For the world is not given in its totality in any intuition: consequently, its quantity cannot be given prior to the regress. It follows that we are unable to make any declaration respecting the cosmical quantity in itself—not even that the regress in it is a regress in infinitum; we must only endeavour to attain to a conception of the quantity of the universe, in conformity with the rule which determines the empirical regress in it. But this rule merely requires us never to admit an absolute limit to our series—how far soever we may have proceeded in it, but always, on the contrary, to subordinate every phenomenon to some other as its condition, and consequently to proceed to this higher phenomenon. Such a regress is, therefore, the regressus in indefinitum, which, as not determining a quantity in the object, is clearly distinguishable from the regressus in infinitum.

It follows from what we have said that we are not justified in declaring the world to be infinite in space, or as regards past time. For this conception of an infinite given quantity is empirical; but we cannot apply the conception of an infinite quantity to the world as an object of the senses. I cannot say, the regress from a given perception to everything limited either in space or time, proceeds in infinitum—for this presupposes an infinite cosmical quantity; neither can I say, it is finite—for an absolute limit is likewise impossible in experience. It follows that I am not entitled to make any assertion at all respecting the whole object of experience—the world of sense; I must limit my declarations to the rule, according to which experience or empirical knowledge is to be attained.

To the question, therefore, respecting the cosmical quantity, the first and negative answer is: The world has no beginning in time, and no absolute limit in space.

For, in the contrary case, it would be limited by a void time on the one hand, and by a void space on the other. Now, since the world, as a phenomenon, cannot be thus limited in itself—for a phenomenon is not a thing in itself; it must be possible for us to have a perception of this limitation by a void time and a void space. But such a perception—such an experience is impossible; because it has no content. Consequently, an absolute cosmical limit is empirically, and therefore absolutely, impossible.

From this follows the affirmative answer: The regress in the series of phenomena—as a determination of the cosmical quantity, proceeds in indefinitum. This is equivalent to saying—the world of sense has no absolute quantity, but the empirical regress rests upon a rule, which requires it to proceed from every member of the series—as conditioned, to one still more remote, and not to cease at any point in this extension of the possible empirical employment of the understanding. And this is the proper and only use which reason can make of its principles.

II. SOLUTION OF THE COSMOLOGICAL IDEA OF THE TOTALITY OF THE DIVISION OF A WHOLE GIVEN IN INTUITION

When I divide a whole which is given in intuition, I proceed from a conditioned to its conditions. The division of the parts of the whole is a regress in the series of these conditions. The absolute totality of this series would be actually attained and given to the mind, if the regress could arrive at *simple* parts. But if all the parts in a continuous decomposition are themselves divisible, the division, that is to say, the regress, proceeds from the conditioned to its conditions in infinitum; because

the conditions are themselves contained in the conditioned, and, as the latter is given in a limited intuition, the former are all given along with it. This regress cannot, therefore, be called a regressus in indefinitum, as happened in the case of the preceding cosmological idea, the regress in which proceeded from the conditioned to the conditions not given contemporaneously and along with it, but discoverable only through the empirical regress. We are not, however, entitled to affirm of a whole of this kind, which is divisible in infinitum, that it consists of an infinite number of parts. For, although all the parts are contained in the intuition of the whole the whole division is not contained therein. The division is contained only in the progressing decomposition—in the regress itself. which is the condition of the possibility and actuality of the series. Now, as this regress is infinite, all the members to which it attains must be contained in the given whole as an aggregate. But the complete series of division is not contained therein. For this series, being infinite in succession and always incomplete, cannot represent an infinite number of members, and still less a composition of these members into a whole.

To apply this remark to space. Every limited part of space presented to intuition is a whole, the parts of which are always spaces—to whatever extent subdivided. Every limited space is hence divisible to infinity.

III. SOLUTION OF THE COSMOLOGICAL IDEA OF THE TOTALITY OF THE DEDUCTION OF COSMICAL EVENTS FROM THEIR CAUSES

There are only two modes of causality cogitable—the causality of nature, or of freedom. The first is the conjunction of a particular state with another preceding it in the world of sense, the former following the latter by virtue of a law. Now, as the causality of phenomena is subject to conditions of time, and the preceding state, if it had always existed, could not have produced an effect which would make its first appearance at a particular time, the causality of a cause must itself be an effect—must itself have begun to be, and therefore, according to the principle of the understanding, itself requires a cause.

We must understand, on the contrary, by the term freedom, in the cosmological sense, a faculty of the *spontaneous* origination of a state; the causality of which, therefore, is not subordinated to another cause determining it in time. Freedom is in this sense a pure transcendental idea, which, in the first place, contains no empirical element; the object of which, in the second place, cannot be given or determined in any experience, because it is a universal law of the very possibility of experience, that everything which happens must have a cause, that consequently the causality of a cause, being itself something that has hap-

pened, must also have a cause. In this view of the case, the whole field of experience, how far soever it may extend, contains nothing that is not subject to the laws of nature. But, as we cannot by this means attain to an absolute totality of conditions in reference to the series of causes and effects, reason creates the idea of a spontaneity, which can begin to act of itself, and without any external cause determining it to action, according to the natural law of causality.

IV. SOLUTION OF THE COSMOLOGICAL IDEA OF THE TOTALITY OF THE DEPENDENCE OF PHENOMENAL EXISTENCES

In the preceding remarks, we considered the changes in the world of sense as constituting a dynamical series, in which each member is subordinated to another—as its cause. Our present purpose is to avail ourselves of this series of states or conditions as a guide to an existence which may be the highest condition of all changeable phenomena, that is, to a necessary being. Our endeavour is to reach, not the unconditioned causality, but the unconditioned existence, of substance. The series before us is therefore a series of conceptions, and not of intuitions (in which the one intuition is the condition of the other).

But it is evident that, as all phenomena are subject to change, and conditioned in their existence, the series of dependent existences cannot embrace an unconditioned member, the existence of which would be absolutely necessary. It follows that, if phenomena were things in themselves, and—as an immediate consequence from this supposition—condition and conditioned belonged to the same series of phenomena, the existence of a necessary being, as the condition of the existence of sensuous phenomena, would be perfectly impossible.

An important distinction, however, exists between the dynamical and the mathematical regress. The latter is engaged solely with the combination of parts into a whole, or with the division of a whole into its parts; and therefore are the conditions of its series parts of the series, and to be consequently regarded as homogeneous, and for this reason, as consisting, without exception, of phenomena. In the former regress, on the contrary, the aim of which is not to establish the possibility of an unconditioned whole consisting of given parts, or of an unconditioned part of a given whole, but to demonstrate the possibility of the deduction of a certain state from its cause, or of the contingent existence of substance from that which exists necessarily, it is not requisite that the condition should form part of an empirical series along with the conditioned.

In the case of the apparent antinomy with which we are at present dealing, there exists a way of escape from the difficulty; for it is not impossible that both of the contradictory statements may be true in different relations. All sensuous phenomena may be contingent, and consequently possess only an empirically conditioned existence, and yet there may also exist a non-empirical condition of the whole series, or, in other words, a necessary being. For this necessary being, as an intelligible condition, would not form a member-not even the highest memberof the series; the whole world of sense would be left in its empirically determined existence uninterfered with and uninfluenced. This would also form a ground of distinction between the modes of solution employed for the third and fourth antinomies. For, while in the consideration of freedom in the former antinomy, the thing itself—the cause was regarded as belonging to the series of conditions, and only its causality to the intelligible world—we are obliged in the present case to cogitate this necessary being as purely intelligible and as existing entirely apart from the world of sense; for otherwise it would be subject to the phenomenal law of contingency and dependence.

In relation to the present problem, therefore, the regulative principle of reason is that everything in the sensuous world possesses an empirically conditioned existence—that no property of the sensuous world possesses unconditioned necessity—that we are bound to expect, and, so far as is possible, to seek for the empirical condition of every member in the series of conditions—and that there is no sufficient reason to justify us in deducing any existence from a condition which lies out of and beyond the empirical series, or in regarding any existence as independent and self-subsistent; although this should not prevent us from recognizing the possibility of the whole series being based upon a being which is intelligible, and for this reason free from all empirical conditions.

III. THE IDEAL OF PURE REASON

Of the Ideal in General

We have seen that pure conceptions do not present objects to the mind, except under sensuous conditions; because the conditions of objective reality do not exist in these conceptions, which contain, in fact, nothing but the mere form of thought. They may, however, when applied to phenomena, be presented *in concreto*; for it is phenomena that present to them the materials for the formation of empirical conceptions, which are nothing more than concrete forms of the conceptions of the under-

standing. But *ideas* are still further removed from objective reality than categories; for no phenomenon can ever present them to the human, mind in concreto. They contain a certain perfection, attainable by no possible empirical cognition; and they give to reason a systematic unity, to which the unity of experience attempts to approximate, but can never completely attain.

But still further removed than the idea from objective reality is the *Ideal*, by which term I understand the idea, not in concreto, but in individuo—as an individual thing, determinable or determined by the idea alone. The idea of humanity in its complete perfection supposes not only the advancement of all the powers and faculties, which constitute our conception of human nature, to a complete attainment of their final aims, but also everything which is requisite for the complete determination of the idea; for of all contradictory predicates, only one can conform with the idea of the perfect man. What I have termed an ideal, was in Plato's philosophy an idea of the divine mind—an individual object present to its pure intuition, the most perfect of every kind of possible beings, and the archetype of all phenomenal existences.

Without rising to these speculative heights, we are bound to confess that human reason contains not only ideas, but ideals, which possess, not, like those of Plato, creative, but certainly practical power—as regulative principles, and form the basis of the perfectibility of certain actions. Moral conceptions are not perfectly pure conceptions of reason, because an empirical element—of pleasure or pain—lies at the foundation of them. In relation, however, to the principle, whereby reason sets bounds to a freedom which is in itself without law, and consequently when we attend merely to their form, they may be considered as pure conceptions of reason. Virtue and wisdom in their perfect purity are ideas. But the wise man of the Stoics is an ideal, that is to say, a human being existing only in thought, and in complete conformity with the idea of wisdom. As the idea provides a rule, so the ideal serves as an archetype for the perfect and complete determination of the copy. Thus the conduct of this wise and divine man serves us as a standard of action, with which we may compare and judge ourselves, which may help us to reform ourselves, although the perfection it demands can never be attained by us. Although we cannot concede objective reality to these ideals, they are not to be considered as chimeras; on the contrary, they provide reason with a standard, which enables it to estimate, by comparison, the degree of incompleteness in the objects presented to it. But to aim at realizing the ideal in an example in the world of experience—to describe, for instance, the character of the perfectly wise man in a romance, is impracticable. Nay more, there is something absurd in the attempt; and the result must be little edifying, as the natural limitations which are continually breaking in upon the perfection and completeness of the idea, destroy the illusion in the story, and throw an air of suspicion even on what is good in the idea, which hence appears fictitious and unreal.

Of the Transcendental Ideal

Every conception is, in relation to that which is not contained in it, undetermined and subject to the principle of determinability. This principle is, that of every two contradictorily opposed predicates, only one can belong to a conception. It is a purely logical principle, itself based upon the principle of contradiction; inasmuch as it makes complete abstraction of the content, and attends merely to the logical form of the cognition.

But again, everything, as it regards its possibility, is also subject to the principle of complete determination, according to which one of all the possible contradictory predicates of things must belong to it. This principle is not based merely upon that of contradiction; for, in addition to the relation between two contradictory predicates, it regards everything as standing in a relation to the sum of possibilities, as the sumtotal of all predicates of things, and, while presupposing this sum as an a priori condition, presents to the mind everything as receiving the possibility of its individual existence from the relation it bears to, and the share it possesses in the aforesaid sum of possibilities. The principle of complete determination relates therefore to the content and not to the logical form. It is the principle of the synthesis of all the predicates which are required to constitute the complete conception of a thing, and not a mere principle of analytical representation, which enounces that one of two contradictory predicates must belong to a conception. It contains, moreover, a transcendental presupposition—that, namely, of the material for all possibility, which must contain a priori the data for this or that particular possibility.

The proposition, Everything which exists is completely determined, means not only that one of every pair of given contradictory attributes, but that one of all possible attributes, is always predicable of the thing; in it the predicates are not merely compared logically with each other, but the thing itself is transcendentally compared with the sum-total of all possible predicates. The proposition is equivalent to saying: To attain to a complete knowledge of a thing, it is necessary to possess a knowledge of everything that is possible, and to determine it thereby in a positive or negative manner. The conception of complete determination is consequently a conception which cannot be presented in its totality in concreto, and is therefore based upon an idea, which has its seat in the reason

—the faculty which prescribes to the understanding the laws of its harmonious and perfect exercise.

Now, although this idea of the sum-total of all possibility, in so far as it forms the condition of the complete determination of everything, is itself undetermined in relation to the predicates which may constitute this sum-total, and we cogitate in it merely the sum-total of all possible predicates—we nevertheless find, upon closer examination, that this idea, as a primitive conception of the mind, excludes a large number of predicates—those deduced and those irreconcilable with others, and that it is evolved as a conception completely determined a priori. Thus it becomes the conception of an individual object, which is completely determined by and through the mere idea, and must consequently be termed an ideal of pure reason.

When we consider all possible predicates, not merely logically, but transcendentally, that is to say, with reference to the content which may be cogitated as existing in them a priori, we shall find that some indicate a being, others merely a non-being. The logical negation expressed in the word not, does not properly belong to a conception, but only to the relation of one conception to another in a judgment, and is consequently quite insufficient to present to the mind the content of a conception. The expression not mortal does not indicate that a non-being is cogitated in the object; it does not concern the content at all. A transcendental negation, on the contrary, indicates non-being in itself, and is opposed to transcendental affirmation, the conception of which of itself expresses a being. Hence this affirmation indicates a reality, because in and through it objects are considered to be something—to be things; while the opposite negation, on the other hand, indicates a mere want, or privation, or absence, and, where such negations alone are attached to a representation, the non-existence of anything corresponding to the representation.

Now a negation cannot be cogitated as determined, without cogitating at the same time the opposite affirmation. The man born blind has not the least notion of darkness, because he has none of light; the vagabond knows nothing of poverty, because he has never known what it is to be in comfort; the ignorant man has no conception of his ignorance, because he has no conception of knowledge. All conceptions of negatives are accordingly derived or deduced conceptions; and realities contain the data, and, so to speak, the material or transcendental content of the possibility and complete determination of all things.

If, therefore, a transcendental substratum lies at the foundation of the complete determination of things—a substratum which is to form the fund from which all possible predicates of things are to be supplied, this substratum cannot be anything else than the idea of a sum-total of reality. In this view, negations are nothing but *limitations*—a term which could

not, with propriety, be applied to them, if the unlimited did not form the true basis of our conception.

Of the Arguments Employed by Speculative Reason in Proof of the Existence of a Supreme Being

Notwithstanding the pressing necessity which reason feels, to form some presupposition that shall serve the understanding as a proper basis for the complete determination of its conceptions, the idealistic and factitious nature of such a presupposition is too evident to allow reason for a moment to persuade itself into a belief of the objective existence of a mere creation of its own thought. But there are other considerations which compel reason to seek out some resting-place in the regress from the conditioned to the unconditioned, which is not given as an actual existence from the mere conception of it, although it alone can give completeness to the series of conditions. And this is the natural course of every human reason, even of the most uneducated, although the path at first entered it does not always continue to follow. It does not begin from conceptions, but from common experience, and requires a basis in actual existence. But this basis is insecure, unless it rests upon the immovable rock of the absolutely necessary. And this foundation is itself unworthy of trust, if it leave under and above it empty space, if it do not fill all, and leave no room for a why or a wherefore, if it be not, in one word, infinite in its reality.

If we admit the existence of some one thing, whatever it may be, we must also admit that there is something which exists necessarily. For what is contingent exists only under the condition of some other thing, which is its cause; and from this we must go on to conclude the existence of a cause which is not contingent, and which consequently exists necessarily and unconditionally. Such is the argument by which reason justifies its advances towards a primal being.

Now reason looks round for the conception of a being that may be admitted, without inconsistency, to be worthy of the attribute of absolute necessity, not for the purpose of inferring a priori, from the conception of such a being, its objective existence, but for the purpose of discovering, among all our conceptions of possible things, that conception which possesses no element inconsistent with the idea of absolute necessity. For that there must be some absolutely necessary existence, it regards as a truth already established. Now, if it can remove every existence incapable of supporting the attribute of absolute necessity, excepting one—this must be the absolutely necessary being, whether its necessity is comprehensible by us, that is, deducible from the conception of it alone, or not.

Of the Impossibility of an Ontological Proof of the Existence of God

It is evident from what has been said, that the conception of an absolutely necessary being is a mere idea, the objective reality of which is far from being established by the mere fact that it is a need of reason. On the contrary, this idea serves merely to indicate a certain unattainable perfection, and rather limits the operations than, by the presentation of new objects, extends the sphere of the understanding. But a strange anomaly meets us at the very threshold; for the inference from a given existence in general to an absolutely necessary existence, seems to be correct and unavoidable, while the conditions of the *understanding* refuse to aid us in forming any conception of such a being.

Philosophers have always talked of an absolutely necessary being, and have nevertheless declined to take the trouble of conceiving, whether—and how—a being of this nature is even cogitable, not to mention that its existence is actually demonstrable. A verbal definition of the conception is certainly easy enough: it is something, the non-existence of which is impossible. But does this definition throw any light upon the conditions which render it impossible to cogitate the non-existence of a thing—conditions which we wish to ascertain, that we may discover whether we think anything in the conception of such a being or not? For the mere fact that I throw away, by means of the word *Unconditioned*, all the conditions which the understanding habitually requires in order to regard anything as necessary, is very far from making clear whether by means of the conception of the unconditionally necessary I think of something, or really of nothing at all.

Nay, more, this chance-conception, now become so current, many have endeavoured to explain by examples which seemed to render any inquiries regarding its intelligibility quite needless. Every geometrical proposition—a triangle has three angles—it was said, is absolutely necessary; and thus people talked of an object which lay out of the sphere of our understanding as if it were perfectly plain what the conception of such a being meant.

All the examples adduced have been drawn, without exception, from judgments, and not from things. But the unconditioned necessity of a judgment does not form the absolute necessity of a thing. On the contrary, the absolute necessity of a judgment is only a conditioned necessity of a thing, or of the predicate in a judgment. The proposition above mentioned does not enounce that three angles necessarily exist, but, upon condition that a triangle exists, three angles must necessarily exist—in it. And thus this logical necessity has been the source of the greatest delusions. Having

formed an a priori conception of a thing, the content of which was made to embrace existence, we believed ourselves safe in concluding that, because existence belongs necessarily to the object of the conception, the existence of the thing is also posited necessarily, and that it is therefore absolutely necessary—merely because its existence has been cogitated in the conception.

If, in an identical judgment, I annihilate the predicate in thought, and retain the subject, a contradiction is the result; and hence I say, the former belongs necessarily to the latter. But if I suppress both subject and predicate in thought, no contradiction arises; for there is nothing at all. and therefore no means of forming a contradiction. To suppose the existence of a triangle and not that of its three angles, is self-contradictory; but to suppose the non-existence of both triangle and angles is perfectly admissible. And so is it with the conception of an absolutely necessary being. Annihilate its existence in thought, and you annihilate the thing itself with all its predicates; how then can there be any room for contradiction? Externally, there is nothing to give rise to a contradiction, for a thing cannot be necessary externally; nor internally, for, by the annihilation or suppression of the thing itself, its internal properties are also annihilated. God is omnipotent—that is a necessary judgment. His omnipotence cannot be denied, if the existence of a Deity is posited—the existence, that is, of an infinite being, the two conceptions being identical. But when you say, God does not exist, neither omnipotence nor any other predicate is affirmed; they must all disappear with the subject, and in this judgment there cannot exist the least self-contradiction.

Of the Impossibility of a Cosmological Proof of the Existence of God

It was by no means a natural course of proceeding, but, on the contrary, an invention entirely due to the subtlety of the schools, to attempt to draw from a mere idea a proof of the existence of an object corresponding to it. Such a course would never have been pursued, were it not for that need of reason which requires it to suppose the existence of a necessary being as a basis for the empirical regress, and that, as this necessity must be unconditioned and a priori, reason is bound to discover a conception which shall satisfy, if possible, this requirement, and enable us to attain to the a priori cognition of such a being. This conception was thought to be found in the idea of an ens realissimum, and thus this idea was employed for the attainment of a better defined knowledge of a necessary being, of the existence of which we were convinced, or persuaded, on other grounds. Thus reason was seduced from her natural

course; and, instead of concluding with the conception of an ens realissimum, an attempt was made to begin with it, for the purpose of inferring from it that idea of a necessary existence which it was in fact called in to complete. Thus arose that unfortunate ontological argument, which neither satisfies the healthy common sense of humanity, nor sustains the scientific examination of the philosopher.

The cosmological proof, which we are about to examine, retains the connection between absolute necessity and the highest reality; but, instead of reasoning from this highest reality to a necessary existence, like the preceding argument, it concludes from the given unconditioned necessity of some being its unlimited reality. The track it pursues, whether rational or sophistical, is at least natural, and not only goes far to persuade the common understanding, but shows itself deserving of respect from the speculative intellect; while it contains, at the same time, the outlines of all the arguments employed in natural theology—arguments which always have been, and still will be, in use and authority. These, however adorned, and hid under whatever embellishments of rhetoric and sentiment, are at bottom identical with the arguments we are at present to discuss. This proof, termed by Leibnitz the argumentum a contingentia mundi, I shall now lay before the reader, and subject to a strict examination.

It is framed in the following manner: If something exists, an absolutely necessary being must likewise exist. Now I, at least, exist. Consequently, there exists an absolutely necessary being. The minor contains an experience, the major reasons from a general experience to the existence of a necessary being. Thus this argument really begins at experience, and is not completely a priori, or ontological. The object of all possible experience being the world, it is called the cosmological proof. It contains no reference to any peculiar property of sensuous objects, by which this world of sense might be distinguished from other possible worlds; and in this respect it differs from the physico-theological proof, which is based upon the consideration of the peculiar constitution of our sensuous world.

The proof proceeds thus: A necessary being can be determined only in one way, that is, it can be determined by only one of all possible opposed predicates; consequently, it must be completely determined in and by its conception. But there is only a single conception of a thing possible, which completely determines the thing a priori: that is, the conception of the ens realissimum. It follows that the conception of the ens realissimum is the only conception by and in which we can cogitate a necessary being. Consequently, a Supreme Being necessarily exists.

In this cosmological argument are assembled so many sophistical propositions, that speculative reason seems to have exerted in it all her dialectical skill to produce a transcendental illusion of the most extreme

character. We shall postpone an investigation of this argument for the present, and confine ourselves to exposing the stratagem by which it imposes upon us an old argument in a new dress, and appeals to the agreement of two witnesses, the one with the credentials of pure reason, and the other with those of empiricism; while, in fact, it is only the former who has changed his dress and voice, for the purpose of passing himself off for an additional witness. That it may possess a secure foundation, it bases its conclusions upon experience, and thus appears to be completely distinct from the ontological argument, which places its confidence entirely in pure a priori conceptions. But this experience merely aids reason in making one step-to the existence of a necessary being. What the properties of this being are, cannot be learned from experience; and therefore reason abandons it altogether, and pursues its inquiries in the sphere of pure conceptions, for the purpose of discovering what the properties of an absolutely necessary being ought to be, that is, what among all possible things contain the conditions of absolute necessity. Reason believes that it has discovered these requisites in the conception of an ens realissimum and in it alone, and hence concludes: The ens realissimum is an absolutely necessary being. But it is evident that reason has here presupposed that the conception of an ens realissimum is perfectly adequate to the conception of a being of absolute necessity, that is, that we may infer the existence of the latter from that of the former—a proposition which formed the basis of the ontological argument, and which is now employed in the support of the cosmological argument, contrary to the wish and professions of its inventors. For the existence of an absolutely necessary being is given in conceptions alone. But if I say—the conception of the ens realissimum is a conception of this kind, and in fact the only conception which is adequate to our idea of a necessary being, I am obliged to admit, that the latter may be inferred from the former. Thus it is properly the ontological argument which figures in the cosmological, and constitutes the whole strength of the latter; while the spurious basis of experience has been of no further use than to conduct us to the conception of absolute necessity, being utterly insufficient to demonstrate the presence of this attribute in any determinate existence or thing. For when we propose to ourselves an aim of this character, we must abandon the sphere of experience, and rise to that of pure conceptions, which we examine with the purpose of discovering whether any one contains the conditions of the possibility of an absolutely necessary being. But if the possibility of such a being is thus demonstrated, its existence is also proved; for we may then assert that, of all possible beings there is one which possesses the attribute of necessity—in other words, this being possesses an absolutely necessary existence.

All illusions in an argument are more easily detected when they are

presented in the formal manner employed by the schools, which we now proceed to do.

If the proposition: Every absolutely necessary being is likewise an ens realissimum, is correct, it must, like all affirmative judgments, be capable of conversion—the conversio per accidens, at least. It follows, then, that some entia realissima are absolutely necessary beings. But no ens realissimum is in any respect different from another, and what is valid of some, is valid of all. In this present case, therefore, I may employ simple conversion, and say: Every ens realissimum is a necessary being. But as this proposition is determined a priori by the conceptions contained in it, the mere conception of an ens realissimum must possess the additional attribute of absolute necessity. But this is exactly what was maintained in the ontological argument, and not recognized by the cosmological, although it formed the real ground of its disguised and illusory reasoning.

Thus the second mode employed by speculative reason of demonstrating the existence of a Supreme Being is not only, like the first, illusory and inadequate, but possesses the additional blemish of an *ignoratio elenchi*—professing to conduct us by a new road to the desired goal, but bringing us back, after a short circuit, to the old path which we had deserted at its call.

Of the Impossibility of a Physico-Theological Proof

If, then, neither a pure conception nor the general experience of an existing being can provide a sufficient basis for the proof of the existence of the Deity, we can make the attempt by the only other mode—that of grounding our argument upon a determinate experience of the phenomena of the present world, their constitution and disposition, and discover whether we can thus attain to a sound conviction of the existence of a Supreme Being. This argument we shall term the physico-theological argument. If it is shown to be insufficient, speculative reason cannot present us with any satisfactory proof of the existence of a being corresponding to our transcendental idea.

The world around us opens before our view so magnificent a spectacle of order, variety, beauty, and conformity to ends, that whether we pursue our observations into the infinity of space in the one direction, or into its illimitable divisions in the other, whether we regard the world in its greatest or its least manifestations—even after we have attained to the highest summit of knowledge which our weak minds can reach, we find that language in the presence of wonders so inconceivable has lost its force, and number its power to reckon, nay, even thought fails to conceive adequately, and our conception of the whole dissolves into an astonish-

ment without the power of expression—all the more eloquent that it is dumb. Everywhere around us we observe a chain of causes and effects, of means and ends, of death and birth; and, as nothing has entered of itself into the condition in which we find it, we are constantly referred to some other thing, which itself suggests the same inquiry regarding its cause, and thus the universe must sink into the abyss of nothingness, unless we admit that, besides this infinite chain of contingencies, there exists something that is primal and self-subsistent—something which, as the cause of this phenomenal world, secures its continuance and preservation.

This highest cause—what magnitude shall we attribute to it? Of the content of the world we are ignorant; still less can we estimate its magnitude by comparison with the sphere of the possible. But this supreme cause being a necessity of the human mind, what is there to prevent us from attributing to it such a degree of perfection as to place it above the sphere of all that is possible? This we can easily do, although only by the aid of the faint outline of an abstract conception, by representing this being to ourselves as containing in itself, as an individual substance, all possible perfection—a conception which satisfies that requirement of reason which demands parsimony in principles, which is free from self-contradiction, which even contributes to the extension of the employment of reason in experience, by means of the guidance afforded by this idea to order and system, and which in no respect conflicts with any law of experience.

I maintain, then, that the physico-theological argument is insufficient of itself to prove the existence of a Supreme Being, that it must entrust this to the ontological argument—to which it serves merely as an introduction, and that, consequently, this argument contains the only possible ground of proof for the existence of this being.

Transcendental Doctrine of Method

I UNDERSTAND by the transcendental doctrine of method, the determination of the formal conditions of a complete system of pure reason. We shall accordingly have to treat of the *Discipline*, the *Canon*, the *Architec*tonic, and, finally, of the *History* of pure reason. This part of our *Critique* will accomplish, from the transcendental point of view, what has been usually attempted, but miserably executed, under the name of practical logic. It has been badly executed, I say, because general logic, not being limited to any particular kind of cognition, nor to any particular objects, it cannot, without borrowing from other sciences, do more than present merely the titles or signs of *possible methods* and the technical expressions, which are employed in the systematic parts of all sciences; and thus the pupil is made acquainted with names, the meaning and application of which he is to learn only at some future time.

I. THE DISCIPLINE OF PURE REASON

NEGATIVE JUDGMENTS—those which are so not merely as regards their logical form, but in respect of their content—are not commonly held in especial respect. They are, on the contrary, regarded as jealous enemies of our insatiable desire for knowledge; and it almost requires an apology to induce us to tolerate, much less to prize and to respect them.

But where the limits of our possible cognition are very much contracted, the attraction to new fields of knowledge great, the illusions to which the mind is subject of the most deceptive character, and the evil consequences of error of no inconsiderable magnitude—the negative element in knowledge, which is useful only to guard us against error, is of far more importance than much of that positive instruction which makes additions to the sum of our knowledge. The restraint which is employed to repress, and finally to extirpate the constant inclination to depart from certain rules, is termed Discipline.

Reason, when employed in the field of experience, does not stand in need of criticism, because its principles are subjected to the continual test of empirical observations. Nor is criticism requisite in the sphere of mathematics, where the conceptions of reason must always be presented in concreto in pure intuition, and baseless or arbitrary assertions are discovered without difficulty. But where reason is not held in a plain track by the influence of empirical or of pure intuition, that is, when it is employed in the transcendental sphere of pure conceptions, it stands in great need of discipline, to restrain its propensity to overstep the limits of possible experience, and to keep it from wandering into error. In fact, the utility of the philosophy of pure reason is entirely of this negative character.

The Discipline of Pure Reason in the Sphere of Dogmatism

Philosophical cognition is the cognition of reason by means of conceptions; mathematical cognition is cognition by means of the construction of conceptions. The construction of a conception is the presentation a priori of the intuition which corresponds to the conception. For this purpose a non-empirical intuition is requisite, which, as an intuition, is an

individual object; while, as the construction of a conception, it must be seen to be universally valid for all the possible intuitions which rank under that conception.

Philosophical cognition, accordingly, regards the particular only in the general; mathematical the general in the particular, nay, in the individual. This is done, however, entirely a priori and by means of pure reason, so that, as this individual figure is determined under certain universal conditions of construction, the object of the conception, to which this individual figure corresponds as its schema, must be cogitated as universally determined.

The essential difference of these two modes of cognition consists, therefore, in this formal quality; it does not regard the difference of the matter or objects of both. Those thinkers who aim at distinguishing philosophy from mathematics by asserting that the former has to do with quality merely, and the latter with quantity, have mistaken the effect for the cause. The reason why mathematical cognition can relate only to quantity, is to be found in its form alone. For it is the conception of quantities only that is capable of being constructed, that is, presented a priori in intuition; while qualities cannot be given in any other than an empirical intuition. Hence the cognition of qualities by reason is possible only through conceptions. No one can find an intuition which shall correspond to the conception of reality, except in experience; it cannot be presented to the mind a priori, and antecedently to the empirical consciousness of a reality.

Now, what is the cause of this difference in the fortune of the philosopher and the mathematician, the former of whom follows the path of conceptions, while the latter pursues that of intuitions, which he represents, a priori, in correspondence with his conceptions? The cause is evident from what has been already demonstrated in the introduction to this Critique. We do not, in the present case, want to discover analytical propositions, which may be produced merely by analysing our conceptions—for in this the philosopher would have the advantage over his rival; we aim at the discovery of synthetical propositions—such synthetical propositions, moreover, as can be cognized a priori. I must not confine myself to that which I actually cogitate in my conception of a triangle, for this is nothing more than the mere definition; I must try to go beyond that, and to arrive at properties which are not contained in, although they belong to, the conception. Now, this is impossible, unless I determine the object present to my mind according to the conditions, either of empirical, or of pure intuition. In the former case, I should have an empirical proposition, which would possess neither universality nor necessity; but that would be of no value. In the latter, I proceed by geometrical construction, by means of which I collect, in a pure intuition, just as I would in an empirical intuition, all the various properties which belong to the schema of a triangle in general, and consequently to its conception, and thus construct synthetical propositions which possess the attribute of universality.

All our knowledge relates, finally, to possible intuitions, for it is these alone that present objects to the mind. An a priori or non-empirical conception contains either a pure intuition—and in this case it can be constructed; or it contains nothing but the synthesis of possible intuitions, which are not given a priori. In this latter case, it may help us to form synthetical a priori judgments, but only in the discursive method, by conceptions, not in the intuitive, by means of the construction of conceptions.

The only a priori intuition is that of the pure form of phenomena—space and time. A conception of space and time as quanta may be presented a priori in intuition, that is, constructed, either alone with their quality, or as pure quantity, by means of number. But the matter of phenomena, by which things are given in space and time, can be presented only in perception, a posteriori. The only conception which represents a priori this empirical content of phenomena, is the conception of a thing in general; and the a priori synthetical cognition of this conception can give us nothing more than the rule for the synthesis of that which may be contained in the corresponding a posteriori perception; it is utterly inadequate to present an a priori intuition of the real object, which must necessarily be empirical.

Synthetical propositions, which relate to things in general, an a priori intuition of which is impossible, are transcendental. For this reason transcendental propositions cannot be framed by means of the construction of conceptions; they are a priori, and based entirely on conceptions themselves. They contain, merely the rule, by which we are to seek in the world of perception or experience the synthetical unity of that which cannot be intuited a priori. But they are incompetent to present any of the conceptions which appear in them in an a priori intuition; these can be given only a posteriori, in experience, which, however, is itself possible only through these synthetical principles.

The Discipline of Pure Reason in Polemics

By the polemic of pure reason I mean the defence of its propositions made by reason, in opposition to the dogmatical counter-propositions advanced by other parties. The question here is not whether its own statements may not also be false; it merely regards the fact that reason proves that the opposite cannot be established with demonstrative certainty, nor even asserted with a higher degree of probability. Reason does not hold

her possessions upon sufferance; for, although she cannot show a perfectly satisfactory title to them, no one can prove that she is *not* the rightful possessor.

It is a melancholy reflection, that reason, in its highest exercise, falls into an antithetic; and that the supreme tribunal for the settlement of differences should not be at union with itself. It is true that we had to discuss the question of an apparent antithetic, but we found that it was based upon a misconception. In conformity with the common prejudice, phenomena were regarded as things in themselves, and thus an absolute completeness in their synthesis was required in the one mode or in the other; a demand entirely out of place in regard to phenomena. There was, then, no real self-contradiction of reason in the propositions—The series of phenomena given in themselves has an absolutely first beginning, and, This series is absolutely and in itself without beginning. The two propositions are perfectly consistent with each other, because phenomena as phenomena are in themselves nothing, and consequently the hypothesis that they are things in themselves, must lead to self-contradictory inferences.

But there are cases in which a similar misunderstanding cannot be provided against, and the dispute must remain unsettled. Take, for example, the theistic proposition: There is a Supreme Being; and on the other hand, the atheistic counter-statement: There exists no Supreme Being; or, in psychology: Everything that thinks, possesses the attribute of absolute and permanent unity, which is utterly different from the transitory unity of material phenomena; and the counter-proposition: The soul is not an immaterial unity, and its nature is transitory, like that of phenomena. The objects of these questions contain no heterogeneous or contradictory elements, for they relate to things in themselves, and not to phenomena. There would arise, indeed, a real contradiction, if reason came forward with a statement on the negative side of these questions alone. As regards the criticism to which the grounds of proof on the affirmative side must be subjected, it may be freely admitted, without necessitating the surrender of the affirmative propositions, which have, at least, the interest of reason in their favour-an advantage which the opposite party cannot lay claim to.

Everything in nature is good for some purpose. Even poisons are serviceable; they destroy the evil effects of other poisons generated in our system, and must always find a place in every complete pharmacopoeia. The objections raised against the fallacies and sophistries of speculative reason, are objections given by the nature of this reason itself, and must therefore have a destination and purpose which can only be for the good of humanity. For what purpose has Providence raised many objects, in which we have the deepest interest, so far above us, that we vainly try to cognize

them with certainty, and our powers of mental vision are rather excited than satisfied by the glimpses we may chance to seize? It is very doubtful whether it is for our benefit to advance bold affirmations regarding subjects involved in such obscurity; perhaps it would even be detrimental to our best interests. But it is undoubtedly always beneficial to leave the investigating, as well as the critical reason, in perfect freedom, and permit it to take charge of its own interests, which are advanced as much by its limitation, as by its extension of its views, and which always suffer by the interference of foreign powers forcing it, against its natural tendencies, to bend to certain preconceived designs.

The Discipline of Pure Reason in Hypothesis

Imagination may be allowed, under the strict surveillance of reason, to invent suppositions; but, these must be based on something that is perfectly certain—and that is the *possibility* of the object. If we are well assured upon this point, it is allowable to have recourse to supposition in regard to the reality of the object; but this supposition must, unless it is utterly groundless, be connected, as its ground of explanation, with that which is really given and absolutely certain. Such a supposition is termed a *hypothesis*.

It is beyond our power to form the least conception a priori of the possibility of dynamical connection in phenomena; and the category of the pure understanding will not enable us to excogitate any such connection, but merely helps us to understand it, when we meet with it in experience. For this reason we cannot, in accordance with the categories, imagine or invent any object or any property of an object not given, or that may not be given in experience, and employ it in a hypothesis; otherwise, we should be basing our chain of reasoning upon mere chimerical fancies, and not upon conceptions of things. Thus, we have no right to assume the existence of new powers, not existing in nature—for example, an understanding with a non-sensuous intuition, a force of attraction without contact, or some new kind of substances occupying space, and yet without the property of impenetrability; and, consequently, we cannot assume that there is any other kind of community among substances than that observable in experience, any kind of presence than that in space, or any kind of duration than that in time. In one word, the conditions of possible experience are for reason the only conditions of the possibility of things; reason cannot venture to form, independently of these conditions, any conceptions of things, because such conceptions, although not self-contradictory, are without object and without application.

Transcendental hypotheses are therefore inadmissible; and we cannot

use the liberty of employing, in the absence of physical, hyperphysical grounds of explanation. And this for two reasons; first, because such hypotheses do not advance reason, but rather stop it in its progress; secondly, because this licence would render fruitless all its exertions in its own proper sphere, which is that of experience. For, when the explanation of natural phenomena happens to be difficult, we have constantly at hand a transcendental ground of explanation, which lifts us above the necessity of investigating nature; and our inquiries are brought to a close, not because we have obtained all the requisite knowledge, but because we abut upon a principle, which is incomprehensible, and which, indeed, is so far back in the track of thought, as to contain the conception of the absolutely primal being.

The next requisite for the admissibility of a hypothesis is its sufficiency. That is, it must determine a priori the consequences which are given in experience, and which are supposed to follow from the hypothesis itself. If we require to employ auxiliary hypotheses, the suspicion naturally arises that they are mere fictions; because the necessity for each of them requires the same justification as in the case of the original hypothesis. and thus their testimony is invalid. If we suppose the existence of an infinitely perfect cause, we possess sufficient grounds for the explanation of the conformity to aims, the order and the greatness which we observe in the universe; but we find ourselves obliged, when we observe the evil in the world and the exceptions to these laws, to employ new hypotheses in support of the original one. We employ the idea of the simple nature of the human soul as the foundation of all the theories we may form of its phenomena; but when we meet with difficulties in our way, when we observe in the soul phenomena similar to the changes which take place in matter, we require to call in new auxiliary hypotheses. These may, indeed, not be false, but we do not know them to be true, because the only witness to their certitude is the hypothesis which they themselves have been called in to explain.

But, although hypotheses are inadmissible in answers to the questions of pure speculative reason, they may be employed in the defence of these answers. That is to say, hypotheses are admissible in polemic, but not in the sphere of dogmatism. By the defence of statements of this character, I do not mean an attempt at discovering new grounds for their support, but merely the refutation of the arguments of opponents. All a priori synthetical propositions possess the peculiarity, that, although the philosopher who maintains the reality of the ideas contained in the proposition, is not in possession of sufficient knowledge to establish the certainty of his statements, his opponent is as little able to prove the truth of the opposite. This equality of fortune does not allow the one party to be superior to the other in the sphere of speculative cognition; and it is

this sphere accordingly that is the proper arena of these endless speculative conflicts. But we shall afterwards show that, in relation to its practical exercise, Reason has the right of admitting what, in the field of pure speculation, she would not be justified in supposing, except upon perfectly sufficient grounds; because all such suppositions destroy the necessary completeness of speculation—a condition which the practical reason, however, does not consider to be requisite. In this sphere, therefore, Reason is mistress of a possession, her title to which she does not require to prove which, in fact, she could not do. The burden of proof accordingly rests upon the opponent. But as he has just as little knowledge regarding the subject discussed, and is as little able to prove the non-existence of the object of an idea, as the philosopher on the other side is to demonstrate its reality, it is evident that there is an advantage on the side of the philosopher who maintains his proposition as a practically necessary supposition. For he is at liberty to employ, in self-defence, the same weapons as his opponent makes use of in attacking him; that is, he has a right to use hypotheses not for the purpose of supporting the arguments in favour of his own propositions, but to show that his opponent knows no more than himself regarding the subject under discussion, and cannot boast of any speculative advantage.

Hypotheses are, therefore, admissible in the sphere of pure reason, only as weapons for self-defence, and not as supports to dogmatical assertions. But the opposing party we must always seek for in ourselves. For speculative reason is, in the sphere of transcendentalism, dialectical in its own nature. The difficulties and objections we have to fear lie in ourselves. They are like old but never superannuated claims; and we must seek them out, and settle them once and for ever, if we are to expect a permanent peace. External tranquillity is hollow and unreal. The root of these contradictions, which lies in the nature of human reason, must be destroyed; and this can only be done by giving it, in the first instance, freedom to grow, nay, by nourishing it, that it may send out shoots, and thus betray its own existence. It is our duty, therefore, to try to discover new objections, to put weapons in the hands of our opponent, and to grant him the most favourable position in the arena that he can wish. We have nothing to fear from these concessions; on the contrary, we may rather hope that we shall thus make ourselves master of a possession which no one will ever venture to dispute.

The Discipline of Pure Reason in Relation to Proofs

It is a peculiarity which distinguishes the proofs of transcendental synthetical propositions from those of all other a priori synthetical cogni-

tions, that reason, in the case of the former, does not apply its conceptions directly to an object, but is first obliged to prove, a priori, the objective validity of these conceptions and the possibility of their syntheses. This is not merely a prudential rule, it is essential to the very possibility of the proof of a transcendental proposition. If I am required to pass, a priori. beyond the conception of an object, I find that it is utterly impossible without the guidance of something which is not contained in the conception. In mathematics, it is a priori intuition that guides my synthesis; and, in this case, all our conclusions may be drawn immediately from pure intuition. In transcendental cognition, so long as we are dealing only with conceptions of the understanding, we are guided by possible experience. That is to say, a proof in the sphere of transcendental cognition does not show that the given conception leads directly to another conception—for this would be a saltus which nothing can justify; but it shows that experience itself, and consequently the object of experience, is impossible without the connection indicated by these conceptions. It follows that such a proof must demonstrate the possibility of arriving, synthetically and a priori, at a certain knowledge of things, which was not contained in our conceptions of these things. Unless we pay particular attention to this requirement, our proofs, instead of pursuing the straight path indicated by reason, follow the tortuous road of mere subjective association. The illusory conviction, which rests upon subjective causes of association, and which is considered as resulting from the perception of a real and objective natural affinity, is always open to doubt and suspicion. For this reason, all the attempts which have been made to prove the principle of sufficient reason, have, according to the universal admission of philosophers, been quite unsuccessful; and, before the appearance of transcendental criticism, it was considered better, as this principle could not be abandoned, to appeal boldly to the common sense of mankind, rather than attempt to discover new dogmatical proofs.

But, if the proposition to be proved is a proposition of pure reason, and if I aim at passing beyond my empirical conceptions by the aid of mere ideas, it is necessary that the proof should first show that such a step in synthesis is possible (which it is not), before it proceeds to prove the truth of the proposition itself. The so-called proof of the simple nature of the soul from the unity of apperception, is a very plausible one. But it contains no answer to the objection, that, as the notion of absolute simplicity is not a conception which is directly applicable to a perception, but is an idea which must be inferred—if at all—from observation, it is by no means evident, how the mere fact of consciousness, which is contained in all thought, although in so far a simple representation, can conduct me to the consciousness and cognition of a thing which is purely a thinking substance. When I represent to my mind the power of my body

as in motion, my body in this thought is so far absolute unity, and my representation of it is a simple one; and hence I can indicate this representation by the motion of a point, because I have made abstraction of the size or volume of the body. But I cannot hence infer that, given merely the moving power of a body, the body may be cogitated as simple substance, merely because the representation in my mind takes no account of its content in space, and is consequently simple. The simple, in abstraction, is very different from the objectively simple; and hence the Ego, which is simple in the first sense, may, in the second sense, as indicating the soul itself, be a very complex conception, with a very various content. Thus it is evident that in all such arguments there lurks a paralogism. We guess at the presence of the paralogism by keeping ever before us a criterion of the possibility of those synthetical propositions which aim at proving more than experience can teach us. This criterion is obtained from the observation that such proofs do not lead us directly from the subject of the proposition to be proved to the required predicate, but find it necessary to presuppose the possibility of extending our cognition a priori by means of ideas. We must, accordingly, always use the greatest caution; we require, before attempting any proof, to consider how it is possible to extend the sphere of cognition by the operations of pure reason, and from what source we are to derive knowledge, which is not obtained from the analysis of conceptions, nor relates, by anticipation, to possible experience. We shall thus spare ourselves much severe and fruitless labour, by not expecting from reason what is beyond its power, or rather by subjecting it to discipline, and teaching it to moderate its vehement desires for the extension of the sphere of cognition.

The first rule for our guidance is, therefore, not to attempt a transcendental proof, before we have considered from what source we are to derive the principles upon which the proof is to be based, and what right we have to expect that our conclusions from these principles will be veracious. If they are principles of the understanding, it is vain to expect that we should attain by their means to ideas of pure reason; for these principles are valid only in regard to objects of possible experience. If they are principles of pure reason, our labour is alike in vain. The second peculiarity of transcendental proof is, that a transcendental proposition cannot rest upon more than a single proof. If I am drawing conclusions, not from conceptions, but from intuition corresponding to a conception, be it pure intuition, as in mathematics, or empirical, as in natural science, the intuition which forms the basis of my inferences, presents me with materials for many synthetical propositions, which I can connect in various modes, while, as it is allowable to proceed from different points in the intention, I can arrive by different paths at the same proposition.

The third rule for the guidance of pure reason in the conduct of a

proof is, that all transcendental proofs must never be apagogic or indirect, but always ostensive or direct. The direct or ostensive proof not only establishes the truth of the proposition to be proved, but exposes the grounds of its truth; the apagogic, on the other hand, may assure us of the truth of the proposition, but it cannot enable us to comprehend the grounds of its possibility. The latter is, accordingly, rather an auxiliary to an argument, than a strictly philosophical and rational mode of procedure. In one respect, however, they have an advantage over direct proofs, from the fact that the mode of arguing by contradiction, which they employ, renders our understanding of the question more clear, and approximates the proof to the certainty of an intuitional demonstration.

II. THE CANON OF PURE REASON

I understand by a canon a list of the a priori principles of the proper employment of certain faculties of cognition. Thus general logic, in its analytical department, is a formal canon for the faculties of understanding and reason. In the same way, Transcendental Analytic was seen to be a canon of the pure understanding; for it alone is competent to enounce true a priori synthetical cognitions. But, when no proper employment of a faculty of cognition is possible, no canon can exist. But the synthetical cognition of pure speculative reason is, as has been shown, completely impossible. There cannot, therefore, exist any canon for the speculative exercise of this faculty—for its speculative exercise is entirely dialectical; and consequently, transcendental logic, in this respect, is merely a discipline, and not a canon. If, then, there is any proper mode of employing the faculty of pure reason—in which case there must be a canon for this faculty—this canon will relate, not to the speculative, but to the practical use of reason. This canon we now proceed to investigate.

Of the Ultimate End of the Pure Use of Reason

The transcendental speculation of reason relates to three things: the freedom of the will, the immortality of the soul, and the existence of God. The speculative interest which reason has in those questions is very small; and, for its sake alone, we should not undertake the labour of transcendental investigation—a labour full of toil and ceaseless struggle. We should be loth to undertake this labour, because the discoveries we might make would not be of the smallest use in the sphere of concrete or physical investigation. We may find out that the will is free, but this knowledge only relates to the intelligible cause of our volition. As regards

the phenomena or expressions of this will, that is, our actions, we are bound, in obedience to an inviolable maxim, without which reason cannot be employed in the sphere of experience, to explain these in the same way as we explain all the other phenomena of nature, that is to say, according to its unchangeable laws. We may have discovered the spirituality and immortality of the soul, but we cannot employ this knowledge to explain the phenomena of this life, nor the peculiar nature of the future, because our conception of an incorporeal nature is purely negative and does not add anything to our knowledge, and the only inferences to be drawn from it are purely fictitious. If, again, we prove the existence of a supreme intelligence, we should be able from it to make the conformity to aims existing in the arrangement of the world comprehensible; but we should not be justified n deducing from it any particular arrangement or disposition, or, inferring any, where it is not perceived. For it is a necessary rule of the speculative use of reason, that we must not overlook natural causes, or refuse to listen to the teaching of experience, for the sake of deducing what we know and perceive from something that transcends all our knowledge. In one word, these three propositions are, for the speculative reason, always transcendent, and cannot be employed as immanent principles in relation to the objects of experience; they are, consequently, of no use to us in this sphere, being but the valueless results of the severe but unprofitable efforts of reason.

If, then, the actual cognition of these three cardinal propositions is perfectly useless, while Reason uses her utmost endeavours to induce us to admit them, it is plain that their real value and importance relate to our practical, and not to our speculative interest.

I term all that is possible through free will, practical. But if the conditions of the exercise of free volition are empirical, reason can have only a regulative, and not a constitutive, influence upon it, and is serviceable merely for the introduction of unity into its empirical laws. In the moral philosophy of prudence, for example, the sole business of reason is to bring about a union of all the ends, which are aimed at by our inclinations, into one ultimate end-that of happiness, and to show the agreement which should exist among the means of attaining that end. In this sphere, accordingly, reason cannot present to us any other than pragmatical laws of free action, for our guidance towards the aims set up by the senses, and is incompetent to give us laws which are pure and determined completely a priori. On the other hand, pure practical laws, the ends of which have been given by reason entirely a priori, and which are not empirically conditioned, but are, on the contrary, absolutely imperative in their nature, would be products of pure reason. Such are the moral laws; and these alone belong to the sphere of the practical exercise of reason, and admit of a canon.

All the powers of reason, in the sphere of what may be termed pure philosophy, are, in fact, directed to the three above-mentioned problems alone. These again have a still higher end—the answer to the question, what we ought to do, if the will is free, if there is a God, and a future world. Now, as this problem relates to our conduct, in reference to the highest aim of humanity, it is evident that the ultimate intention of nature, in the constitution of our reason, has been directed to the moral alone. This faculty, accordingly, enounces laws, which are imperative or objective laws of freedom, and which tell us what ought to take place, thus distinguishing themselves from the laws of nature, which relate to that which does take place. The laws of freedom or of free will are hence termed practical laws.

Whether reason is not itself, in the actual delivery of these laws, determined in its turn by other influences, and whether the action which, in relation to sensuous impulses, we call free, may not, in relation to higher and more remote operative causes, really form a part of nature—these are questions which do not here concern us. They are purely speculative questions; and all we have to do, in the practical sphere, is to inquire into the rule of conduct which reason has to present. Experience demonstrates to us the existence of practical freedom as one of the causes which exist in nature, that is, it shows the causal power of reason in the determination of the will. The idea of transcendental freedom, on the contrary, requires that reason—in relation to its causal power of commencing a series of phenomena—should be independent of all sensuous determining causes: and thus it seems to be in opposition to the law of nature and to all possible experience. It therefore remains a problem for the human mind. But this problem does not concern reason in its practical use; and we have, therefore, in a canon of pure reason, to do with only two questions, which relate to the practical interest of pure reason—Is there a God? and, Is there a future life? The question of transcendental freedom is purely speculative, and we may therefore set it entirely aside when we come to treat of practical reason. Besides, we have already fully discussed this subject in the antinomy of pure reason.

Of the Ideal of the Summum Bonum as a Determining Ground of the Ultimate End of Pure Reason

The whole interest of reason, speculative as well as practical, is centred in the three following questions:

- I. WHAT CAN I KNOW?
- 2. WHAT OUGHT I TO DO?
- 3. WHAT MAY I HOPE?

The first question is purely speculative. We have, as I flatter myself, exhausted all the replies of which it is susceptible, and have at last found the reply with which reason must content itself, and with which it ought to be content, so long as it pays no regard to the practical. But from the two great ends to the attainment of which all these efforts of pure reason were in fact directed, we remain just as far removed as if we had consulted our ease, and declined the task at the outset. So far, then, as knowledge is concerned, thus much, at least, is established, that, in regard to those two problems, it lies beyond our reach.

The second question is purely practical. As such it may indeed fall within the province of pure reason, but still it is not transcendental, but moral, and consequently cannot in itself form the subject of our criticism.

The third question: If I act as I ought to do, what may I then hope?—is at once practical and theoretical. The practical forms a clue to the answer of the theoretical, and—in its highest form—speculative question. For all hoping has happiness for its object, and stands in precisely the same relation to the practical and the law of morality, as knowing to the theoretical cognition of things and the law of nature. The former arrives finally at the conclusion that something is, because something ought to take place; the latter, that something is, because something does take place.

Happiness is the satisfaction of all our desires; extensive, in regard to their multiplicity; intensive, in regard to their degree; and protensive, in regard to their duration. The practical law based on the motive of happiness. I term a pragmatical law; but that law, assuming such to exist, which has no other motive than the worthiness of being happy, I term a moral or ethical law. The first tells us what we have to do, if we wish to become possessed of happiness; the second dictates how we ought to act, in order to deserve happiness. The first is based upon empirical principles; for it is only by experience that I can learn either what inclinations exist which desire satisfaction, or what are the natural means of satisfying them. The second takes no account of our desires or the means of satisfying them, and regards only the freedom of a rational being, and the necessary conditions under which alone this freedom can harmonize with the distribution of happiness according to principles. This second law may therefore rest upon mere ideas of pure reason, and may be cognized a priori.

I call the world a moral world, in so far as it may be in accordance with all the ethical laws—which, by virtue of the freedom of reasonable beings, it can be, and according to the necessary laws of morality it ought to be. But this world must be conceived only as an intelligible world, inasmuch as abstraction is therein made of all conditions, and even of all impediments to morality. So far, then, it is a mere idea—though still a practical idea—which may have, and ought to have, an influence on the world of

sense, so as to bring it as far as possible into conformity with itself. The idea of a moral world has, therefore, objective reality, not as referring to an object of intelligible intuition—for of such an object we can form no conception whatever—but to the world of sense—conceived, however, as an object of pure reason in its practical use—and to a corpus mysticum of rational beings in it, in so far as the liberum arbitrium of the individual is placed, under and by virtue of moral laws, in complete systematic unity both with itself, and with the freedom of all others.

That is the answer to the first of the two questions of pure reason which relate to its practical interest: Do that which will render thee worthy of happiness. The second question is this: If I conduct myself so as not to be unworthy of happiness, may I hope thereby to obtain happiness? In order to arrive at the solution of this question, we must inquire whether the principles of pure reason, which prescribe a priori the law, necessarily also connect this hope with it.

I say, then, that just as the moral principles are necessary according to reason in its *practical* use, so it is equally necessary according to reason in its *theoretical* use, to assume that every one has ground to hope for happiness in the measure in which he has made himself worthy of it in his conduct, and that therefore the system of morality is inseparably connected with that of happiness.

Now in an intelligible, that is, in the moral world, in the conception of which we make abstraction of all the impediments to morality, such a system of happiness, connected with and proportioned to morality, may be conceived as necessary, because freedom of volition—partly incited, and partly restrained by moral laws—would be itself the cause of general happiness; and thus rational beings, under the guidance of such principles, would be themselves the authors both of their own enduring welfare and that of others. But such a system of self-rewarding morality is only an idea, the carrying out of which depends upon the condition that every one acts as he ought; in other words, that all actions of reasonable beings be such as they would be if they sprung from a Supreme Will, comprehending in, or under, itself all particular wills. But since the moral law is binding on each individual in the use of his freedom of volition, even if others should not act in conformity with this law, neither the nature of things, nor the causality of actions and their relation to morality, determine how the consequences of these actions will be related to happiness; and the necessary connection of the hope of happiness with the unceasing endeavour to become worthy of happiness, cannot be cognized by reason, if we take nature alone for our guide. This connection can be hoped for only on the assumption that the cause of nature is a supreme reason, which governs according to moral laws.

I term the idea of an intelligence in which the morally most perfect

will, united with supreme blessedness, is the cause of all happiness in the world, so far as happiness stands in strict relation to morality, the Ideal of the Supreme Good. It is only, then, in the ideal of the supreme original good, that pure reason can find the ground of the practically necessary connection of both elements of the highest derivative good, and accordingly of an intelligible, that is, moral world. Now since we are necessitated by reason to conceive ourselves as belonging to such a world, while the senses present to us nothing but a world of phenomena, we must assume the former as a consequence of our conduct in the world of sense, and therefore as future in relation to us. Thus God and a future life are two hypotheses which, according to the principles of pure reason, are inseparable from the obligation which this reason imposes upon us.

Morality per se constitutes a system. But we can form no system of happiness, except in so far as it is dispensed in strict proportion to morality. But this is only possible in the intelligible world, under a wise author and ruler. Such a ruler, together with life in such a world, which we must look upon as future, reason finds itself compelled to assume; or it must regard the moral laws as idle dreams, since the necessary consequence which this same reason connects with them must, without this hypothesis, fall to the ground. Hence also the moral laws are universally regarded as commands, which they could not be, did they not connect a priori adequate consequences with their dictates, and thus carry with them promises and threats. But this, again, they could not do, did they not reside in a necessary being, as the Supreme Good, which alone can render such a teleological unity possible.

Happiness, therefore, in exact proportion with the morality of rational beings, constitutes alone the supreme good of a world into which we absolutely must transport ourselves according to the commands of pure but practical reason. This world is, it is true, only an intelligible world; for of such a systematic unity of ends as it requires, the world of sense gives us no hint. Its reality can be based on nothing else but the hypothesis of a supreme original good. In it independent reason, equipped with all the sufficiency of a supreme cause, founds, maintains, and fulfils the universal order of things, with the most perfect teleological harmony, however much this order may be hidden from us in the world of sense.

This moral theology has the peculiar advantage, in contrast with speculative theology, of leading inevitably to the conception of a sole, perfect, and rational First Cause, whereof speculative theology does not give us any indication on objective grounds, far less any convincing evidence. For we find neither in transcendental nor in natural theology, however far reason may lead us in these, any ground to warrant us in assuming the existence of one only Being, which stands at the head of all natural causes, and on which these are entirely dependent. On the other

hand, if we take our stand on moral unity as a necessary law of the universe, and from this point of view consider what is necessary to give this law adequate efficiency and, for us, obligatory force, we must come to the conclusion that there is one only supreme will, which comprehends all these laws in itself. For how, under different wills, should we find complete unity of ends? This will must be omnipotent, that all nature and its relation to morality in the world may be subject to it; omniscient, that it may have knowledge of the most secret feelings and their moral worth; omnipresent, that it may be at hand to supply every necessity to which the highest weal of the world may give rise; eternal, that this harmony of nature and liberty may never fail; and so on.

But this systematic unity of ends in this world of intelligenceswhich, as mere nature, is only a world of sense, but as a system of freedom of volition, may be termed an intelligible, that is, moral world—leads inevitably also to the teleological unity of all things which constitute this great whole, according to universal natural laws-just as the unity of the former is according to universal and necessary moral laws—and unites the practical with the speculative reason. The world must be represented as having originated from an idea, if it is to harmonize with that use of reason without which we cannot even consider ourselves as worthy of reason-namely, the moral use, which rests entirely on the idea of the supreme good. Hence the investigation of nature receives a teleological direction, and becomes, in its widest extension, physico-theology. But this, taking its rise in moral order as a unity founded on the essence of freedom, and not accidentally instituted by external commands, establishes the teleological view of nature on grounds which must be inseparably connected with the internal possibility of things. This gives rise to a transcendental theology, which takes the ideal of the highest ontological perfection as a principle of systematic unity; and this principle connects all things according to universal and necessary natural laws, because all things have their origin in the absolute necessity of the one only Primal Being.

Of Opinion, Knowledge, and Belief

The holding of a thing to be true is a phenomenon in our understanding which may rest on objective grounds, but requires, also, subjective causes in the mind of the person judging. If a judgment is valid for every rational being, then its ground is objectively sufficient, and it is termed a conviction. If, on the other hand, it has its ground in the particular character of the subject, it is termed a persuasion.

Persuasion, accordingly, cannot be subjectively distinguished from conviction, that is, so long as the subject views its judgment simply as

a phenomenon of its own mind. But if we inquire whether the grounds of our judgment, which are valid for us, produce the same effect on the reason of others as on our own, we have then the means, though only subjective means, not, indeed, of producing conviction, but of detecting the merely private validity of the judgment; in other words, of discovering that there is in it the element of mere persuasion.

If we can, in addition to this, develop the *subjective causes* of the judgment, which we have taken for its *objective grounds*, and thus explain the deceptive judgment as a phenomenon in our mind, apart altogether from the objective character of the object, we can then expose the illusion and need be no longer deceived by it, although, if its subjective cause lies in our nature, we cannot hope altogether to escape its influence.

I can only *maintain*, that is, affirm as necessarily valid for every one, that which produces conviction. Persuasion I may keep for myself, if it is agreeable to me; but I cannot, and ought not, to attempt to impose it as binding upon others.

Holding for true, or the subjective validity of a judgment in relation to conviction, has the three following degrees: Opinion, Belief, and Knowledge. Opinion is a consciously insufficient judgment, subjectively as well as objectively. Belief is subjectively sufficient, but is recognized as being objectively insufficient. Knowledge is both subjectively and objectively sufficient. Subjective sufficiency is termed conviction; objective sufficiency is termed certainty. I need not dwell longer on the explanation of such simple conceptions.

I must never venture to be of opinion, without knowing something, at least, by which my judgment, in itself merely problematical, is brought into connection with the truth—which connection, although not perfect, is still something more than an arbitrary fiction. Moreover, the law of such a connection must be certain. For if, in relation to this law, I have nothing more than opinion, my judgment is but a play of the imagination, without the least relation to truth. In the judgments of pure reason, opinion has no place. For as they do not rest on empirical grounds, and as the sphere of pure reason is that of necessary truth and a priori cognition, the principle of connection in it requires universality and necessity, and consequently perfect certainty—otherwise we should have no guide to the truth at all. Hence it is absurd to have an opinion in pure mathematics; we must know, or abstain from forming a judgment altogether. The case is the same with the maxims of morality. For we must not hazard an action on the mere opinion that it is allowed, but we must know it to be so.

In the transcendental sphere of reason, on the other hand, the term opinion is too weak, while the word knowledge is too strong. From the merely speculative point of view, therefore, we cannot form a judgment at all. For the subjective grounds of a judgment, such as produce belief, cannot be admitted in speculative inquiries, inasmuch as they cannot stand without empirical support, and are incapable of being communicated to others in equal measure.

Now, in cases where we cannot enter upon any course of action in reference to some object, and where, accordingly, our judgment is purely theoretical, we can still represent to ourselves, in thought, the possibility of a course of action, for which we suppose that we have sufficient grounds, if any means existed of ascertaining the truth of the matter. Thus we find in purely theoretical judgments an analogon of practical judgments, to which the word belief may properly be applied, and which we may term doctrinal belief. I should not hesitate to stake my all on the truth of the proposition—if there were any possibility of bringing it to the test of experience—that, at least, some one of the planets, which we see, is inhabited. Hence I say that I have not merely the opinion, but the strong belief, on the correctness of which I would stake even many of the advantages of life, that there are inhabitants in other worlds.

Now we must admit that the doctrine of the existence of God belongs to doctrinal belief. For, although in respect to the theoretical cognition of the universe I do not require to form any theory which necessarily involves this idea, as the condition of my explanation of the phenomena which the universe presents, but, on the contrary, am rather bound so to use my reason as if everything were mere nature, still teleological unity is so important a condition of the application of my reason to nature, that it is impossible for me to ignore it—especially since, in addition to these considerations, abundant examples of it are supplied by experience. But the sole condition, so far as my knowledge extends, under which this unity can be my guide in the investigation of nature, is the assumption that a supreme intelligence has ordered all things according to the wisest ends.

It is quite otherwise with moral belief. For in this sphere action is absolutely necessary, that is, I must act in obedience to the moral law in all points. The end is here incontrovertibly established, and there is only one condition possible, according to the best of my perception, under which this end can harmonize with all other ends, and so have practical validity—namely, the existence of a God and of a future world. I know also, to a certainty, that no one can be acquainted with any other conditions which conduct to the same unity of ends under the moral law. But since the moral precept is, at the same time, my maxim, I am irresistibly constrained to believe in the existence of God and in a future life; and I am sure that nothing can make me waver in this belief, since I should thereby overthrow my moral maxims, the renunciation of which would render me hateful in my own eyes.

Thus, while all the ambitious attempts of reason to penetrate beyond the limits of experience end in disappointment, there is still enough left to satisfy us in a practical point of view. No one, it is true, will be able to boast that he knows that there is a God and a future life; for, if he knows this, he is just the man whom I have long wished to find. All knowledge, regarding an object of mere reason, can be communicated; and I should thus be enabled to hope that my own knowledge would receive this wonderful extension, through the instrumentality of his instruction. No, my conviction is not logical, but moral certainty; and since it rests on subjective grounds, I must not even say: It is morally certain that there is a God, etc., but: I am morally certain, that is, my belief in God and in another world is so interwoven with my moral nature, that I am under as little apprehension of having the former torn from me as of losing the latter.

THE WORLD AS WILL AND IDEA

by

ARTHUR SCHOPENHAUER

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ARTHUR SCHOPENHAUER

1788-1860

THE SCHOPENHAUERS Were members of the mercantile aristocracy of Danzig, wealthy bankers and traders. Heinrich Floris Schopenhauer, the philosopher's father, was a man of strong will and originality. When his town surrendered to the Prussians in 1793, he moved to Hamburg. In 1805 Heinrich began to show signs of mental deterioration, and in that year he either fell or threw himself into a canal and died.

Arthur Schopenhauer was born on the twenty-second of February, 1788. His mother, Johanna, was twenty years younger than his father and quite different from him temperamentally. Arthur suffered greatly because of the incompatibility of his parents and developed a morbid capacity for discontent which colored his entire life and thought. After the death of his father he drew away from his mother until, in 1814, he broke with her completely and never saw her again.

Although his parents urged him to carry on the mercantile ventures of the family, Schopenhauer had no love for this kind of life and turned more and more to study. Finally his mother gave up the idea of forcing him into business, turned over to him a share of his father's estate, and permitted him to enter the University of Göttingen, where his studies began in earnest.

At Göttingen he became enthusiastic about the philosophic systems of Plato and of Kant. But a streak of pessimism began to manifest itself, and morbid fears grew on him. Chief of these was the fear of being assassinated, which led him to keep firearms always at hand and ready for use. He had few intimates and seldom went among people, his closest friend being a poodle.

From Göttingen he went to the University of Berlin, and

from there to Jena. His fellow students left him severely alone, for he told them that he was unusually sensitive to sound. "Noises torture me. Whenever I am interrupted in my work . . . I feel as if my head were severed from my body under the executioner's ax."

During the years that followed, Schopenhauer received his diploma from Jena and made the acquaintance of F. Mayer, a noted Orientalist who introduced him to the philosophy of ancient India, and to Goethe. It was Goethe who persuaded him to undertake some investigations in color in which he was then interested, and from which came a brilliant essay on the subject of color and light.

But Schopenhauer was chiefly interested in composing a work which would contain his entire philosophy in detail. At Dresden, where he went after a rupture with his mother, he devoted himself almost exclusively to the preparation and the writing of this work. He came more and more to believe that the will and the passions were the determinants of intellectual life, of all life. This was the theme of his greatest work, *The World as Will and Idea*, which was completed in 1818.

But the book did not gain recognition, and Schopenhauer was deeply disappointed. He believed that people were plotting to keep him in obscurity, and this thought preyed upon his mind. His later writings were equally unsuccessful, and he was driven deeper into despair. While he remained unheard, Hegel's philosophy was dominating the intellectual circles of the time. This embittered Schopenhauer against Hegel and his philosophy, which he held to be "three-quarters utter absurdity and one-quarter mere paradox."

Not until 1844, when the second edition of *The World as Will and Idea* appeared in a slightly altered form, did this work really attract attention. It was then that Schopenhauer's fame began to spread and grow. Men of prominence, notably Richard Wagner, sought his advice, and philosophers began to study and interpret his views. This recognition gave some happiness to an otherwise disappointed man. But it came later in life than he would have liked, for his long-nursed bitterness had eaten into his soul.

Early in 1860 Schopenhauer began to be affected by occasional difficulty in breathing and heart palpitations. This continued until the twenty-first of September of that year, when he was found dead in his chair at breakfast. Schopenhauer's philosophy, like his life, is full of gloom. He was impatient with the "false optimism" of most philosophers. Man, he said, is a creature of pain. His will drives him constantly to attain the objects of his desire. And when he attains them, what then? A terrible boredom, an empty void. So he keeps on desiring, and striving, and complaining, and desiring again. An endless vicious circle of emptiness and pain. In such a world, asks Schopenhauer, is there any place for hope? And his answer is—decidedly no. Nothing but the will to power, and the weariness of acquiring power with the will to further power still unsatisfied.

And what is the end of it all? Is it death? No, not even that. When the individual dies, the universal craving for life goes on. Nature takes care of that. The sex urge is a hunger that is concerned not at all with the individual but with the race. The only things that count-and we can derive no personal comfort out of it—are the will to power and the will to live. The individual is given the power to reproduce his kind, to continue this useless chain of desire and frustration; and then, having fulfilled his function, he is cast upon the rubbish heap like an outworn rag. What a travesty, this meaningless continuation of the race! How stupid it is to marry, to reproduce, to love! "We see the glances of two lovers meet longingly. Yet why so secretly, fearfully, and stealthily? Because these lovers are the traitors who seek to perpetuate the want and the drudgery of the human race which would otherwise speedily come to an end."

The philosophy of Schopenhauer is a depreciation of love by a man who had never been loved.

THE WORLD AS WILL AND IDEA

Part I

FIRST BOOK: THE WORLD AS IDEA

First Aspect: The Idea Subordinated to the Principle of Sufficient Reason: The Object of Experience and Science

"THE WORLD is my idea":—this is a truth which holds good for everything that lives and knows, though man alone can bring it into reflective and abstract consciousness. If he really does this, he has attained to philosophical wisdom. It then becomes clear and certain to him that what he knows is not a sun and an earth, but only an eye that sees a sun, a hand that feels an earth; that the world which surrounds him is there only as idea, i.e., only in relation to something else, the consciousness, which is himself. If any truth can be asserted a priori, it is this: for it is the expression of the most general form of all possible and thinkable experience: a form which is more general than time, or space, or causality, for they all presuppose it; and each of these, which we have seen to be just so many modes of the principle of sufficient reason, is valid only for a particular class of ideas; whereas the antithesis of object and subject is the common form of all these classes, is that form under which alone any idea of whatever kind it may be, abstract or intuitive, pure or empirical, is possible and thinkable. No truth therefore is more certain, more independent of all others, and less in need of proof than this, that all that exists for knowledge, and therefore this whole world, is only object in relation to subject, perception of a perceiver, in a word, idea. This is obviously true of the past and the future, as well as of the present, of what is farthest off, as of what is near; for it is true of time and space themselves, in which alone these distinctions arise. All that in any way belongs or can belong to the world is inevitably thus conditioned through the subject, and exists only for the subject. The world is idea.

With reference to our exposition up to this point, it must be observed that we did not start either from the object or the subject, but from the idea, which contains and presupposes them both; for the antithesis of object and subject is its primary, universal, and essential form.

This procedure distinguishes our philosophical method from that of all former systems. For they all start either from the object or from the subject, and therefore seek to explain the one from the other, and this according to the principle of sufficient reason. We, on the contrary, deny the validity of this principle with reference to the relation of subject and object, and confine it to the object.

The systems starting from the object had always the whole world of perception and its constitution as their problem; yet the object which they take as their starting-point is not always this whole world of perception, nor its fundamental element, matter.

Of all systems of philosophy which start from the object, the most consistent, and that which may be carried furthest, is simple materialism. It regards matter, and with it time and space, as existing absolutely, and ignores the relation to the subject in which alone all this really exists. It then lays hold of the law of causality as a guiding principle or clue, regarding it as a self-existent order (or arrangement) of things, veritas æterna, and so fails to take account of the understanding, in which and for which alone causality is. It seeks the primary and most simple state of matter, and then tries to develop all the others from it; ascending from mere mechanism, to chemism, to polarity, to the vegetable and to the animal kingdom. And if we suppose this to have been done, the last link in the chain would be animal sensibility—that is, knowledge—which would consequently now appear as a mere modification or state of matter produced by causality.

The fundamental absurdity of materialism is that it starts from the objective, and takes as the ultimate ground of explanation something objective, whether it be matter in the abstract, simply as it is thought, or after it has taken form, is empirically given—that is to say, is substance, the chemical element with its primary relations. Some such thing it takes, as existing absolutely and in itself, in order that it may evolve organic nature and finally the knowing subject from it, and explain them adequately by means of it; whereas in truth all that is objective is already determined as such in manifold ways by the knowing subject through its forms of knowing, and presupposes them; and consequently it entirely disappears if we think the subject away. Thus materialism is the attempt to explain what is immediately given us by what is given us indirectly.

"No object without a subject," is the principle which renders all materialism for ever impossible. Suns and planets without an eye that sees them, and an understanding that knows them, may indeed be spoken of in words, but for the idea, these words are absolutely meaningless. On the other hand, the law of causality and the treatment and investigation

of nature which is based upon it, lead us necessarily to the conclusion that, in time, each more highly organised state of matter has succeeded a cruder state: so that the lower animals existed before men, fishes before land animals, plants before fishes, and the unorganised before all that is organised; that, consequently, the original mass had to pass through a long series of changes before the first eye could be opened. And yet, the existence of this whole world remains ever dependent upon the first eye that opened, even if it were that of an insect. For such an eye is a necessary condition of the possibility of knowledge, and the whole world exists only in and for knowledge, and without it is not even thinkable. The world is entirely idea, and as such demands the knowing subject as the supporter of its existence. This long course of time itself, filled with innumerable changes, through which matter rose from form to form till at last the first percipient creature appeared,—this whole time itself is only thinkable in the identity of a consciousness whose succession of ideas, whose form of knowing it is, and apart from which, it loses all meaning and is nothing at all. Thus we see, on the one hand, the existence of the whole world necessarily dependent upon the first conscious being. however undeveloped it may be; on the other hand, this conscious being just as necessarily entirely dependent upon a long chain of causes and effects which have preceded it, and in which it itself appears as a small link. These two contradictory points of view, to each of which we are led with the same necessity, we might again call an antinomy in our faculty of knowledge, and set it up as the counterpart of that which we found in the first extreme of natural science.

This explanation at which we have arrived by following the most consistent of the philosophical systems which start from the object, materialism, has brought out clearly the inseparable and reciprocal dependence of subject and object, and at the same time the inevitable antithesis between them. And this knowledge leads us to seek for the inner nature of the world, the thing-in-itself, not in either of the two elements of the idea, but in something quite distinct from it, and which is not encumbered with such a fundamental and insoluble antithesis.

Opposed to the system we have explained, which starts from the object in order to derive the subject from it, is the system which starts from the subject and tries to derive the object from it. The first of these has been of frequent and common occurrence throughout the history of philosophy, but of the second we find only one example, and that a very recent one; the "philosophy of appearance" of J. G. Fichte. He was made a philosopher by Kant's doctrine of the thing-in-itself, and if it had not been for this he would probably have pursued entirely different ends, with far better results, for he certainly possessed remarkable rhetorical talent. If he had only penetrated somewhat deeply into the meaning of

the book that made him a philosopher, The Critique of Pure Reason, he would have understood that its principal teaching about mind is this. The principle of sufficient reason is not, as all scholastic philosophy maintains, a veritas æterna—that is to say, it does not possess an unconditioned validity before, outside of, and above the world. It is relative and conditioned, and valid only in the sphere of phenomena, and thus it may appear as the necessary nexus of space and time, or as the law of causality, or as the law of the ground of knowledge. The inner nature of the world, the thing-in-itself can never be found by the guidance of this principle, for all that it leads to will be found to be dependent and relative and merely phenomenal, not the thing-in-itself. Further, it does not concern the subject, but is only the form of objects, which are therefore not things-in-themselves. The subject must exist along with the object, and the object along with the subject, so that it is impossible that subject and object can stand to each other in a relation of reason and consequent.

The method of our own system is toto genere distinct from these two opposite misconceptions, for we start neither from the object nor from the subject, but from the idea, as the first fact of consciousness. Its first essential, fundamental form, is the antithesis of subject and object. The form of the object again is the principle of sufficient reason in its various forms. Each of these reigns so absolutely in its own class of ideas that, as we have seen, when the special form of the principle of sufficient reason which governs any class of ideas is known, the nature of the whole class is known also; for the whole class, as idea, is no more than this form of the principle of sufficient reason itself; so that time itself is nothing but the principle of existence in it, i.e., succession; space is nothing but the principle of existence in it, i.e., position; matter is nothing but causality; the concept is nothing but relation to a ground of knowledge. This thorough and consistent relativity of the world as idea, both according to its universal form and according to the form which is subordinate to this, warns us, as we said before, to seek the inner nature of the world in an aspect of it which is quite different and quite distinct from the idea; and in the next book we shall find this in a fact which is just as immediate to every living being as the idea.

SECOND BOOK: THE WORLD AS WILL

First Aspect: The Objectification of the Will

IN THE FIRST BOOK we considered the idea merely as such, that is, only according to its general form.

But what now impels us to inquiry is just that we are not satisfied

with knowing that we have ideas, that they are such and such, and that they are connected according to certain laws, the general expression of which is the principle of sufficient reason. We wish to know the significance of these ideas; we ask whether this world is merely idea; in which case it would pass by us like an empty dream or a baseless vision, not worth our notice; or whether it is also something else, something more than idea, and if so, what. Thus much is certain, that this something we seek for must be completely and in its whole nature different from the idea; that the forms and laws of the idea must therefore be completely foreign to it; further, that we cannot arrive at it from the idea under the guidance of the laws which merely combine objects, ideas, among themselves, and which are the forms of the principles of sufficient reason.

In fact, the meaning for which we seek of that world which is present to us only as our idea, or the transition from the world as mere idea of the knowing subject to whatever it may be besides this, would never be found if the investigator himself were nothing more than the pure knowing subject. But he is himself rooted in that world; he finds himself in it as an individual, that is to say, his knowledge, which is the necessary supporter of the whole world as idea, is yet always given through the medium of a body, whose affections are, as we have shown, the starting-point for the understanding in the perception of that world. His body is, for the pure knowing subject, an idea like every other idea, an object among objects. Its movements and actions are so far known to him, in precisely the same way as the changes of all other perceived objects, and would be just as strange and incomprehensible to him if their meaning were not explained for him in an entirely different way. Otherwise he would see his actions follow upon given motives with the constancy of a law of nature, just as the changes of other objects follow upon causes, stimuli, or motives. But he would not understand the influence of the motives any more than the connection between every other effect which he sees and its cause. He would then call the inner nature of these manifestations and actions of his body which he did not understand a force, a quality, or a character, as he pleased, but he would have no further insight into it. But all this is not the case; indeed the answer to the riddle is given to the subject of knowledge who appears as an individual, and the answer is will. This and this alone gives him the key to his own existence, reveals to him the significance, shows him the inner mechanism of his being, of his action, of his movements. The body is given in two entirely different ways to the subject of knowledge, who becomes an individual only through his identity with it. It is given as an idea in intelligent perception, as an object among objects and subject to the laws of objects. And it is also given in quite a different way as that which is immediately known to every one, and is signified by the

word will. Every true act of his will is also at once and without exception a movement of his body. The act of will and the movement of the body are not two different things objectively known, which the bond of causality unites; they do not stand in the relation of cause and effect; they are one and the same, but they are given in entirely different ways,immediately, and again in perception for the understanding. The action of the body is nothing but the act of the will objectified, i.e., passed into perception. It will appear later that this is true of every movement of the body, not merely those which follow upon motives, but also involuntary movements which follow upon mere stimuli, and, indeed, that the whole body is nothing but objectified will, i.e., will become idea. All this will be proved and made quite clear in the course of this work. In one respect, therefore, I shall call the body the objectivity of will; as in the previous book, and in the essay on the principle of sufficient reason, in accordance with the one-sided point of view intentionally adopted there (that of the idea), I called it the immediate object. Thus in a certain sense we may also say that will is the knowledge a priori of the body, and the body is the knowledge a posteriori of the will.

It is just because of this special relation to one body that the knowing subject is an individual. For regarded apart from this relation, his body is for him only an idea like all other ideas. But the relation through which the knowing subject is an individual, is just on that account a relation which subsists only between him and one particular idea of all those which he has. Therefore he is conscious of this one idea, not merely as an idea, but in quite a different way as a will. If, however, he abstracts from that special relation, from that twofold and completely heterogeneous knowledge of what is one and the same, then that one, the body, is an idea like all other ideas. Therefore, in order to understand the matter, the individual who knows must either assume that what distinguishes that one idea from others is merely the fact that his knowledge stands in this double relation to it alone; that insight in two ways at the same time is open to him only in the case of this one object of perception, and that this is to be explained not by the difference of this object from all others, but only by the difference between the relation of his knowledge to this one object, and its relation to all other objects. Or else he must assume that this object is essentially different from all others; that it alone of all objects is at once both will and idea, while the rest are only ideas, i.e., only phantoms. Thus he must assume that his body is the only real individual in the world, i.e., the only phenomenon of will and the only immediate object of the subject. That other objects, considered merely as ideas, are like his body, that is, like it, fill space (which itself can only be present as idea), and also, like it, are causally active in space, is indeed demonstrably certain from the law of causality which is a priori valid for ideas, and which admits of no effect without a cause; but apart from the fact that we can only reason from an effect to a cause generally, and not to a similar cause, we are still in the sphere of mere ideas, in which alone the law of causality is valid, and beyond which it can never take us. But whether the objects known to the individual only as ideas are yet, like his own body, manifestations of a will, is, as was said in the First Book, the proper meaning of the question as to the reality of the external world. To deny this is theoretical egoism, which on that account regards all phenomena that are outside its own will as phantoms, just as in a practical reference exactly the same thing is done by practical egoism.

The double knowledge which each of us has of the nature and activity of his own body, and which is given in two completely different ways, has now been clearly brought out. We shall accordingly make further use of it as a key to the nature of every phenomenon in nature, and shall judge of all objects which are not our own bodies, and are consequently not given to our consciousness in a double way but only as ideas, according to the analogy of our own bodies, and shall therefore assume that as in one aspect they are idea, just like our bodies, and in this respect are analogous to them, so in another aspect, what remains of objects when we set aside their existence as idea of the subject, must in its inner nature be the same as that in us which we call will. For what other kind of existence or reality should we attribute to the rest of the material world? Whence should we take the elements out of which we construct such a world? Besides will and idea nothing is known to us or thinkable. If we wish to attribute the greatest known reality to the material world which exists immediately only in our idea, we give it the reality which our own body has for each of us; for that is the most real thing for every one. But if we now analyse the reality of this body and its actions, beyond the fact that it is idea, we find nothing in it except the will; with this its reality is exhausted. Therefore we can nowhere find another kind of reality which we can attribute to the material world. Thus if we hold that the material world is something more than merely our idea, we must say that besides being idea, that is, in itself and according to its inmost nature, it is that which we find immediately in ourselves as will. I say according to its inmost nature; but we must first come to know more accurately this real nature of the will, in order that we may be able to distinguish from it what does not belong to itself, but to its manifestation, which has many grades. Such, for example, is the circumstance of its being accompanied by knowledge, and the determination by motives which is conditioned by this knowledge. As we shall see farther on, this does not belong to the real nature of will, but merely to its distinct manifestation as an animal or a human being. If, therefore, I say,—the force which attracts a stone to the earth is according to its nature, in itself, and apart from all idea, will, I shall not be supposed to express in this proposition the insane opinion that the stone moves itself in accordance with a known motive, merely because this is the way in which will appears in man. We shall now proceed more clearly and in detail to prove, establish, and develop to its full extent what as yet has only been provisionally and generally explained.

If now every action of my body is the manifestation of an act of will in which my will itself in general, and as a whole, thus my character, expresses itself under given motives, manifestation of the will must be the inevitable condition and presupposition of every action. For the fact of its manifestation cannot depend upon something which does not exist directly and only through it, which consequently is for it merely accidental, and through which its manifestation itself would be merely accidental. Now that condition is just the whole body itself. Thus the body itself must be manifestation of the will, and it must be related to my will as a whole, that is, to my intelligible character, whose phenomenal appearance in time is my empirical character, as the particular action of the body is related to the particular act of the will. The whole body, then, must be simply my will become visible, must be my will itself, so far as this is object of perception, an idea of the first class. It has already been advanced in confirmation of this that every impression upon my body also affects my will at once and immediately, and in this respect is called pain or pleasure, or, in its lower degrees, agreeable or disagreeable sensation; and also, conversely, that every violent movement of the will, every emotion or passion, convulses the body and disturbs the course of its functions. Indeed we can also give an etiological account, though a very incomplete one, of the origin of my body, and a somewhat better account of its development and conservation, and this is the substance of physiology. But physiology merely explains its theme in precisely the same way as motives explain action.

The will as a thing-in-itself is quite different from its phenomenal appearance, and entirely free from all the forms of the phenomenal, into which it first passes when it manifests itself, and which therefore only concern its objectivity, and are foreign to the will itself. Even the most universal form of all idea, that of being object for a subject, does not concern it; still less the forms which are subordinate to this and which collectively have their common expression in the principle of sufficient reason, to which we know that time and space belong, and consequently multiplicity also, which exists and is possible only through these. In this last regard I shall call time and space the principium individuationis, borrowing an expression from the old schoolmen, and I beg to draw attention to this, once for all. For it is only through the medium of time and space that what is one and the same, both according to its nature

and to its concept, yet appears as different, as a multiplicity of co-existent and successive phenomena. Thus time and space are the principium individuationis, the subject of so many subtleties and disputes among the schoolmen. According to what has been said, the will as a thing-in-itself lies outside the province of the principle of sufficient reason in all its forms, and is consequently completely groundless, although all its manifestations are entirely subordinated to the principle of sufficient reason. Further, it is free from all multiplicity, although its manifestations in time and space are innumerable. It is itself one, though not in the sense in which an object is one, for the unity of an object can only be known in opposition to a possible multiplicity; nor yet in the sense in which a concept is one, for the unity of a concept originates only in abstraction from a multiplicity; but it is one as that which lies outside time and space, the principium individuationis, i.e., the possibility of multiplicity.

The uncaused nature of will has been actually recognised, where it -manifests itself most distinctly, as the will of man, and this has been called free, independent. But on account of the uncaused nature of the will itself, the necessity to which its manifestation is everywhere subjected has been overlooked, and actions are treated as free, which they are not. For every individual action follows with strict necessity from the effect of the motive upon the character. All necessity is, as we have already said, the relation of the consequent to the reason, and nothing more. The principle of sufficient reason is the universal form of all phenomena, and man in his action must be subordinated to it like every other phenomenon. But because in self-consciousness the will is known directly and in itself, in this consciousness lies also the consciousness of freedom. The fact is, however, overlooked that the individual, the person, is not will as a thing-in-itself, but is a phenomenon of will, is already determined as such, and has come under the form of the phenomenal, the principle of sufficient reason.

I call a cause, in the narrowest sense of the word, that state of matter, which, while it introduces another state with necessity, yet suffers just as great a change itself as that which it causes; which is expressed in the rule, "action and reaction are equal." Further, in the case of what is properly speaking a cause, the effect increases directly in proportion to the cause, and therefore also the reaction. So that, if once the mode of operation be known, the degree of the effect may be measured and calculated from the degree of the intensity of the cause; and conversely the degree of the intensity of the cause may be calculated from the degree of the effect. Such causes, properly so called, operate in all the phenomena of mechanics, chemistry, and so forth; in short, in all the changes of unorganised bodies. On the other hand, I call a stimulus, such a cause as sustains no reaction proportional to its effect, and the intensity of which

does not vary directly in proportion to the intensity of its effect, so that the effect cannot be measured by it. On the contrary, a small increase of the stimulus may cause a very great increase of the effect, or conversely, it may eliminate the previous effect altogether, and so forth. All effects upon organised bodies as such are of this kind. All properly organic and vegetative changes of the animal body must therefore be referred to stimuli, not to mere causes. But the stimulus, like every cause and motive generally, never determines more than the point of time and space at which the manifestation of every force is to take place, and does not determine the inner nature of the force itself which is manifested. This inner nature we know, from our previous investigation, is will, to which therefore we ascribe both the unconscious and the conscious changes of the body. The stimulus holds the mean, forms the transition between the motive, which is causality accompanied throughout by knowledge, and the cause in the narrowest sense. In particular cases, it is sometimes nearer a motive, sometimes nearer a cause, but vet it can always be distinguished from both.

It only remains for us to take the final step, the extension of our way of looking at things to all those forces which act in nature in accordance with universal, unchangeable laws, in conformity with which the movements of all those bodies take place, which are wholly without organs, and have therefore no susceptibility for stimuli, and have no knowledge, which is the necessary condition of motives. Thus we must also apply the key to the understanding of the inner nature of things, which the immediate knowledge of our own existence alone can give us, to those phenomena of the unorganised world which are most remote from us.

Yet the remoteness, and indeed the appearance of absolute difference between the phenomena of unorganised nature and the will which we know as the inner reality of our own being arises chiefly from the contrast between the completely determined conformity to law of the one species of phenomena, and the apparently unfettered freedom of the other. For in man, individuality makes itself powerfully felt. Every one has a character of his own; and therefore the same motive has not the same influence over all, and a thousand circumstances which exist in the wide sphere of the knowledge of the individual, but are unknown to others, modify its effect. Therefore action cannot be predetermined from the motive alone, for the other factor is wanting, the accurate acquaintance with the individual character, and with the knowledge which accompanies it. On the other hand, the phenomena of the forces of nature illustrate the opposite extreme. They act according to universal laws, without variation, without individuality in accordance with openly manifest circumstances, subject to the most exact predetermination; and the same force of nature appears in its million phenomena in precisely the

same way. In order to explain this point and prove the identity of the one indivisible will in all its different phenomena, in the weakest as in the strongest, we must first of all consider the relation of the will as thing-initself to its phenomena, that is, the relation of the world as will to the world as idea; for this will open to us the best way to a more thorough investigation of the whole subject we are considering in this Second Book.

The lowest grades of the objectification of will are to be found in those most universal forces of nature which partly appear in all matter without exception, as gravity and impenetrability, and partly have shared the given matter among them, so that certain of them reign in one species of matter and others in another species, constituting its specific difference, as rigidity, fluidity, elasticity, electricity, magnetism, chemical properties and qualities of every kind. They are in themselves immediate manifestations of will, just as much as human action; and as such they are groundless, like human character. Only their particular manifestations are subordinated to the principle of sufficient reason, like the particular actions of men. They themselves, on the other hand, can never be called either effect or cause, but are the prior and presupposed conditions of all causes and effects through which their real nature unfolds and reveals itself. It is therefore senseless to demand a cause of gravity or electricity. for they are original forces. Their expressions, indeed, take place in accordance with the law of cause and effect, so that every one of their particular manifestations has a cause, which is itself again just a similar particular manifestation which determines that this force must express itself here, must appear in space and time; but the force itself is by no means the effect of a cause, nor the cause of an effect. It is therefore a mistake to say "gravity is the cause of a stone falling"; for the cause in this case is rather the nearness of the earth, because it attracts the stone. Take the earth away and the stone will not fall, although gravity remains. The force itself lies quite outside the chain of causes and effects, which presupposes time, because it only has meaning in relation to it; but the force lies outside time. The individual change always has for its cause another change just as individual as itself, and not the force of which it is the expression. For that which always gives its efficiency to a cause, however many times it may appear, is a force of nature. As such, it is groundless, i.e., it lies outside the chain of causes and outside the province of the principle of sufficient reason in general, and is philosophically known as the immediate objectivity of will, which is the "in-itself" of the whole of nature; but in etiology, which in this reference is physics, it is set down as an original force.

In the higher grades of the objectivity of will we see individuality occupy a prominent position, especially in the case of man, where it appears as the great difference of individual characters, i.e., as complete per-

sonality, outwardly expressed in strongly marked individual physiognomy, which influences the whole bodily form. None of the brutes have this individuality in anything like so high a degree, though the higher species of them have a trace of it; but the character of the species completely predominates over it, and therefore they have little individual physiognomy. The farther down we go, the more completely is every trace of the individual character lost in the common character of the species, and the physiognomy of the species alone remains.

Thus every universal, original force of nature is nothing but a low grade of the objectification of will, and we call every such grade an eternal Idea in Plato's sense. But a law of nature is the relation of the Idea to the form of its manifestation. This form is time, space, and causality, which are necessarily and inseparably connected and related to each other. Through time and space the Idea multiplies itself in innumerable phenomena, but the order according to which it enters these forms of multiplicity is definitely determined by the law of causality; this law is as it were the norm of the limit of these phenomena of different Ideas, in accordance with which time, space, and matter are assigned to them. This norm is therefore necessarily related to the identity of the aggregate of existing matter, which is the common substratum of all those different phenomena. If all these were not directed to that common matter in the possession of which they must be divided, there would be no need for such a law to decide their claims. They might all at once and together fill a boundless space throughout an endless time. Therefore, because all these phenomena of the eternal Ideas are directed to one and the same matter, must there be a rule for their appearance and disappearance; for if there were not, they would not make way for each other.

If, from the foregoing consideration of the forces of nature and their phenomena, we have come to see clearly how far an explanation from causes can go, and where it must stop if it is not to degenerate into the vain attempt to reduce the content of all phenomena to their mere form, in which case there would ultimately remain nothing but form, we shall be able to settle in general terms what is to be demanded of etiology as a whole. It must seek out the causes of all phenomena in nature, i.e., the circumstances under which they invariably appear. Then it must refer the multitude of phenomena which have various forms in various circumstances to what is active in every phenomenon, and is presupposed in the cause,—original forces of nature. It must correctly distinguish between a difference of the phenomenon which arises from a difference of the force, and one which results merely from a difference of the circumstances under which the force expresses itself; and with equal care it must guard against taking the expressions of one and the same force under different circumstances for the manifestations of different forces, and conversely against taking for manifestations of one and the same force what originally belongs to different forces. For physics demands causes, and the will is never a cause. Its whole relation to the phenomenon is not in accordance with the principle of sufficient reason. But that which in itself is the will exists in another aspect as idea; that is to say, is phenomenon. As such, it obeys the laws which constitute the form of the phenomenon.

It follows from all that has been said that it is certainly an error on the part of natural science to seek to refer the higher grades of the objectification of will to the lower; for the failure to recognise, or the denial of, original and self-existing forces of nature is just as wrong as the groundless assumption of special forces when what occurs is merely a peculiar kind of manifestation of what is already known. Thus Kant rightly says that it would be absurd to hope for a blade of grass from a Newton, that is, from one who reduced the blade of grass to the manifestations of physical and chemical forces, of which it was the chance product, and therefore a mere freak of nature, in which no special Idea appeared, i.e., the will did not directly reveal itself in it in a higher and specific grade, but just as in the phenomena of unorganised nature and by chance in this form.

Now, although the difference between phenomenon and thing-in-itself is never lost sight of, and therefore the identity of the will which objectifies itself in all Ideas can never be distorted to mean identity of the particular Ideas themselves in which it appears, so that, for example, chemical or electrical attraction can never be reduced to the attraction of gravitation, although this inner analogy is known, and the former may be regarded as, so to speak, higher powers of the latter, just as little does the similarity of the construction of all animals warrant us in mixing and identifying the species and explaining the more developed as mere variations of the less developed; and although, finally, the physiological functions are never to be reduced to chemical or physical processes, yet, in justification of this procedure, within certain limits, we may accept the following observations as highly probable.

If several of the phenomena of will in the lower grades of its objectification—that is, in unorganised nature—come into conflict because each of them, under the guidance of causality, seeks to possess a given portion of matter, there arises from the conflict the phenomenon of a higher Idea which prevails over all the less developed phenomena previously there, yet in such a way that it allows the essence of these to continue to exist in a subordinate manner, in that it takes up into itself from them something which is analogous to them. This process is only intelligible from the identity of the will which manifests itself in all the Ideas, and which is always striving after higher objectification. We thus see, for example, in the hardening of the bones, an unmistakable analogy to crystallisation, as

the force which originally had possession of the chalk, although ossification is never to be reduced to crystallisation. The analogy shows itself in a weaker degree in the flesh becoming firm. The combination of humours in the animal body and secretion are also analogous to chemical combination and separation. Indeed, the laws of chemistry are still strongly operative in this case, but subordinated, very much modified, and mastered by a higher Idea; therefore mere chemical forces outside the organism will never afford us such humours; but the more developed Idea resulting from this victory over several lower Ideas or objectifications of will, gains an entirely new character by taking up into itself from every Idea over which it has prevailed a strengthened analogy. The will objectifies itself in a new, more distinct way. It originally appears in generatio æquivoca; afterwards in assimilation to the given germ, organic moisture, plant, animal, man. Thus from the strife of lower phenomena the higher arise, swallowing them all up, but yet realising in the higher grade the tendency of all the lower.

From grade to grade objectifying itself more distinctly, yet still completely without consciousness as an obscure striving force, the will acts in the vegetable kingdom also, in which the bond of its phenomena consists no longer properly of causes, but of stimuli; and, finally, also in the vegetative part of the animal phenomenon, in the production and maturing of the animal and in sustaining its inner economy, in which the manifestation of will is still always necessarily determined by stimuli. The ever-ascending grades of the objectification of will bring us at last to the point at which the individual that expresses the Idea could no longer receive food for its assimilation through mere movement following upon stimuli.

Thus knowledge generally, rational as well as merely sensuous, proceeds originally from the will itself, belongs to the inner being of the higher grades of its objectification as a means of supporting the individual and the species, just like any organ of the body. Originally destined for the service of the will for the accomplishment of its aims, it remains almost throughout entirely subjected to its service: it is so in all brutes and in almost all men.

We have considered the great multiplicity and diversity of the phenomena in which the will objectifies itself, and we have seen their endless and implacable strife with each other. Yet, according to the whole discussion up to this point, the will itself, as thing-in-itself, is by no means included in that multiplicity and change. The diversity of the Ideas, i.e., grades of objectification, the multitude of individuals in which each of these expresses itself, the struggle of forms for matter,—all this does not concern it, but is only the manner of its objectification, and only through this has an indirect relation to it, by virtue of which it belongs to the

expression of the nature of will for the idea. As the magic-lantern shows many different pictures, which are all made visible by one and the same light, so in all the multifarious phenomena which fill the world together or throng after each other as events, only one will manifests itself, of which everything is the visibility, the objectivity, and which remains unmoved in the midst of this change; it alone is thing-in-itself; all objects are manifestations, or, to speak the language of Kant, phenomena. Although in man, as Idea, the will finds its clearest and fullest objectification, yet man alone could not express its being. In order to manifest the full significance of the will, the Idea of man would need to appear, not alone and sundered from everything else, but accompanied by the whole series of grades, down through all the forms of animals, through the vegetable kingdom to unorganised nature. All these supplement each other in the complete objectification of will; they are as much presupposed by the Idea of man as the blossoms of a tree presuppose leaves, branches, stem, and root; they form a pyramid, of which man is the apex. We find, however, that the inner necessity of the gradation of its manifestations, which is inseparable from the adequate objectification of the will, is expressed by an outer necessity in the whole of these manifestations themselves, by reason of which man has need of the beasts for his support, the beasts in their grades have need of each other as well as of plants, which in their turn require the ground, water, chemical elements and their combinations, the planet, the sun, rotation and motion round the sun, the curve of the ellipse, &c., &c. At bottom this results from the fact that the will must live on itself, for there exists nothing beside it, and it is a hungry will. Hence arise eager pursuit, anxiety, and suffering.

It is only the knowledge of the unity of will as thing-in-itself, in the endless diversity and multiplicity of the phenomena, that can afford us the true explanation of that wonderful, unmistakable analogy of all the productions of nature, that family likeness on account of which we may regard them as variations on the same ungiven theme. So in like measure, through the distinct and thoroughly comprehended knowledge of that harmony, that essential connection of all the parts of the world, that necessity of their gradation which we have just been considering, we shall obtain a true and sufficient insight into the inner nature and meaning of the undeniable *teleology* of all organised productions of nature, which, indeed, we presupposed a priori, when considering and investigating them.

This teleology is of a twofold description; sometimes an inner teleology, that is, an agreement of all the parts of a particular organism, so ordered that the sustenance of the individual and the species results from it, and therefore presents itself as the end of that disposition or arrangement. Sometimes, however, there is an outward teleology, a relation of

unorganised to organised nature in general, or of particular parts of organised nature to each other, which makes the maintenance of the whole of organised nature, or of the particular animal species, possible, and therefore presents itself to our judgment as the means to this end.

I here conclude the second principal division of my exposition, in the hope that, so far as is possible in the case of an entirely new thought, which cannot be quite free from traces of the individuality in which it originated. I have succeeded in conveying to the reader the complete certainty that this world in which we live and have our being is in its whole nature through and through will, and at the same time through and through idea: that this idea, as such, already presupposes a form, object and subject, is therefore relative; and if we ask what remains if we take away this form, and all those forms which are subordinate to it, and which express the principle of sufficient reason, the answer must be that as something toto genere different from idea, this can be nothing but will. which is thus properly the thing-in-itself. Every one finds that he himself is this will, in which the real nature of the world consists, and he also finds that he is the knowing subject, whose idea the whole world is, the world which exists only in relation to his consciousness, as its necessary supporter. Every one is thus himself in a double aspect the whole world. the microcosm; finds both sides whole and complete in himself. And what he thus recognises as his own real being also exhausts the being of the whole world—the macrocosm; thus the world, like man, is through and through will, and through and through idea, and nothing more than this.

THIRD BOOK: THE WORLD AS IDEA

SECOND ASPECT: THE IDEA INDEPENDENT OF THE PRINCIPLE OF SUFFICIENT REASON: THE PLATONIC IDEA: THE OBJECT OF ART

In order to gain a deeper insight into the nature of the world, it is absolutely necessary that we should learn to distinguish the will as thing-initself from its adequate objectivity, and also the different grades in which this appears moré and more distinctly and fully, i.e., the Ideas themselves, from the merely phenomenal existence of these Ideas in the forms of the principle of sufficient reason, the restricted method of knowledge of the individual. We shall then agree with Plato when he attributes actual being only to the Ideas, and allows only an illusive, dreamlike existence to things in space and time, the real world for the individual. Then we shall understand how one and the same Idea reveals itself in so many phenomena, and presents its nature only bit by bit to the individual, one side after another. Then we shall also distinguish the Idea itself from the

way in which its manifestation appears in the observation of the individual, and recognise the former as essential and the latter as unessential.

To him who has thoroughly grasped this, and can distinguish between the will and the Idea, and between the Idea and its manifestation, the events of the world will have significance only so far as they are the letters out of which we may read the Idea of man, but not in and for themselves. He will not believe with the vulgar that time may produce something actually new and significant; that through it, or in it, something absolutely real may attain to existence, or indeed that it itself as a whole has beginning and end, plan and development, and in some way has for its final aim the highest perfection (according to their conception) of the last generation of man, whose life is a brief thirty years.

History follows the thread of events; it is pragmatic so far as it deduces them in accordance with the law of motivation, a law that determines the self-manifesting will wherever it is enlightened by knowledge. At the lowest grades of its objectivity, where it still acts without knowledge, natural science, in the form of etiology, treats of the laws of the changes of its phenomena, and, in the form of morphology, of what is permanent in them. This almost endless task is lightened by the aid of concepts, which comprehend what is general in order that we may deduce what is particular from it. Lastly, mathematics treats of the mere forms, time and space, in which the Ideas, broken up into multiplicity, appear for the knowledge of the subject as individual. All these, of which the common name is science, proceed according to the principle of sufficient reason in its different forms, and their theme is always the phenomenon, its laws, connections, and the relations which result from them. But what kind of knowledge is concerned with that which is outside and independent of all relations, that which alone is really essential to the world, the true content of its phenomena, that which is subject to no change, and therefore is known with equal truth for all time, in a word, the Ideas, which are the direct and adequate objectivity of the thing-initself, the will? We answer, Art, the work of genius. It repeats or reproduces the eternal Ideas grasped through pure contemplation, the essential and abiding in all the phenomena of the world; and according to what the material is in which it reproduces, it is sculpture or painting, poetry or music. Its one source is the knowledge of Ideas; its one aim the communication of this knowledge. While science, following the unresting and inconstant stream of the fourfold forms of reason and consequent, with each end attained sees further, and can never reach a final goal nor attain full satisfaction, any more than by running we can reach the place where the clouds touch the horizon; art, on the contrary, is everywhere at its goal. For it plucks the object of its contemplation out of the stream of the world's course, and has it isolated before it. And this particular thing, which in that stream was a small perishing part, becomes to art the representative of the whole, an equivalent of the endless multitude in space and time. It therefore pauses at this particular thing; the course of time stops; the relations vanish for it; only the essential, the Idea, is its object. We may, therefore, accurately define it as the way of viewing things independent of the principle of sufficient reason, in opposition to the way of viewing them which proceeds in accordance with that principle, and which is the method of experience and of science. This last method of considering things may be compared to a line infinitely extended in a horizontal direction, and the former to a vertical line which cuts it at any point. The method of viewing things which proceeds in accordance with the principle of sufficient reason is the rational method, and it alone is valid and of use in practical life and in science. The method which looks away from the content of this principle is the method of genius, which is only valid and of use in art.

Imagination has rightly been recognised as an essential element of genius; it has sometimes even been regarded as identical with it; but this is a mistake. As the objects of genius are the eternal Ideas, the permanent, essential forms of the world and all its phenomena, and as the knowledge of the Idea is necessarily knowledge through perception, is not abstract, the knowledge of the genius would be limited to the Ideas of the objects actually present to his person, and dependent upon the chain of circumstances that brought these objects to him, if his imagination did not extend his horizon far beyond the limits of his actual personal existence, and thus enable him to construct the whole out of the little that comes into his own actual apperception, and so to let almost all possible scenes of life pass before him in his own consciousness. Further, the actual objects are almost always very imperfect copies of the Ideas expressed in them; therefore the man of genius requires imagination in order to see in things, not that which Nature has actually made, but that which she endeavoured to make, yet could not because of that conflict of her forms among themselves which we referred to in the last book. The imagination then extends the intellectual horizon of the man of genius beyond the objects which actually present themselves to him, both as regards quality and quantity. Therefore extraordinary strength of imagination accompanies, and is indeed a necessary condition of genius. But the converse does not hold, for strength of imagination does not indicate genius; on the contrary, men who have no touch of genius may have much imagination. For as it is possible to consider a real object in two opposite ways, purely objectively, the way of genius grasping its Idea, or in the common way, merely in the relations in which it stands to other objects and to one's own will, in accordance with the principle of sufficient reason, it is also possible to perceive an imaginary object in both of these ways. Regarded in the first way, it is a means to the knowledge of the Idea, the communication of which is the work of art; in the second case, the imaginary object is used to build castles in the air congenial to egotism and the individual humour, and which for the moment delude and gratify; thus only the relations of the phantasies so linked together are known. The man who indulges in such an amusement is a dreamer; he will easily mingle those fancies that delight his solitude with reality, and so unfit himself for real life: perhaps he will write them down, and then we shall have the ordinary novel of every description, which entertains those who are like him and the public at large, for the readers imagine themselves in the place of the hero, and then find the story very agreeable.

The knowledge of the beautiful always supposes at once and inseparably the pure knowing subject and the known Idea as object. Yet the source of asthetic satisfaction will sometimes lie more in the comprehension of the known idea, sometimes more in the blessedness and spiritual peace of the pure knowing subject freed from all willing, and therefore from all individuality, and the pain that proceeds from it. And, indeed, this predominance of one or the other constituent part of æsthetic feeling will depend upon whether the intuitively grasped Idea is a higher or a lower grade of the objectivity of will. Thus in æsthetic contemplation (in the real, or through the medium of art) of the beauty of Nature in the inorganic and vegetable worlds, or in works of architecture, the pleasure of pure will-less knowing will predominate, because the Ideas which are here apprehended are only low grades of the objectivity of will, and are therefore not manifestations of deep significance and rich content. On the other hand, if animals and man are the objects of æsthetic contemplation or representation, the pleasure will consist rather in the comprehension of these Ideas, which are the most distinct revelation of will; for they exhibit the greatest multiplicity of forms, the greatest richness and deep significance of phenomena, and reveal to us most completely the nature of will, whether in its violence, its terribleness, its satisfaction or its aberration (the latter in tragic situations), or finally in its change and self-surrender, which is the peculiar theme of Christian painting; as the Idea of the will enlightened by full knowledge is the object of historical painting in general, and of the drama. We shall now go through the fine arts one by one, and this will give completeness and distinctness to the theory of the beautiful which we have advanced.

The great problem of historical painting and sculpture is to express directly and for perception the Idea in which the will reaches the highest grade of its objectification. The objective side of the pleasure afforded by the beautiful is here always predominant, and the subjective side has retired into the background. It is further to be observed that at the next grade below this, animal painting, the characteristic is entirely one with

the beautiful; the most characteristic lion, wolf, horse, sheep, or ox, was always the most beautiful also. The reason of this is that animals have only the character of their species, no individual character. In the representation of men the character of the species is separated from that of the individual; the former is now called beauty (entirely in the objective sense), but the latter retains the name, character, or expression, and the new difficulty arises of representing both, at once and completely, in the same individual.

Human beauty is an objective expression, which means the fullest objectification of will at the highest grade at which it is knowable, the Idea of man in general, completely expressed in the sensible form. But however much the objective side of the beautiful appears here, the subjective side still always accompanies it. And just because no object transports us so quickly into pure æsthetic contemplation, as the most beautiful human countenance and form, at the sight of which we are instantly filled with unspeakable satisfaction, and raised above ourselves and all that troubles us: this is only possible because this most distinct and purest knowledge of will raises us most easily and quickly to the state of pure knowing, in which our personality, our will with its constant pain, disappears, so long as the pure æsthetic pleasure lasts. Therefore it is that Goethe says: "No evil can touch him who looks on human beauty; he feels himself at one with himself and with the world." That a beautiful human form is produced by Nature must be explained in this way. At this its highest grade the will objectifies itself in an individual; and therefore through circumstances and its own power it completely overcomes all the hindrances and opposition which the phenomena of the lower grades present to it. Such are the forces of Nature, from which the will must always first extort and win back the matter that belongs to all its manifestations. Further, the phenomenon of will at its higher grades always has multiplicity in its form. Even the tree is only a systematic aggregate of innumerably repeated sprouting fibres. This combination assumes greater complexity in higher forms and the human body is an exceedingly complex system of different parts, each of which has a peculiar life of its own, vita propria, subordinate to the whole. Now that all these parts are in the proper fashion subordinate to the whole, and co-ordinate to each other, that they all work together harmoniously for the expression of the whole, nothing superfluous, nothing restricted; all these are the rare conditions, whose result is beauty, the completely expressed character of the species. So is it in Nature. But how in art? One would suppose that art achieved the beautiful by imitating Nature. But how is the artist to recognise the perfect work which is to be imitated, and distinguish it from the failures, if he does not anticipate the beautiful before experience? And besides this, has Nature ever produced a human being perfectly

beautiful in all his parts? It has accordingly been thought that the artist must seek out the beautiful parts, distributed among a number of different human beings, and out of them construct a beautiful whole; a perverse and foolish opinion. For it will be asked, how is he to know that just these forms and not others are beautiful? We also see what kind of success attended the efforts of the old German painters to achieve the beautiful by imitating Nature. Observe their naked figures. No knowledge of the beautiful is possible purely a posteriori, and from mere experience; it is always, at least in part, a priori, although quite different in kind, from the forms of the principle of sufficient reason, of which we are conscious a priori. These concern the universal form of phenomena as such, as it constitutes the possibility of knowledge in general, the universal how of all phenomena, and from this knowledge proceed mathematics and pure natural science. But this other kind of knowledge a priori, which makes it possible to express the beautiful, concerns, not the form but the content of phenomena, not the how but the what of the phenomenon. That we all recognise human beauty when we see it, but that in the true artist this takes place with such clearness that he shows it as he has never seen it, and surpasses Nature in his representation; this is only possible because we ourselves are the will whose adequate objectification at its highest grade is here to be judged and discovered. Thus alone have we in fact an anticipation of that which Nature (which is just the will that constitutes our own being) strives to express. And in the true genius this anticipation is accompanied by so great a degree of intelligence that he recognises the Idea in the particular thing, and thus, as it were, understands the halfuttered speech of Nature, and articulates clearly what she only stammered forth. He expresses in the hard marble that beauty of form which in a thousand attempts she failed to produce, he presents it to Nature, saying, as it were, to her, "That is what you wanted to say!" And whoever is able to judge replies, "Yes, that is it." Only in this way was it possible for the genius of the Greeks to find the type of human beauty and establish it as a canon for the school of sculpture; and only by virtue of such an anticipation is it possible for all of us to recognise beauty, when it has actually been achieved by Nature in the particular case. This anticipation is the Ideal. It is the Idea so far as it is known a priori, at least half, and it becomes practical for art, because it corresponds to and completes what is given a posteriori through Nature. The possibility of such an anticipation of the beautiful a priori in the artist, and of its recognition a posteriori by the critic, lies in the fact that the artist and the critic are themselves the "in-itself" of Nature, the will which objectifies itself. For, as Empedocles said, like can only be known by like; only Nature can understand itself: only Nature can fathom itself; but only spirit also can understand spirit.

FOURTH BOOK: THE WORLD AS WILL

SECOND ASPECT: THE ASSERTION AND DENIAL OF THE WILL TO LIVE, WHEN SELF-CONSCIOUSNESS HAS BEEN ATTAINED

THE WILL, which, considered purely in itself, is without knowledge, and is merely a blind incessant impulse, as we see it appear in unorganised and vegetable nature and their laws, and also in the vegetative part of our own life, receives through the addition of the world as idea, which is developed in subjection to it, the knowledge of its own willing and of what it is that it wills. And this is nothing else than the world as idea, life, precisely as it exists. Therefore we called the phenomenal world the mirror of the will, its objectivity. And since what the will wills is always life, just because life is nothing but the representation of that willing for the idea, it is all one and a mere pleonasm if, instead of simply saying "the will," we say, "the will to live."

Will is the thing-in-itself, the inner content, the essence of the world. Life, the visible world, the phenomenon, is only the mirror of the will. Therefore life accompanies the will as inseparably as the shadow accompanies the body; and if will exists, so will life, the world, exist. Life is, therefore, assured to the will to live; and so long as we are filled with the will to live we need have no fear for our existence, even in the presence of death. It is true we see the individual come into being and pass away: but the individual is only phenomenal, exists only for the knowledge which is bound to the principle of sufficient reason, to the principium individuationis. Certainly, for this kind of knowledge, the individual receives his life as a gift, rises out of nothing, then suffers the loss of this gift through death, and returns again to nothing. But we desire to consider life philosophically, i.e., according to its Ideas, and in this sphere we shall find that neither the will, the thing-in-itself in all phenomena, nor the subject of knowing, that which perceives all phenomena, is affected at all by birth or by death. Birth and death belong merely to the phenomenon of will, thus to life; and it is essential to this to exhibit itself in individuals which come into being and pass away, as fleeting phenomena appearing in the form of time-phenomena of that which in itself knows no time, but must exhibit itself precisely in the way we have said, in order to objectify its peculiar nature. Birth and death belong in like manner to life, and hold the balance as reciprocal conditions of each other, or, if one likes the expression, as poles of the whole phenomenon of life. The form of this phenomenon is time, space, and causality, and by means of these individuation, which carries with it that the individual must come into being and pass away. But this no more affects the will to live, of whose manifestation the individual is, as it were, only a particular example or specimen, than the death of an individual injures the whole of Nature. For it is not the individual, but only the species that Nature cares for, and for the preservation of which she so earnestly strives, providing for it with the utmost prodigality through the vast surplus of the seed and the great strength of the fructifying impulse. The individual, on the contrary, neither has nor can have any value for Nature, for her kingdom is infinite time and infinite space, and in these infinite multiplicity of possible individuals. Therefore she is always ready to let the individual fall. and hence it is not only exposed to destruction in a thousand ways by the most insignificant accident, but originally destined for it, and conducted towards it by Nature herself from the moment it has served its end of maintaining the species. Thus Nature naïvely expresses the great truth that only the Ideas, not the individuals, have, properly speaking, reality, i.e., are complete objectivity of the will. Now, since man is Nature itself, and indeed Nature at the highest grade of its self-consciousness, but Nature is only the objectified will to live, the man who has comprehended and retained this point of view may well console himself, when contemplating his own death and that of his friends, by turning his eyes to the immortal life of Nature, which he himself is. This is the significance of Siva with the lingam, and of those ancient sarcophagi with their pictures of glowing life, which say to the mourning beholder, Natura non contristatur.

Above all things, we must distinctly recognise that the form of the phenomenon of will, the form of life or reality, is really only the *present*, not the future nor the past. The latter are only in the conception, exist only in the connection of knowledge, so far as it follows the principle of sufficient reason. No man has ever lived in the past, and none will live in the future; the *present* alone is the form of all life, and is its sure possession which can never be taken from it. The present always exists, together with its content. Both remain fixed without wavering, like the rainbow on the waterfall. For life is firm and certain in the will, and the present is firm and certain in life.

The present alone is that which always exists and remains immovable. That which, empirically apprehended, is the most transitory of all, presents itself to the metaphysical vision, which sees beyond the forms of empirical perception, as that which alone endures, the nunc stans of the schoolmen. The source and the supporter of its content is the will to live or the thing-in-itself,—which we are. That which constantly becomes and passes away, in that it has either already been or is still to be, belongs to the phenomenon as such on account of its forms, which make coming into being and passing away possible. Life is certain to the will, and the

present is certain to life. Thus it is that every one can say, "I am once for all lord of the present, and through all eternity it will accompany me as my shadow: therefore I do not wonder where it has come from, and how it happens that it is exactly now." We might compare time to a constantly revolving sphere; the half that was always sinking would be the past, that which was always rising would be the future; but the indivisible point at the top, where the tangent touches, would be the extensionless present. As the tangent does not revolve with the sphere, neither does the present, the point of contact of the object, the form of which is time, with the subject, which has no form, because it does not belong to the knowable, but is the condition of all that is knowable. Or, time is like an unceasing stream, and the present a rock on which the stream breaks itself, but does not carry away with it. The will, as thing-in-itself, is just as little subordinate to the principle of sufficient reason as the subject of knowledge, which, finally, in a certain regard is the will itself or its expression. And as life, its own phenomenon, is assured to the will, so is the present, the single form of real life. Therefore we have not to investigate the past before life, nor the future after death: we have rather to know the present, the one form in which the will manifests itself. It will not escape from the will, but neither will the will escape from it. If, therefore, life as it is satisfies, whoever affirms it in every way may regard it with confidence as endless, and banish the fear of death as an illusion that inspires him with the foolish dread that he can ever be robbed of the present, and foreshadows a time in which there is no present; an illusion with regard to time analogous to the illusion with regard to space through which every one imagines the position on the globe he happens to occupy as above, and all other places as below. In the same way every one links the present to his own individuality, and imagines that all present is extinguished with it; that then past and future might be without a present. But as on the surface of the globe every place is above, so the form of all life is the present, and to fear death because it robs us of the present, is just as foolish as to fear that we may slip down from the round globe upon which we have now the good fortune to occupy the upper surface. The present is the form essential to the objectification of the will. It cuts time, which extends infinitely in both directions, as a mathematical point, and stands immovably fixed, like an everlasting mid-day with no cool evening, as the actual sun burns without intermission, while it only seems to sink into the bosom of night. Therefore, if a man fears death as his annihilation, it is just as if he were to think that the sun cries out at evening, "Woe is me! for I go down into eternal night." And conversely, whoever is oppressed with the burden of life, whoever desires life and affirms it, but abhors its torments, and especially can no longer endure the hard lot that has fallen to himself, such a man has no deliverance to hope for from death, and cannot right himself by suicide. The cool shades of Orcus allure him only with the false appearance of a haven of rest. The earth rolls from day into night, the individual dies, but the sun itself shines without intermission, an eternal noon. Life is assured to the will to live; the form of life is an endless present, no matter how the individuals, the phenomena of the Idea, arise and pass away in time, like fleeting dreams. Thus even already suicide appears to us as a vain and therefore a foolish action; when we have carried our investigation further it will appear to us in a still less favourable light.

That the will as such is free, follows from the fact that, according to our view, it is the thing-in-itself, the content of all phenomena. The phenomena, on the other hand, we recognise as absolutely subordinate to the principle of sufficient reason in its four forms. And since we know that necessity is throughout identical with following from given grounds, and that these are convertible conceptions, all that belongs to the phenomenon, i.e., all that is object for the knowing subject as individual, is in one aspect reason, and in another aspect consequent; and in this last capacity is determined with absolute necessity, and can, therefore, in no respect be other than it is. The whole content of Nature, the collective sum of its phenomena, is thus throughout necessary, and the necessity of every part, of every phenomenon, of every event, can always be proved, because it must be possible to find the reason from which it follows as a consequent. This admits of no exception: it follows from the unrestricted validity of the principle of sufficient reason. In another aspect, however, the same world is for us, in all its phenomena, objectivity of will. And the will, since it is not phenomenon, is not idea or object, but thing-in-itself, and is not subordinate to the principle of sufficient reason, the form of all object; thus is not determined as a consequent through any reason, knows no necessity, i.e., is free. The concept of freedom is thus properly a negative concept, for its content is merely the denial of necessity, i.e., the relation of consequent to its reason, according to the principle of sufficient reason. Now here lies before us in its most distinct form the solution of that great contradiction, the union of freedom with necessity, which has so often been discussed in recent times, yet, so far as I know, never clearly and adequately. Everything is as phenomenon, as object, absolutely necessary: in itself it is will, which is perfectly free to all eternity. The phenomenon, the object, is necessarily and unalterably determined in that chain of causes and effects which admits of no interruption. But the existence in general of this object, and its specific nature, i.e., the Idea which reveals itself in it, or, in other words, its character, is a direct manifestation of will. Thus, in conformity with the freedom of this will, the object might not be at all, or it might be originally and essentially something quite different from what it is, in which case, however, the

whole chain of which it is a link, and which is itself a manifestation of the same will, would be quite different also. But once there and existing, it has entered the chain of causes and effects, is always necessarily determined in it, and can, therefore, neither become something else, i.e., change itself, nor yet escape from the chain, i.e., vanish. Man, like every other part of Nature, is objectivity of the will; therefore all that has been said holds good of him. As everything in Nature has its forces and qualities, which react in a definite way when definitely affected, and constitute its character, man also has his character, from which the motives call forth his actions with necessity. In this manner of conduct his empirical character reveals itself, but in this again his intelligible character, the will in itself, whose determined phenomenon he is. But man is the most complete phenomenon of will, and he had to be enlightened with so high a degree of knowledge in order to maintain himself in existence, that in it a perfectly adequate copy or repetition of the nature of the world under the form of the idea became possible: this is the comprehension of the Ideas. the pure mirror of the world. Thus in man the will can attain to full self-consciousness, to distinct and exhaustive knowledge of its own nature, as it mirrors itself in the whole world. We saw in the preceding book that art springs from the actual presence of this degree of knowledge; and at the end of our whole work it will further appear that, through the same knowledge, in that the will relates it to itself, a suppression and selfdenial of the will in its most perfect manifestation is possible. So that the freedom which otherwise, as belonging to the thing-in-itself, can never show itself in the phenomenon, in such a case does also appear in it, and, by abolishing the nature which lies at the foundation of the phenomenon. while the latter itself still continues to exist in time, it brings about a contradiction of the phenomenon with itself, and in this way exhibits the phenomena of holiness and self-renunciation. But all this can only be fully understood at the end of this book. What has just been said merely affords a preliminary and general indication of how man is distinguished from all the other phenomena of will by the fact that freedom, i.e., independence of the principle of sufficient reason, which only belongs to the will as thing-in-itself, and contradicts the phenomenon, may yet possibly, in his case, appear in the phenomenon also, where, however, it necessarily exhibits itself as a contradiction of the phenomenon with itself. In this sense, not only the will in itself, but man also may certainly be called free, and thus distinguished from all other beings. But how this is to be understood can only become clear through all that is to follow, and for the present we must turn away from it altogether. For, in the first place, we must beware of the error that the action of the individual definite man is subject to no necessity, i.e., that the power of the motive is less certain than the power of the cause, or the following of the conclusion from the premises. The

freedom of the will as thing-in-itself, if, as has been said, we abstract from the entirely exceptional case mentioned above, by no means extends directly to its phenomenon, not even in the case in which this reaches the highest grade of its visibility, and thus does not extend to the rational animal endowed with individual character, i.e., the person. The person is never free although he is the phenomenon of a free will; for he is already the determined phenomenon of the free volition of this will, and, because he enters the form of every object, the principle of sufficient reason, he develops indeed the unity of that will in a multiplicity of actions, but on account of the timeless unity of that volition in itself, this multiplicity exhibits in itself the regular conformity to law of a force of nature. Since, however, it is that free volition that becomes visible in the person and the whole of his conduct, relating itself to him as the concept to the definition, every individual action of the person is to be ascribed to the free will, and directly proclaims itself as such in consciousness.

The assertion of an empirical freedom of the will agrees precisely with the doctrine that places the inner nature of man in a soul, which is originally a knowing, and indeed really an abstract thinking nature, and only in consequence of this a willing nature—a doctrine which thus regards the will as of a secondary or derivative nature, instead of knowledge which is really so. The will indeed came to be regarded as an act of thought, and to be identified with the judgment, especially by Descartes and Spinoza. According to this doctrine every man must become what he is only through his knowledge; he must enter the world as a moral cipher come to know the things in it, and thereupon determine to be this or that, to act thus or thus, and may also through new knowledge achieve a new course of action, that is to say, become another person. Further, he must first know a thing to be good, and in consequence of this will it, instead of first willing it, and in consequence of this calling it good. According to my fundamental point of view, all this is a reversal of the true relation. Will is first and original; knowledge is merely added to it as an instrument belonging to the phenomenon of will. Therefore every man is what he is through his will, and his character is original, for willing is the basis of his nature. Through the knowledge which is added to it he comes to know in the course of experience what he is, i.e., he learns his character. Thus he knows himself in consequence of and in accordance with the nature of his will, instead of willing in consequence of and in accordance with his knowing. According to the latter view, he would only require to consider how he would like best to be, and he would be it: that is its doctrine of the freedom of the will. Thus it consists really in this, that a man is his own work guided by the light of knowledge. I, on the contrary, say that he is his own work before all knowledge, and knowledge is merely added to it to enlighten it. Therefore he cannot resolve to be this or that, nor can he become other than he is; but he is once for all, and he knows in the course of experience what he is. According to one doctrine he wills what he knows, and according to the other he knows what he wills.

As the result of the whole of this discussion of the freedom of the will and what relates to it, we find that although the will may, in itself and apart from the phenomenon, be called free and even omnipotent, yet in its particular phenomena enlightened by knowledge, as in men and brutes, it is determined by motives to which the special character regularly and necessarily responds, and always in the same way. We see that because of the possession on his part of abstract or rational knowledge, man, as distinguished from the brutes, has a choice, which only makes him the scene of the conflict of his motives, without withdrawing him from their control. This choice is therefore certainly the condition of the possibility of the complete expression of the individual character, but is by no means to be regarded as freedom of the particular volition, i.e., independence of the law of causality, the necessity of which extends to man as to every other phenomenon. Thus the difference between human volition and that of the brutes, which is introduced by reason or knowledge through concepts, extends to the point we have indicated, and no farther. But, what is quite a different thing, there may arise a phenomenon of the human will which is quite impossible in the brute creation, if man altogether lays aside the knowledge of particular things as such which is subordinate to the principle of sufficient reason, and by means of his knowledge of the Ideas sees through the principium individuationis. Then an actual appearance of the real freedom of the will as a thing-initself is possible, by which the phenomenon comes into a sort of contradiction with itself, as is indicated by the word self-renunciation; and, finally, the "in-itself" of its nature suppresses itself.

Though everything may be regarded as irrevocably predetermined by fate, yet it is so only through the medium of the chain of causes; therefore in no case can it be determined that an effect shall appear without its cause. Thus it is not simply the event that is predetermined, but the event as the consequence of preceding causes; so that fate does not decide the consequence alone, but also the means as the consequence of which it is destined to appear. Accordingly, if some means is not present, it is certain that the consequence also will not be present: each is always present in accordance with the determination of fate, but this is never known to us till afterwards.

As events always take place according to fate, i.e., according to the infinite concatenation of causes, so our actions always take place according to our intelligible character. But just as we do not know the former

beforehand, so no a priori insight is given us into the latter, but we only come to know ourselves as we come to know other persons a posteriori through experience. If the intelligible character involved that we could only form a good resolution after a long conflict with a bad disposition, this conflict would have to come first and be waited for. Reflection on the unalterable nature of the character, on the unity of the source from which all our actions flow, must not mislead us into claiming the decision of the character in favour of one side or the other; it is in the resolve that follows that we shall see what manner of men we are, and mirror ourselves in our actions. This is the explanation of the satisfaction or the anguish of soul with which we look back on the course of our past life. Both are experienced, not because these past deeds have still an existence; they are past, they have been, and now are no more; but their great importance for us lies in their significance, lies in the fact that these deeds are the expression of the character, the mirror of the will, in which we look and recognise our inmost self, the kernel of our will. Because we experience this not before, but only after, it behoves us to strive and fight in time, in order that the picture we produce by our deeds may be such that the contemplation of it may calm us as much as possible, instead of harassing us. The significance of this consolation or anguish of soul will, as we have said, be inquired into farther on; but to this place there belongs the inquiry which follows, and which stands by itself.

This freedom, this omnipotence, as the expression of which the whole visible world exists and progressively develops in accordance with the laws which belong to the form of knowledge, can now, at the point at which in its most perfect manifestation it has attained to the completely adequate knowledge of its own nature, express itself anew in two ways. Either it wills here, at the summit of mental endowment and selfconsciousness, simply what it willed before blindly and unconsciously, and if so, knowledge always remains its motive in the whole as in the particular case. Or, conversely, this knowledge becomes for it a quieter, which appeases and suppresses all willing. This is that assertion and denial of the will to live which was stated above in general terms. As, in the reference of individual conduct, a general, not a particular manifestation of will, it does not disturb and modify the development of the character, nor does it find its expression in particular actions; but, either by an ever more marked appearance of the whole method of action it has followed hitherto, or conversely by the entire suppression of it, it expresses in a living form the maxims which the will has freely adopted in accordance with the knowledge it has now attained to. By the explanations we have just given of freedom, necessity, and character, we have somewhat facilitated and prepared the way for the clearer development of all this, which is the principal subject of this last book. But we shall have done so still more when we have turned our attention to life itself, the willing or not willing of which is the great question, and have endeavoured to find out generally what the will itself, which is everywhere the inmost nature of this life, will really attain by its assertion—in what way and to what extent this assertion satisfies or can satisfy the will; in short, what is generally and mainly to be regarded as its position in this its own world, which in every relation belongs to it.

At every grade that is enlightened by knowledge, the will appears as an individual. The human individual finds himself as finite in infinite space and time, and consequently as a vanishing quantity compared with them. He is projected into them, and, on account of their unlimited nature, he has always a merely relative, never absolute when and where of his existence; for his place and duration are finite parts of what is infinite and boundless. His real existence is only in the present, whose unchecked flight into the past is a constant transition into death, a constant dying. For his past life, apart from its possible consequences for the present, and the testimony regarding the will that is expressed in it, is now entirely done with, dead, and no longer anything; and, therefore, it must be, as a matter of reason, indifferent to him whether the content of that past was pain or pleasure. But the present is always passing through his hands into the past; the future is quite uncertain and always short. Thus his existence, even when we consider only its formal side, is a constant hurrying of the present into the dead past, a constant dying. But if we look at it from the physical side; it is clear that, as our walking is admittedly merely a constantly prevented falling, the life of our body is only a constantly prevented dying, an ever-postponed death: finally, in the same way, the activity of our mind is a constantly deferred ennui. Every breath we draw wards off the death that is constantly intruding upon us. In this way we fight with it every moment, and again, at longer intervals, through every meal we eat, every sleep we take, every time we warm ourselves, &c. In the end, Death must conquer, for we became subject to him through birth, and he only plays for a little while with his prey before he swallows it up. We pursue our life, however, with great interest and much solicitude as long as possible, as we blow out a soap-bubble as long and as large as possible, although we know perfectly well that it will burst.

All satisfaction, or what is commonly called happiness, is always really and essentially only negative, and never positive. It is not an original gratification coming to us of itself, but must always be the satisfaction of a wish. The wish, i.e., some want, is the condition which precedes every pleasure. But with the satisfaction the wish and therefore the pleasure cease. Thus the satisfaction or the pleasing can never be more than the deliverance from a pain, from a want; for such is not only every actual, open sorrow, but every desire, the importunity of which disturbs our

peace, and, indeed, the deadening ennui also that makes life a burden to us. It is, however, so hard to attain or achieve anything; difficulties and troubles without end are opposed to every purpose, and at every step hindrances accumulate. But when finally everything is overcome and attained, nothing can ever be gained but deliverance from some sorrow or desire, so that we find ourselves just in the same position as we occupied before this sorrow or desire appeared. All that is even directly given us is merely the want, i.e., the pain. The satisfaction and the pleasure we can only know indirectly through the remembrance of the preceding suffering and want, which ceases with its appearance. Hence it arises that we are not properly conscious of the blessings and advantages we actually possess, nor do we prize them, but think of them merely as a matter of course, for they gratify us only negatively by restraining suffering. Only when we have lost them do we become sensible of their value; for the want, the privation, the sorrow, is the positive, communicating itself directly to us.

That all happiness is only of a negative, not a positive, nature, that just on this account it cannot be lasting satisfaction and gratification, but merely delivers us from some pain or want which must be followed either by a new pain, or by languor, empty longing, and ennui; this finds support in art, that true mirror of the world and life, and especially in poetry. Every epic and dramatic poem can only represent a struggle, an effort, and fight for happiness, never enduring and complete happiness itself. It conducts its heroes through a thousand difficulties and dangers to the goal; as soon as this is reached, it hastens to let the curtain fall: for now there would remain nothing for it to do but to show that the glittering goal in which the hero expected to find happiness had only disappointed him, and that after its attainment he was no better off than before. Because a genuine enduring happiness is not possible, it cannot be the subject of art. Certainly the aim of the idyll is the description of such a happiness, but one also sees that the idyll as such cannot continue. The poet always finds that it either becomes epical in his hands, and in this case it is a very insignificant epic, made up of trifling sorrows, trifling delights, and trifling efforts—this is the commonest case—or else it becomes a merely descriptive poem, describing the beauty of nature, i.e., pure knowing free from will, which certainly, as a matter of fact, is the only pure happiness, which is neither preceded by suffering or want, nor necessarily followed by repentance, sorrow, emptiness, or satiety; but this happiness cannot fill the whole life, but is only possible at moments. What we see in poetry we find again in music; in the melodies of which we have recognised the universal expression of the inmost history of the self-conscious will, the most secret life, longing, suffering, and delight; the ebb and flow of the human heart. Melody is always a deviation from the keynote through a thousand capricious wanderings, even to the most painful discord, and

then a final return to the keynote which expresses the satisfaction and appeasing of the will, but with which nothing more can then be done, and the continuance of which any longer would only be a wearisome and unmeaning monotony corresponding to ennui.

We now wish to discover the significance of the concept good, which can be done with very little trouble. This concept is essentially relative and signifies the conformity of an object to any definite effort of the will. Accordingly everything that corresponds to the will in any of its expressions and fulfils its end is thought through the concept good, however different such things may be in other respects. Thus we speak of good eating, good roads, good weather, good weapons, good omens, and so on; in short, we call everything good that is just as we wish it to be; and therefore that may be good in the eyes of one man which is just the reverse in those of another. The conception of the good divides itself into two sub-species—that of the direct and present satisfaction of any volition. and that of its indirect satisfaction which has reference to the future, i.e., the agreeable, and the useful. The conception of the opposite, so long as we are speaking of unconscious existence, is expressed by the word bud. more rarely and abstractly by the word evil, which thus denotes everything that does not correspond to any effort of the will. Like all other things that can come into relation to the will, men who are favourable to the ends which happen to be desired, who further and befriend them, are called good in the same sense, and always with that relative limitation, which shows itself, for example, in the expression, "I find this good, but you don't." Those, however, who are naturally disposed not to hinder the endeavours of others, but rather to assist them, and who are thus consistently helpful, benevolent, friendly, and charitable, are called good men, on account of this relation of their conduct to the will of others in general. Thus, having started entirely from the passive element to the good, the inquiry could only proceed later to the active element, and investigate the conduct of the man who is called good, no longer with reference to others, but to himself; specially setting itself the task of explaining both the purely objective respect which such conduct produces in others, and the peculiar contentment with himself which it clearly produces in the man himself, since he purchases it with sacrifices of another kind; and also, on the other hand, the inner pain which accompanies the bad disposition, whatever outward advantages it brings to him who entertains it. It was from this source that the ethical systems, both the philosophical and those which are supported by systems of religion, took their rise. Both seek constantly in some way or other to connect happiness with virtue. the former either by means of the principle of contradiction or that of sufficient reason, and thus to make happiness either identical with or the consequence of virtue, always sophistically; the latter, by asserting the

existence of other worlds than that which alone can be known to experience. In our system, on the contrary, virtue will show itself, not as a striving after happiness, that is, well-being and life, but as an effort in quite an opposite direction.

Absolute good is, therefore, a contradiction in terms; highest good, summum bonum, really signifies the same thing—a final satisfaction of the will, after which no new desire could arise,—a last motive, the attainment of which would afford enduring satisfaction of the will. But such a consummation is not even thinkable. The will can just as little cease from willing altogether on account of some particular satisfaction, as time can end or begin; for it there is no such thing as a permanent fulfilment which shall completely and for ever satisfy its craving. It is the vessel of the Danaides; for it there is no highest good, no absolute good, but always a merely temporary good. If, however, we wish to give an honorary position, as it were emeritus, to an old expression, which from custom we do not like to discard altogether, we may, metaphorically and figuratively, call the complete self-effacement and denial of the will, the true absence of will, which alone for ever stills and silences its struggle, alone gives that contentment which can never again be disturbed, alone redeems the world, and which we shall now soon consider at the close of our whole investigation—the absolute good, the summum bonum—and regard it as the only radical cure of the disease of which all other means are only palliations or anodynes.

If a man is always disposed to do wrong whenever the opportunity presents itself, and there is no external power to restrain him, we call him bad. According to our doctrine of wrong, this means that such a man does not merely assert the will to live as it appears in his own body, but in this assertion goes so far that he denies the will which appears in other individuals. This is shown by the fact that he desires their powers for the service of his own will, and seeks to destroy their existence when they stand in the way of its efforts. The ultimate source of this is a high degree of egoism, the nature of which has been already explained. Two things are here apparent. In the first place, that in such a man an excessively vehement will to live expresses itself, extending far beyond the assertion of his own body; and, in the second place, that his knowledge, entirely given up to the principle of sufficient reason and involved in the principium individuationis, cannot get beyond the difference which this latter principle establishes between his own person and every one else. Therefore he seeks his own well-being alone, completely indifferent to that of all others, whose existence is to him altogether foreign and divided from his own by a wide gulf, and who are indeed regarded by him as mere masks with no reality behind them. And these two qualities are the constituent elements of the bad character.

This great intensity of will is in itself and directly a constant source of suffering. In the first place, because all volition as such arises from want; that is, suffering. (Therefore, as will be remembered, from the Third Book, the momentary cessation of all volition, which takes place whenever we give ourselves up to æsthetic contemplation, as pure willless subject of knowledge, the correlative of the Idea, is one of the principal elements in our pleasure in the beautiful.) Secondly, because, through the causal connection of things, most of our desires must remain unfulfilled, and the will is oftener crossed than satisfied, and therefore much intense volition carries with it much intense suffering. For all suffering is simply unfulfilled and crossed volition; and even the pain of the body when it is injured or destroyed is as such only possible through the fact that the body is nothing but the will itself become object. Now on this account, because much intense suffering is inseparable from much intense volition, very bad men bear the stamp of inward suffering in the very expression of the countenance; even when they have attained every external happiness, they always look unhappy so long as they are not transported by some momentary ecstasy and are not dissembling. From this inward torment, which is absolutely and directly essential to them, there finally proceeds that delight in the suffering of others which does not spring from mere egoism, but is disinterested, and which constitutes wickedness proper, rising to the pitch of cruelty. For this the suffering of others is not a means for the attainment of the ends of its own will, but an end in itself. The more definite explanation of this phenomenon is as follows:—Since man is a manifestation of will illuminated by the clearest knowledge, he is always contrasting the actual and felt satisfaction of his will with the merely possible satisfaction of it which knowledge presents to him. Hence arises envy: every privation is infinitely increased by the enjoyment of others, and relieved by the knowledge that others also suffer the same privation. Those ills which are common to all and inseparable from human life trouble us little, just as those which belong to the climate, to the whole country. The recollection of greater sufferings than our own stills our pain; the sight of the sufferings of others soothes our own. If, now, a man is filled with an exceptionally intense pressure of will,—if with burning eagerness he seeks to accumulate everything to slake the thirst of his egoism, and thus experiences, as he inevitably must, that all satisfaction is merely apparent, that the attained end never fulfils the promise of the desired object, the final appeasing of the fierce pressure of will, but that when fulfilled the wish only changes its form, and now torments him in a new one; and indeed that if at last all wishes are exhausted, the pressure of will itself remains without any conscious motive, and makes itself known to him with fearful pain as a feeling of terrible desolation and emptiness; if

from all this, which in the case of the ordinary degrees of volition is only felt in a small measure, and only produces the ordinary degree of melancholy, in the case of him who is a manifestation of will reaching the point of extraordinary wickedness, there necessarily springs an excessive inward misery, an eternal unrest, an incurable pain; he seeks indirectly the alleviation which directly is denied him,—seeks to mitigate his own suffering by the sight of the suffering of others, which at the same time he recognises as an expression of his power. The suffering of others now becomes for him an end in itself, and is a spectacle in which he delights; and thus arises the phenomenon of pure cruelty, blood-thirstiness, which history exhibits so often in the Neros and Domitians, in the African Deis, in Robespierre, and the like.

Suicide, the actual doing away with the individual manifestation of will, differs most widely from the denial of the will to live, which is the single outstanding act of free will in the manifestation, and is therefore, as Asmus calls it, the transcendental change. This last has been fully considered in the course of our work. Far from being denial of the will, suicide is a phenomenon of strong assertion of will; for the essence of negation lies in this, that the joys of life are shunned, not its sorrows. The suicide wills life, and is only dissatisfied with the conditions under which it has presented itself to him. He therefore by no means surrenders the will to live, but only life, in that he destroys the individual manifestation. He wills life-wills the unrestricted existence and assertion of the body; but the complication of circumstances does not allow this, and there results for him great suffering. The very will to live finds itself so much hampered in this particular manifestation that it cannot put forth its energies. It therefore comes to such a determination as is in conformity with its own nature, which lies outside the conditions of the principle of sufficient reason, and to which, therefore, all particular manifestations are alike indifferent, inasmuch as it itself remains unaffected by all appearing and passing away, and is the inner life of all things; for that firm inward assurance by reason of which we all live free from the constant dread of death, the assurance that a phenomenal existence can never be wanting to the will, supports our action even in the case of suicide. Thus the will to live appears just as much in suicide as in the satisfaction of self-preservation and in the sensual pleasure of procreation. This is the inner meaning of the unity of the Trimurti, which is embodied in its entirety in every human being, though in time it raises now one, now another, of its three heads. Suicide stands in the same relation to the denial of the will as the individual thing does to the Idea. The suicide denies only the individual, not the species. We have already seen that as life is always assured to the will to live, and as sorrow is inseparable from life, suicide, the wilful destruction of the

single phenomenal existence, is a vain and foolish act; for the thing-initself remains unaffected by it, even as the rainbow endures however fast the drops which support it for the moment may change. But, more than this, it is also the masterpiece of Mâyâ, as the most flagrant example of the contradiction of the will to live with itself. As we found this contradiction in the case of the lowest manifestations of will, in the permanent struggle of all the forces of nature, and of all organic individuals for matter and time and space; and as we saw this antagonism come ever more to the front with terrible distinctness in the ascending grades of the objectification of the will, so at last in the highest grade, the Idea of man, it reaches the point at which, not only the individuals which express the same Idea extirpate each other, but even the same individual declares war against itself. The vehemence with which it wills life, and revolts against what hinders it, namely, suffering, brings it to the point of destroying itself; so that the individual will, by its own act, puts an end to that body which is merely its particular visible expression, rather than permit suffering to break the will. Just because the suicide cannot give up willing, he gives up living. The will asserts itself here even in putting an end to its own manifestation, because it can no longer assert itself otherwise. As, however, it was just the suffering which it so shuns that was able, as mortification of the will, to bring it to the denial of itself, and hence to freedom, so in this respect the suicide is like a sick man, who, after a painful operation which would entirely cure him has been begun, will not allow it to be completed, but prefers to retain his disease. Suffering approaches and reveals itself as the possibility of the denial of will; but the will rejects it, in that it destroys the body, the manifestation of itself, in order that it may remain unbroken. This is the reason why almost all ethical teachers, whether philosophical or religious, condemn suicide, although they themselves can only give far-fetched sophistical reasons for their opinion. But if a human being was ever restrained from committing suicide by purely moral motives, the inmost meaning of this self-conquest (in whatever ideas his reason may have clothed it) was this: "I will not shun suffering, in order that it may help to put an end to the will to live, whose manifestation is so wretched, by so strengthening the knowledge of the real nature of the world which is already beginning to dawn upon me, that it may become the final quieter of my will, and may free me for ever."

I now end the general account of ethics, and with it the whole development of that one thought which it has been my object to impart; and I by no means desire to conceal here an objection which concerns this last part of my exposition, but rather to point out that it lies in the nature of the question, and that it is quite impossible to remove it. It is

this, that after our investigation has brought us to the point at which we have before our eyes perfect holiness, the denial and surrender of all volition, and thus the deliverance from a world whose whole existence we have found to be suffering, this appears to us as a passing away into empty nothingness.

That which is generally received as positive, which we call the real, and the negation of which the concept nothing in its most general significance expresses, is just the world as idea, which I have shown to be the objectivity and mirror of the will. Moreover, we ourselves are just this will and this world, and to them belongs the idea in general, as one aspect of them. The form of the idea is space and time, therefore for this point of view all that is real must be in some place and at some time. Denial, abolition, conversion of the will, is also the abolition and the vanishing of the world, its mirror. If we no longer perceive it in this mirror, we ask in vain where it has gone, and then, because it has no longer any where and when, complain that it has vanished into nothing.

A reversed point of view, if it were possible for us, would reverse the signs and show the real for us as nothing, and that nothing as the real. But as long as we ourselves are the will to live, this last—nothing as the real—can only be known and signified by us negatively, because the old saying of Empedocles, that like can only be known by like, deprives us here of all knowledge, as, conversely, upon it finally rests the possibility of all our actual knowledge, i.e., the world as idea; for the world is the self-knowledge of the will.

If, however, it should be absolutely insisted upon that in some way or other a positive knowledge should be attained of that which philosophy can only express negatively as the denial of the will, there would be nothing for it but to refer to that state which all those who have attained to complete denial of the will have experienced, and which has been variously denoted by the names ecstasy, rapture, illumination, union with God, and so forth; a state, however, which cannot properly be called knowledge, because it has not the form of subject and object, and is, moreover, only attainable in one's own experience and cannot be further communicated.

We, however, who consistently occupy the standpoint of philosophy, must be satisfied here with negative knowledge, content to have reached the utmost limit of the positive. We have recognised the inmost nature of the world as will, and all its phenomena as only the objectivity of will; and we have followed this objectivity from the unconscious working of obscure forces of Nature up to the completely conscious action of man. Therefore we shall by no means evade the consequence, that with the free denial, the surrender of the will, all those phenomena are also abolished; that constant strain and effort without end and without rest

at all the grades of objectivity, in which and through which the world consists; the multifarious forms succeeding each other in gradation; the whole manifestation of the will; and, finally, also the universal forms of this manifestation, time and space, and also its last fundamental form, subject and object; all are abolished. No will: no idea, no world.

Before us there is certainly only nothingness. But that which resists this passing into nothing, our nature, is indeed just the will to live, which we ourselves are as it is our world. That we abhor annihilation so greatly, is simply another expression of the fact that we so strenuously will life, and are nothing but this will, and know nothing besides it. But if we turn our glance from our own needy and embarrassed condition to those who have overcome the world, in whom the will, having attained to perfect self-knowledge, found itself again in all, and then freely denied itself, and who then merely wait to see the last trace of it vanish with the body which it animates; then, instead of the restless striving and effort, instead of the constant transition from wish to fruition, and from joy to sorrow, instead of the never-satisfied and never-dying hope which constitutes the life of the man who wills, we shall see that peace which is above all reason, that perfect calm of the spirit, that deep rest, that inviolable confidence and serenity, the mere reflection of which in the countenance, as Raphael and Correggio have represented it, is an entire and certain gospel; only knowledge remains, the will has vanished. We look with deep and painful longing upon this state, beside which the misery and wretchedness of our own is brought out clearly by the contrast. Yet this is the only consideration which can afford us lasting consolation, when, on the one hand, we have recognised incurable suffering and endless misery as essential to the manifestation of will, the world; and, on the other hand, see the world pass away with the abolition of will, and retain before us only empty nothingness. Thus, in this way, by contemplation of the life and conduct of saints, whom it is certainly rarely granted us to meet with in our own experience, but who are brought before our eyes by their written history, and, with the stamp of inner truth, by art, we must banish the dark impression of that nothingness which we discern behind all virtue and holiness as their final goal, and which we fear as children fear the dark; we must not even evade it like the Indians, through myths and meaningless words, such as reabsorption in Brahma or the Nirvana of the Buddhists. Rather do we freely acknowledge that what remains after the entire abolition of will is for all those who are still full of will certainly nothing; but, conversely, to those in whom the will has turned and has denied itself, this our world, which is so real, with all its suns and milky-ways—is nothing.

Part II: Selections

I. ON MAN'S NEED OF METAPHYSICS

With the exception of man, no being wonders at its own existence; but it is to them all so much a matter of course that they do not observe it. The wisdom of nature speaks out of the peaceful glance of the brutes; for in them the will and the intellect are not yet so widely separated that they can be astonished at each other when they meet again. Thus here the whole phenomenon is still firmly attached to the stem of nature from which it has come, and is partaker of the unconscious omniscience of the great mother. Only after the inner being of nature (the will to live in its objectification) has ascended, vigorous and cheerful, through the two series of unconscious existences, and then through the long and broad series of animals, does it attain at last to reflection for the first time on the entrance of reason, thus in man. Then it marvels at its own works. and asks itself what it itself is. Its wonder however is the more serious, as it here stands for the first time consciously in the presence of death. and besides the finiteness of all existence, the vanity of all effort forces itself more or less upon it. With this reflection and this wonder there arises therefore in man alone, the need for a metaphysic; he is accordingly an animal metaphysicum. At the beginning of his consciousness certainly he also accepts himself as a matter of course. This does not last long however, but very early, with the first dawn of reflection, that wonder already appears, which is some day to become the mother of metaphysics. The lower a man stands in an intellectual regard the less of a problem is existence itself for him; everything, how it is, and that it is, appears to him rather a matter of course. This rests upon the fact that his intellect still remains perfectly true to its original destiny of being serviceable to the will as the medium of motives, and therefore is closely bound up with the world and nature, as an integral part of them. Consequently it is very far from comprehending the world in a purely objective manner, freeing itself, so to speak, from the whole of things, opposing itself to this whole, and so for a while becoming as if self-existent. On the other hand, the philosophical wonder which springs from this is conditioned in the individual by higher development of the intellect, yet in general not by this alone; but without doubt it is the knowledge of death, and along with this the consideration of the suffering and misery of life, which gives the strongest impulse to philosophical

reflection and metaphysical explanation of the world. If our life were endless and painless, it would perhaps occur to no one to ask why the world exists, and is just the kind of world it is; but everything would just be taken as a matter of course.

Temples and churches, pagodas and mosques, in all lands and in all ages, in splendour and vastness, testify to the metaphysical need of man, which, strong and ineradicable, follows close upon his physical need. Certainly whoever is satirically inclined might add that this metaphysical need is a modest fellow who is content with poor fare. It sometimes allows itself to be satisfied with clumsy fables and insipid tales. If only imprinted early enough, they are for a man adequate explanations of his existence and supports of his morality.

On the other hand, there have never been wanting persons who were interested in deriving their living from that metaphysical need, and in making the utmost they could out of it. Therefore among all nations there are monopolists and farmers-general of it—the priests. Yet their trade had everywhere to be assured to them in this way, that they received the right to impart their metaphysical dogmas to men at a very early age, before the judgment has awakened from its morning slumber, thus in early childhood; for then every well-impressed dogma, however senseless it may be, remains for ever. If they had to wait till the judgment is ripe, their privileges could not continue.

A second, though not a numerous class of persons, who derive their support from the metaphysical need of man, is constituted by those who live by *philosophy*. By the Greeks they were called Sophists, by the moderns they are called Professors of Philosophy.

By netaphysics I understand all knowledge that pretends to transcend the possibility of experience, thus to transcend nature or the given phenomenal appearance of things, in order to give an explanation of that by which, in some sense or other, this experience or nature is conditioned; or, to speak in popular language, of that which is behind nature, and makes it possible. But the great original diversity in the power of understanding, besides the cultivation of it, which demands much leisure, makes so great a difference between men, that as soon as a people has emerged from the state of savages, no one metaphysic can serve for them all. Therefore among civilised nations we find throughout two different kinds of metaphysics, which are distinguished by the fact that the one has its evidence in itself, the other outside itself. Since the metaphysical systems of the first kind require reflection, culture, and leisure for the recognition of their evidence, they can be accessible only to a very small number of men; and, moreover, they can only arise and maintain their existence in the case of advanced civilisation. On the other hand, the systems of the second kind exclusively are for the great majority of men who are not capable of thinking, but only of believing, and who are not accessible to reasons, but only to authority. These systems may therefore be called metaphysics of the people, after the analogy of poetry of the people, and also wisdom of the people, by which is understood proverbs.

To the distinction established above between metaphysics of the first and of the second kind, we have yet to add the following:—A system of the first kind, thus a philosophy, makes the claim, and has therefore the obligation, in everything that it says, sensu stricto et proprio, to be true, for it appeals to thought and conviction. A religion, on the other hand, being intended for the innumerable multitude who, since they are incapable of examination and thought, would never comprehend the profoundest and most difficult truths sensu proprio, has only the obligation to be true sensu allegorico. Truth cannot appear naked before the people. A symptom of this allegorical nature of religions is the mysteries which are to be found perhaps in them all, certain dogmas which cannot even be distinctly thought, not to speak of being literally true.

It would be most beneficial to both kinds of metaphysics that each of them should remain clearly separated from the other and confine itself to its own province, that it may there be able to develop its nature fully. Instead of which, through the whole Christian era, the endeavour has been to bring about a fusion of the two, for the dogmas and conceptions of the one have been carried over into the other, whereby both are spoiled. This has taken place in the most open manner in our own day in that strange hermaphrodite or centaur, the so-called philosophy of religion, which, as a kind of gnosis, endeavours to interpret the given religion, and to explain what is true sensu allegorico through something which is true sensu proprio. But for this we would have to know and possess the truth sensu proprio already; and in that case such an interpretation would be superfluous.

Religions, being calculated with reference to the power of comprehension of the great mass of men, can only have indirect, not immediate truth. To require of them the latter is as if one wished to read the letters set up in the form-chase, instead of their impression. The value of a religion will accordingly depend upon the greater or less content of truth which it contains under the veil of allegory, and then upon the greater or less distinctness with which it becomes visible through this veil, thus upon the transparency of the latter. It almost seems that, as the oldest languages are the most perfect, so also are the oldest religions. If I were to take the results of my philosophy as the standard of truth, I would be obliged to concede to Buddhism the pre-eminence over the rest. In any case it must be a satisfaction to me to see my teaching in such close agreement with a religion which the majority of men upon the

earth hold as their own; for it numbers far more adherents than any other.

I cannot place, as is always done, the fundamental difference of all religions in the questions whether they are monotheistic, polytheistic, pantheistic, or atheistic, but only in the question whether they are optimistic or pessimistic, that is, whether they present the existence of the world as justified by itself, and therefore praise and value it, or regard it as something that can only be conceived as the consequence of our guilt, and therefore properly ought not to be, because they recognise that pain and death cannot lie in the eternal, original, and immutable order of things, in that which in every respect ought to be. The power by virtue of which Christianity was able to overcome first Judaism, and then the heathenism of Greece and Rome, lies solely in its pessimism, in the confession that our state is both exceedingly wretched and sinful, while Judaism and heathenism were optimistic. That truth, profoundly and painfully felt by all, penetrated, and bore in its train the need of redemption.

I turn to a general consideration of the other kind of metaphysics, that which has its authentication in itself, and is called *philosophy*. I remind the reader of its origin, mentioned above, in a *wonder* concerning the world and our own existence, inasmuch as these press upon the intellect as a riddle, the solution of which therefore occupies mankind without intermission.

Only to the brutes, who are without thought, does the world and existence appear as a matter of course; to man, on the contrary, it is a problem, of which even the most uneducated and narrow-minded becomes vividly conscious in certain brighter moments, but which enters more distinctly and more permanently into the consciousness of each one of us the clearer and more enlightened that consciousness is, and the more material for thought it has acquired through culture, which all ultimately rises, in minds that are naturally adapted for philosophising, to Plato's wonder which comprehends in its whole magnitude that problem which unceasingly occupies the nobler portion of mankind in every age and in every land, and gives it no rest. In fact, the pendulum which keeps in motion the clock of metaphysics, that never runs down, is the consciousness that the non-existence of this world is just as possible as its existence.

We find physics also (in the widest sense of the word) occupied with the explanation of the phenomena in the world. But it lies in the very nature of its explanations themselves that they cannot be sufficient. Physics cannot stand on its own feet, but requires a metaphysic to lean upon, whatever airs it may give itself towards the latter. For it explains the phenomena by something still more unknown than they are them-

selves; by laws of nature, resting upon forces of nature, to which the power of life also belongs. Certainly the whole present condition of all things in the world, or in nature, must necessarily be explicable from purely physical causes.

With naturalism, then, or the purely physical way of looking at things, we shall never attain our end; it is like a sum that never comes out. Causal series without beginning or end, fundamental forces which are inscrutable, endless space, beginningless time, infinite divisibility of matter, and all this further conditioned by a knowing brain, in which alone it exists just like a dream, and without which it vanishes—constitute the labyrinth in which naturalism leads us ceaselessly round. The height to which in our time the natural sciences have risen in this respect entirely throws into the shade all previous centuries, and is a summit which mankind reaches for the first time. But however great are the advances which physics (understood in the wide sense of the ancients) may make, not the smallest step towards metaphysics is thereby taken, just as a plane can never obtain cubical content by being indefinitely extended. For all such advances will only perfect our knowledge of the phenomenon: while metaphysics strives to pass beyond the phenomenal appearance itself, to that which so appears. And if indeed it had the assistance of an entire and complete experience, it would, as regards the main point, be in no way advantaged by it. Nay, even if one wandered through all the planets and fixed stars, one would thereby have made no step in metaphysics. It is rather the case that the greatest advances of physics will make the need of metaphysics ever more felt; for it is just the corrected, extended, and more thorough knowledge of nature which, on the one hand, always undermines and ultimately overthrows the metaphysical assumptions which till then have prevailed, but, on the other hand, presents the problem of metaphysics itself more distinctly, more correctly, and more fully, and separates it more clearly from all that is merely physical; moreover, the more perfectly and accurately known nature of the particular thing more pressingly demands the explanation of the whole and the general, which, the more correctly, thoroughly, and completely it is known empirically, only presents itself as the more mysterious.

The origin of metaphysics in empirical sources of knowledge, which is here set forth, and which cannot fairly be denied, deprives it certainly of that kind of apodictic certainty which is only possible through knowledge a priori. This remains the possession of logic and mathematics—sciences, however, which really only teach what every one knows already, though not distinctly. At most the primary elements of natural science may also be deduced from knowledge a priori. By this confession metaphysics only surrenders an ancient claim, which, according to what has

been said above, rested upon misunderstanding, and against which the great diversity and changeableness of metaphysical systems, and also the constantly accompanying scepticism, in every age has testified. Yet against the possibility of metaphysics in general this changeableness cannot be urged, for the same thing effects just as much all branches of natural science, chemistry, physics, geology, zoology, &c., and even history has not remained exempt from it. But when once, as far as the limits of human intellect allow, a true system of metaphysics shall have been found, the unchangeableness of a science which is known a priori will yet belong to it; for its foundation can only be experience in general, and not the particular and special experiences by which, on the other hand, the natural sciences are constantly modified and new material is always being provided for history. For experience as a whole and in general will never change its character for a new one.

If, as so often happens, metaphysics is reproached with having made so little progress, it ought also to be considered that no other science has grown up like it under constant oppression, none has been so hampered and hindered from without as it has always been by the religion of every land, which, everywhere in possession of a monopoly of metaphysical knowledge, regards metaphysics as a weed growing beside it. as an unlicensed worker, as a horde of gipsies, and as a rule tolerates it only under the condition that it accommodates itself to serve and follow it. For where has there ever been true freedom of thought? It has been vaunted sufficiently; but whenever it wishes to go further than perhaps to differ about the subordinate dogmas of the religion of the country, a holy shudder seizes the prophets of tolerance, and they say: "Not a step further!" What progress of metaphysics was possible under such oppression? Nay, this constraint which the privileged metaphysics exercises is not confined to the communication of thoughts, but extends to thinking itself, for its dogmas are so firmly imprinted in the tender, plastic, trustful, and thoughtless age of childhood, with studied solemnity and serious airs, that from that time forward they grow with the brain, and almost assume the nature of innate thoughts, which some philosophers have therefore really held them to be, and still more have pretended to do so. Yet nothing can so firmly resist the comprehension of even the problem of metaphysics as a previous solution of it intruded upon and early implanted in the mind. For the necessary starting-point for all genuine philosophy is the deep feeling of the Socratic: "This one thing I know, that I know nothing."

Whenever metaphysics is reproached with its small progress, and with not having yet reached its goal in spite of such sustained efforts, one ought further to consider that in the meanwhile it has constantly performed the invaluable service of limiting the boundless claims of the privileged metaphysics, and yet at the same time combatting naturalism and materialism proper, which are called forth by it as an inevitable reaction. Consider to what a pitch the arrogance of the priesthood of every religion would rise if the belief in their doctrines was as firm and blind as they really wish. Look back also at the wars, disturbances, rebellions, and revolutions in Europe from the eighth to the eighteenth century; how few will be found that have not had as their essence, or their pretext, some controversy about beliefs, thus a metaphysical problem, which became the occasion of exciting nations against each other. Yet is that whole thousand years a continual slaughter, now on the battlefield, now on the scaffold, now in the streets, in metaphysical interests! I wish I had an authentic list of all crimes which Christianity has really prevented, and all good deeds it has really performed, that I might be able to place them in the other scale of the balance.

Lastly, as regards the obligations of metaphysics, it has only one; for it is one which endures no other beside it—the obligation to be true. If one would impose other obligations upon it besides this, such as to be spiritualistic, optimistic, monotheistic, or even only to be moral, one cannot know beforehand whether this would not interfere with the fulfilment of that first obligation, without which all its other achievements must clearly be worthless. A given philosophy has accordingly no other standard of its value than that of truth. For the rest, philosophy is essentially world-wisdom: its problem is the world. It has to do with this alone, and leaves the gods in peace—expects, however, in return, to be left in peace by them.

II. ON THE POSSIBILITY OF KNOWING THE THING IN ITSELF

I wish now first of all to make a few preliminary observations from a general point of view as to the sense in which we can speak of a knowledge of the thing in itself and of its necessary limitation.

What is knowledge? It is primarily and essentially idea. What is Idea? A very complicated physiological process in the brain of an animal, the result of which is the consciousness of a picture there. Clearly the relation between such a picture and something entirely different from the animal in whose brain it exists can only be a very indirect one. This is perhaps the simplest and most comprehensible way of disclosing the deep gulf between the ideal and the real. This belongs to the things of which, like the motion of the earth, we are not directly conscious; therefore the ancients did not observe it, just as they did not observe the motion of the earth. Once pointed out, on the other hand, first by Descartes, it has ever since given philosophers no rest. But after Kant had at last

proved in the most thorough manner the complete diversity of the ideal and the real, it was an attempt, as bold as it was absurd, yet perfectly correctly calculated with reference to the philosophical public in Germany, and consequently crowned with brilliant results, to try to assert the absolute identity of the two by dogmatic utterances, on the strength of a pretended intellectual intuition. In truth, on the contrary, a subjective and an objective existence, a being for self and a being for others, a consciousness of one's own self, and a consciousness of other things, is given us directly, and the two are given in such a fundamentally different manner that no other difference can compare with this. About himself every one knows directly, about all others only very indirectly. This is the fact and the problem.

Whether, on the other hand, through further processes in the interior of a brain, general conceptions are abstracted from the perceptible ideas or images that have arisen within it, for the assistance of further combinations, whereby knowledge becomes rational, and is now called thinking—this is here no longer the essential question, but is of subordinate significance. For all such conceptions receive their content only from the perceptible idea, which is therefore primary knowledge, and has consequently alone to be taken account of in an investigation of the relation between the ideal and the real. It therefore shows entire ignorance of the problem, or at least it is very inept, to wish to define that relation as that between being and thinking. Thinking has primarily only a relation to perceiving, but perception has a relation to the real being of what is perceived, and this last is the great problem with which we are here concerned. Empirical being, on the other hand, as it lies before us, is nothing else than simply being given in perception; but the relation of the latter to thinking is no riddle, for the conceptions, thus the immediate materials of thought, are obviously abstracted from perception, which no reasonable man can doubt. It may be said in passing that one can see how important the choice of expressions in philosophy is from the fact that that inept expression condemned above, and the misunderstanding which arose from it, became the foundation of the whole Hegelian pseudo-philosophy, which has occupied the German public for twenty-five years.

If, however, it should be said: "The perception is itself the knowledge of the thing in itself: for it is the effect of that which is outside of us, and as this acts, so it is: its action is just its being;" to this we reply: (1.) that the law of causality, as has been sufficiently proved, is of subjective origin, as well as the sensation from which the perception arises; (2.) that at any rate time and space, in which the object presents itself, are of subjective origin; (3.) that if the being of the object consists simply in its action, this means that it consists merely in the changes which it

brings about in others; therefore itself and in itself it is nothing at all. Only of matter is it true, that its being consists in its action, that it is through and through only causality, thus is itself causality objectively regarded; hence, however, it is also nothing in itself, but as an ingredient in the perceived object, is a mere abstraction, which for itself alone can be given in no experience. The perceived object must be something in itself; not merely something for others. For otherwise it would be altogether merely idea, and we would have an absolute idealism, which would ultimately become theoretical egoism, with which all reality disappears and the world becomes a mere subjective phantasm. If, however, without further question, we stop altogether at the world as idea, then certainly it is all one whether I explain objects as ideas in my head or as phenomena exhibiting themselves in time and space; for time and space themselves exist only in my head. In this sense, then, an identity of the ideal and the real might always be affirmed; only, after Kant, this would not be saying anything new. Besides this, however, the nature of things and of the phenomenal world would clearly not be thereby exhausted: but with it we would always remain still upon the ideal side. The real side must be something toto genere different from the world as idea, it must be that which things are in themselves: and it is this entire diversity between the ideal and the real which Kant has proved in the most thorough manner.

Locke had denied to the senses the knowledge of things as they are in themselves; but Kant denied this also to the perceiving understanding, under which name I here comprehend what he calls the pure sensibility, and, as it is given a priori, the law of causality which brings about the empirical perception. Not only are both right, but we can also see quite directly that a contradiction lies in the assertion that a thing is known as it is in and for itself, i.e., outside of knowledge. For all knowing is, as we have said, essentially a perceiving of ideas; but my perception of ideas, just because it is mine, can never be identical with the inner nature of the thing outside of me. The being in and for itself, of everything, must necessarily be subjective; in the idea of another, however, it exists just as necessarily as objective—a difference which can never be fully reconciled. For by it the whole nature of its existence is fundamentally changed; as objective it presupposes a foreign subject, as whose idea it exists, and, moreover, as Kant has shown, has entered forms which are foreign to its own nature, just because they belong to that foreign subject, whose knowledge is only possible by means of them. If I, absorbed in this reflection, perceive, let us say lifeless bodies, of easily surveyed magnitude and regular, comprehensible form, and now attempt to conceive this spatial existence, in its three dimensions, as their being in itself, consequently as the existence which to the things is subjective, the impossibility of the thing is at once apparent to me, for I can never think those objective forms as the being which to the things is subjective. rather I become directly conscious that what I there perceive is only a picture produced in my brain, and existing only for me as the knowing subject, which cannot constitute the ultimate, and therefore subjective, being in and for itself of even these lifeless bodies. But, on the other hand, I must not assume that even these lifeless bodies exist only in my idea. but, since they have inscrutable qualities, and, by virtue of these, activity. I must concede to them a being in itself of some kind. But this very inscrutableness of the properties, while, on the one hand, it certainly points to something which exists independently of our knowledge, gives also, on the other hand, the empirical proof that our knowledge, because it consists simply in framing ideas by means of subjective forms. affords us always mere phenomena, not the true being of things. This is the explanation of the fact that in all that we know there remains hidden from us a certain something, as quite inscrutable, and we are obliged to confess that we cannot thoroughly understand even the commonest and simplest phenomena. For it is not merely the highest productions of nature, living creatures, or the complicated phenomena of the unorganised world that remain inscrutable to us, but even every rockcrystal, every iron-pyrite, by reason of its crystallographical, optical, chemical, and electrical properties, is to the searching consideration and investigation an abyss of incomprehensibilities and mysteries. This could not be the case if we knew things as they are in themselves: for then at least the simpler phenomena, the path to whose qualities was not barred for us by ignorance, would necessarily be thoroughly comprehensible to us, and their whole being and nature would be able to pass over into our knowledge. Thus it lies not in the defectiveness of our acquaintance with things, but in the nature of knowledge itself. For if our perception, and consequently the whole empirical comprehension of the things that present themselves to us, is already essentially and in the main determined by our faculty of knowledge, and conditioned by its forms and functions, it cannot but be that things exhibit themselves in a manner which is quite different from their own inner nature, and therefore appear as in a mask, which allows us merely to assume what is concealed beneath it, but never to know it; hence, then, it gleams through as an inscrutable mystery, and never can the nature of anything entire and without reserve pass over into knowledge; but much less can any real thing be construed a priori, like a mathematical problem. Thus the empirical inscrutableness of all natural things is a proof a posteriori of the ideality and merely phenomenal-actuality of their empirical existence.

According to all this, upon the path of objective knowledge, hence starting from the idea, one will never get beyond the idea, i.e., the phe-

nomenon. One will thus remain at the outside of things, and will never be able to penetrate to their inner nature and investigate what they are in themselves, i.e., for themselves. So far I agree with Kant. But, as the counterpart of this truth, I have given prominence to this other truth, that we are not merely the knowing subject, but, in another aspect, we ourselves also belong to the inner nature that is to be known, we ourselves are the thing in itself; that therefore a way from within stands open for us to that inner nature belonging to things themselves, to which we cannot penetrate from without, as it were a subterranean passage, a secret alliance, which, as if by treachery, places us at once within the fortress which it was impossible to take by assault from without. The thing in itself can, as such, only come into consciousness quite directly, in this way, that it is itself conscious of itself; to wish to know it objectively is to desire something contradictory. Everything objective is idea, therefore appearance, mere phenomenon of the brain.

Kant's chief result may in substance be thus concisely stated: "All conceptions which have not at their foundation a perception in space and time (sensuous intuition) that is to say then, which have not been drawn from such a perception, are absolutely empty, i.e., give no knowledge. But since now perception can afford us only phenomena, not things in themselves, we have also absolutely no knowledge of things in themselves." I grant this of everything, with the single exception of the knowledge which each of us has of his own willing: this is neither a perception (for all perception is spatial) nor is it empty; rather it is more real than any other. Further, it is not a priori, like merely formal knowledge, but entirely a posteriori; hence also we cannot anticipate it in the particular case, but are hereby often convicted of error concerning ourselves. In fact, our willing is the one opportunity which we have of understanding from within any event which exhibits itself without, consequently the one thing which is known to us immediately, and not, like all the rest, merely given in the idea. Here, then, lies the datum which alone is able to become the key to everything else, or, as I have said, the single narrow door to the truth. Accordingly we must learn to understand nature from ourselves, not conversely ourselves from nature. What is known to us immediately must give us the explanation of what we only know indirectly, not conversely. Do we perhaps understand the rolling of a ball when it has received an impulse more thoroughly than our movement when we feel a motive? Many may imagine so, but I say it is the reverse. Yet we shall attain to the knowledge that what is essential in both the occurrences just mentioned is identical; although identical in the same way as the lowest audible note of harmony is the same as the note of the same name ten octaves higher.

Meanwhile it should be carefully observed, and I have always kept

it in mind, that even the inward experience which we have of our own will by no means affords us an exhaustive and adequate knowledge of the thing in itself. This would be the case if it were entirely an immediate experience; but it is effected in this way: the will, with and by means of the corporisation, provides itself also with an intellect (for the sake of its relations to the external world), and through this now knows itself as will in self-consciousness (the necessary counterpart of the external world): this knowledge therefore of the thing in itself is not fully adequate. First of all, it is bound to the form of the idea, it is apprehension. and as such falls asunder into subject and object. For even in self-consciousness the I is not absolutely simple, but consists of a knower, the intellect, and a known, the will. The former is not known, and the latter does not know, though both unite in the consciousness of an I. But just on this account that I is not thoroughly intimate with itself, as it were transparent, but is opaque, and therefore remains a riddle to itself, thus even in inner knowledge there also exists a difference between the true being of its object and the apprehension of it in the knowing subject. Yet inner knowledge is free from two forms which belong to outer knowledge, the form of space and the form of causality, which is the means of effecting all sense-perception. On the other hand, there still remains the form of time, and that of being known and knowing in general. Accordingly in this inner knowledge the thing in itself has indeed in great measure thrown off its veil, but still does not yet appear quite naked. In consequence of the form of time which still adheres to it, every one knows his will only in its successive acts, and not as a whole, in and for itself: therefore no one knows his character a priori, but only learns it through experience and always incompletely. But yet the apprehension, in which we know the affections and acts of our own will, is far more immediate than any other. It is the point at which the thing in itself most directly enters the phenomenon and is most closely examined by the knowing subject: therefore the event thus intimately known is alone fitted to become the interpreter of all others.

For in every emergence of an act of will from the obscure depths of our inner being into the knowing consciousness a direct transition occurs of the thing in itself, which lies outside time, into the phenomenal world. Accordingly the act of will is indeed only the closest and most distinct manifestation of the thing in itself; yet it follows from this that if all other manifestations or phenomena could be known by us as directly and inwardly, we would be obliged to assert them to be that which the will is in us. Thus in this sense I teach that the inner nature of everything is will, and I call will the thing in itself. Kant's doctrine of the unknowableness of the thing in itself is hereby modified to this extent, that the thing in itself is only not absolutely and from the very founda-

tion knowable, that yet by far the most immediate of its phenomena, which by this immediateness is toto genere distinguished from all the rest, represents it for us; and accordingly we have to refer the whole world of phenomena to that one in which the thing in itself appears in the very thinnest of veils, and only still remains phenomenon in so far as my intellect, which alone is capable of knowledge, remains ever distinguished from me as the willing subject, and moreover does not even in inner perfection put off the form of knowledge of time.

Accordingly, even after this last and furthest step, the question may still be raised, what that will, which exhibits itself in the world and as the world, ultimately and absolutely is in itself? i.e., what it is, regarded altogether apart from the fact that it exhibits itself as will, or in general appears, i.e., in general is known. This question can never be answered: because, as we have said, becoming known is itself the contradictory of being in itself, and everything that is known is as such only phenomenal. But the possibility of this question shows that the thing in itself, which we know most directly in the will, may have, entirely outside all possible phenomenal appearance, ways of existing, determinations, qualities, which are absolutely unknowable and incomprehensible to us, and which remain as the nature of the thing in itself, when, as is explained in the Fourth Book, it has voluntarily abrogated itself as will, and has therefore retired altogether from the phenomenon, and for our knowledge, i.e., as regards the world of phenomena, has passed into empty nothingness. If the will were simply and absolutely the thing in itself this nothing would also be absolute, instead of which it expressly presents itself to us there as only relative.

I now proceed to supplement with a few considerations pertinent to the subject the exposition given both in our Second Book and in the work On the Will in Nature, of the doctrine that what makes itself known to us in the most immediate knowledge as will is also that which objectifies itself at different grades in all the phenomena of this world; and I shall begin by citing a number of psychological facts which prove that first of all in our own consciousness the will always appears as primary and fundamental, and throughout asserts its superiority to the intellect, which, on the other hand, always presents itself as secondary, subordinate and conditioned. This proof is the more necessary as all philosophers before me, from the first to the last, place the true being or the kernel of man in the knowing consciousness, and accordingly have conceived and explained the I, or, in the case of many of them, its transcendental hypostasis called soul, as primarily and essentially knowing, nay, thinking, and only in consequence of this, secondarily and derivatively, as willing. This ancient and universal radical error must before everything be set aside, and instead of it the true state of the case must

be brought to perfectly distinct consciousness. Since, however, this is done here for the first time, after thousands of years of philosophising, some fulness of statement will be appropriate. The remarkable phenomenon, that in this most essential point all philosophers have erred, nav. have exactly reversed the truth, might, especially in the case of those of the Christian era, be partly explicable from the fact that they all had the intention of presenting man as distinguished as widely as possible from the brutes, yet at the same time obscurely felt that the difference between them lies in the intellect, not in the will; whence there arose unconsciously within them an inclination to make the intellect the essential and principal thing, and even to explain volition as a mere function of the intellect. Hence also the conception of a soul is not only inadmissible, because it is a transcendent hypostasis, as is proved by the Critique of Pure Reason, but it becomes the source of irremediable errors, because in its "simple substance" it establishes beforehand an indivisible unity of knowledge and will, the separation of which is just the path to the truth. That conception must therefore appear no more in philosophy, but may be left to German doctors and physiologists, who, after they have laid aside scalpel and spattle, amuse themselves by philosophising with the conceptions they received when they were confirmed. They might certainly try their luck in England. The French physiologists and zootomists have (till lately) kept themselves free from that reproach.

The first consequence of their common fundamental error, which is very inconvenient to all these philosophers, is this: since in death the knowing consciousness obviously perishes, they must either allow death to be the annihilation of the man, to which our inner being is opposed, or they must have recourse to the assumption of a continued existence of the knowing consciousness, which requires a strong faith, for his own experience has sufficiently proved to every one the thorough and complete dependence of the knowing consciousness upon the brain, and one can just as easily believe in digestion without a stomach as in a knowing consciousness without a brain. My philosophy alone leads out of this dilemma, for it for the first time places the true being of man not in the consciousness but in the will, which is not essentially bound up with consciousness, but is related to consciousness, i.e., to knowledge, as substance to accident, as something illuminated to the light, as the string to the resounding-board, and which enters consciousness from within as the corporeal world does from without. Now we can comprehend the indestructibleness of this our real kernel and true being, in spite of the evident ceasing of consciousness in death, and the corresponding nonexistence of it before birth. For the intellect is as perishable as the brain, whose product or rather whose action it is. But the brain, like the whole

organism, is the product or phenomenon, in short, the subordinate of the will, which alone is imperishable.

III. THE METAPHYSICS OF THE LOVE OF THE SEXES

WE ARE ACCUSTOMED to see poets principally occupied with describing the love of the sexes. This is as a rule the chief theme of all dramatic works, tragical as well as comical, romantic as well as classical, Indian as well as European. Not less is it the material of by far the largest part of lyrical and also of epic poetry, especially if we class with the latter the enormous piles of romances which for centuries every year has produced in all the civilised countries of Europe as regularly as the fruits of the earth. As regards their main contents, all these works are nothing else than many-sided brief or lengthly descriptions of the passion we are speaking of.

After what has here been called to mind, no one can doubt either the reality or the importance of the matter; and therefore, instead of wondering that a philosophy should also for once make its own this constant theme of all poets, one ought rather to be surprised that a thing which plays throughout so important a part in human life has hitherto practically been disregarded by philosophers altogether, and lies before us as raw material.

All love, however ethereally it may bear itself, is rooted in the sexual impulse alone, nay, it absolutely is only a more definitely determined, specialised, and indeed in the strictest sense individualised sexual impulse. If now, keeping this in view, one considers the important part which the sexual impulse in all its degrees and nuances plays not only on the stage and in novels, but also in the real world, where, next to the love of life, it shows itself the strongest and most powerful of motives, constantly lays claim to half the powers and thoughts of the vounger portion of mankind, is the ultimate goal of almost all human effort, exerts an adverse influence on the most important events, interrupts the most serious occupations every hour, sometimes embarrasses for a while even the greatest minds, does not hesitate to intrude with its trash interfering with the negotiations of statesmen and the investigations of men of learning, knows how to slip its love letters and locks of hair even into ministerial portfolios and philosophical manuscripts, and no less devises daily the most entangled and the worst actions, destroys the most valuable relationships, breaks the firmest bonds, demands the sacrifice sometimes of life or health, sometimes of wealth, rank, and happiness, nay, robs those who are otherwise honest of all conscience, makes those who have hitherto been faithful, traitors; accordingly, on the whole, appears as a malevolent demon that strives to pervert, confuse, and overthrow everything;—then one will be forced to cry, Wherefore all this noise? Wherefore the straining and storming, the anxiety and want? It is merely a question of every Hans finding his Grethe. Why should such a trifle play so important a part, and constantly introduce disturbance and confusion into the well-regulated life of man? But to the earnest investigator the spirit of truth gradually reveals the answer. It is no trifle that is in question here; on the contrary, the importance of the matter is quite proportionate to the seriousness and ardour of the effort. The ultimate end of all love affairs, whether they are played in sock or cothurnus, is really more important than all other ends of human life, and is therefore quite worthy of the profound seriousness with which every one pursues it. That which is decided by it is nothing less than the composition of the next generation.

The collective love affairs of the present generation taken together are accordingly, of the whole human race, the serious meditation on the composition of the future generation. This high importance of the matter, in which it is not a question of individual weal or woe, as in all other matters, but of the existence and special nature of the human race in future times, and therefore the will of the individual appears at a higher power as the will of the species;—this it is on which the pathetic and sublime elements in affairs of love depend, which for thousands of years poets have never wearied of representing in innumerable examples; because no theme can equal in interest this one, which stands to all others which only concern the welfare of individuals as the solid body to the surface, because it concerns the weal and woe of the species. Just on this account, then, is it so difficult to impart interest to a drama without the element of love, and, on the other hand, this theme is never worn out even by daily use.

That which presents itself in the individual consciousness as sexual impulse in general, without being directed towards a definite individual of the other sex, is in itself, and apart from the phenomenon, simply the will to live. But what appears in consciousness as a sexual impulse directed to a definite individual is in itself the will to live as a definitely determined individual. Now in this case the sexual impulse, although in itself a subjective need, knows how to assume very skilfully the mask of an objective admiration, and thus to deceive our consciousness; for nature requires this stratagem to attain its ends. But yet that in every case of falling in love, however objective and sublime this admiration may appear, what alone is looked to is the production of an individual of a definite nature is primarily confirmed by the fact that the essential matter is not the reciprocation of love, but possession, i.e., the physical enjoyment. The certainty of the former can therefore by no means con-

sole us for the want of the latter; on the contrary, in such a situation many a man has shot himself. On the other hand, persons who are deeply in love, and can obtain no return of it, are contented with possession, i.e., with the physical enjoyment. This is proved by all forced marriages, and also by the frequent purchase of the favour of a woman, in spite of her dislike, by large presents or other sacrifices, nav, even by cases of rape. That this particular child shall be begotten is, although unknown to the parties concerned, the true end of the whole love story; the manner in which it is attained is a secondary consideration. Now, however loudly persons of lofty and sentimental soul, and especially those who are in love, may cry out here about the gross realism of my view, they are yet in error. For is not the definite determination of the individualities of the next generation a much higher and more worthy end than those exuberant feelings and supersensible soap bubbles of theirs? Nay, among earthly aims, can there be one which is greater or more important? It alone corresponds to the profoundness with which passionate love is felt, to the seriousness with which it appears, and the importance which it attributes even to the trifling details of its sphere and occasion. Only so far as this end is assumed as the true one do the difficulties encountered, the infinite exertions and annoyances made and endured for the attainment of the loved object, appear proportionate to the matter. For it is the future generation, in its whole individual determinateness. that presses into existence by means of those efforts and toils. Nay, it is itself already active in that careful, definite, and arbitrary choice for the satisfaction of the sexual impulse which we call love. The growing inclination of two lovers is really already the will to live of the new individual which they can and desire to produce; nay, even in the meeting of their longing glances its new life breaks out, and announces itself as a future individuality harmoniously and well composed. They feel the longing for an actual union and fusing together into a single being, in order to live on only as this; and this longing receives its fulfilment in the child which is produced by them, as that in which the qualities transmitted by them both, fused and united in one being, live on. Conversely. the mutual, decided, and persistent aversion between a man and a maid is a sign that what they could produce would only be a badly organised, in itself inharmonious and unhappy, being.

But, finally, what draws two individuals of different sex exclusively to each other with such power is the will to live, which exhibits itself in the whole species, and which here anticipates in the individual which these two can produce an objectification of its nature answering to its aims. This individual will have the will, or character, from the father, the intellect from the mother, and the corporisation from both; yet, for the most part, the figure will take more after the father, the size after

the mother,—according to the law which comes out in the breeding of hybrids among the brutes, and principally depends upon the fact that the size of the fœtus must conform to the size of the uterus. Just as inexplicable as the quite special individuality of any man, which is exclusively peculiar to him, is also the quite special and individual passion of two lovers; indeed at bottom the two are one and the same: the former is explicit while the latter is implicit.

Let us now set about the more thorough investigation of the matter. Egoism is so deeply rooted a quality of all individuals in general, that in order to arouse the activity of an individual being egoistical ends are the only ones upon which we can count with certainty. Certainly the species has an earlier, closer, and greater claim upon the individual than the perishable individuality itself. Yet when the individual has to act, and even make sacrifices for the continuance and quality of the species, the importance of the matter cannot be made so comprehensible to his intellect, which is calculated merely with regard to individual ends, as to have its proportionate effect. Therefore in such a case nature can only attain its ends by implanting a certain illusion in the individual, on account of which that which is only a good for the species appears to him as a good for himself, so that when he serves the species he imagines he is serving himself; in which process a mere chimera, which vanishes immediately afterwards, floats before him, and takes the place of a real thing as a motive. This illusion is instinct. In the great majority of cases this is to be regarded as the sense of the species, which presents what is of benefit to it to the will. Since, however, the will has here become individual, it must be so deluded that it apprehends through the sense of the individual what the sense of the species presents to it, thus imagines it is following individual ends while in truth it is pursuing ends which are merely general (taking this word in its strictest sense).

Hitherto I have only taken account of the absolute considerations, i.e., those which hold good for every one: I come now to the relative considerations, which are individual, because in their case what is looked to is the rectification of the type of the species, which is already defectively presented, the correction of the divergences from it which the chooser's own person already bears in itself, and thus the return to the pure presentation of the type. Here, then, each one loves what he lacks. Starting from the individual constitution, and directed to the individual constitution, the choice which rests upon such relative considerations is much more definite, decided, and exclusive than that which proceeds merely from the absolute considerations; therefore the source of really passionate love will lie, as a rule, in these relative considerations, and only that of the ordinary and slighter inclination in the absolute considerations.

Accordingly it is not generally precisely correct and perfect beauties that kindle great passions. For such a truly passionate inclination to arise something is required which can only be expressed by a chemical metaphor: two persons must neutralise each other, like acid and alkali, to a neutral salt.

We have seen in the above that the intensity of love increases with its individualisation, because we have shown that the physical qualities of two individuals can be such that, for the purpose of restoring as far as possible the type of the species, the one is quite specially and perfectly the completion or supplement of the other, which therefore desires it exclusively. Already in this case a considerable passion arises, which at once gains a nobler and more sublime appearance from the fact that it is directed to an individual object, and to it alone; thus, as it were, arises at the special order of the species. For the opposite reason, the mere sexual impulse is ignoble, because without individualisation it is directed to all, and strives to maintain the species only as regards quantity, with little respect to quality. But the individualising, and with it the intensity of the love, can reach so high a degree that without its satisfaction all the good things in the world, and even life itself, lose their value. It is then a wish which attains a vehemence that no other wish ever reaches, and therefore makes one ready for any sacrifice, and in case its fulfilment remains unalterably denied, may lead to madness or suicide. At the foundation of such an excessive passion there must lie, besides the considerations we have shown above, still others which we have not thus before our eyes. We must therefore assume that here not only the corporisation, but the will of the man and the intellect of the woman are specially suitable to each other, in consequence of which a perfectly definite individual can be produced by them alone, whose existence the genius of the species has here in view, for reasons which are inaccessible to us, since they lie in the nature of the thing in itself. Or, to speak more exactly, the will to live desires here to objectify itself in a perfectly definite individual, which can only be produced by this father with this mother. This metaphysical desire of the will in itself has primarily no other sphere of action in the series of existences than the hearts of the future parents, which accordingly are seized with this ardent longing, and now imagine themselves to desire on their own account what really for the present has only a purely metaphysical end, i.e., an end which lies outside the series of actually existing things. Thus it is the ardent longing to enter existence of the future individual which has first become possible here, a longing which proceeds from the primary source of all being, and exhibits itself in the phenomenal world as the lofty passion of the future parents for each other, paying little regard to all that is outside itself; in fact, as an unparalleled illusion, on account of which

such a lover would give up all the good things of this world to enjoy the possession of this woman, who yet can really give him nothing more than any other.

Because the passion depended upon an illusion, which represented that which has only value for the species as valuable for the individual, the deception must vanish after the attainment of the end of the species. The spirit of the species which took possession of the individual sets it free again. Forsaken by this spirit, the individual falls back into its original limitation and narrowness, and sees with wonder that after such a high, heroic, and infinite effort nothing has resulted for its pleasure but what every sexual gratification affords. Contrary to expectation, it finds itself no happier than before. It observes that it has been the dupe of the will of the species. Therefore, as a rule, a Theseus who has been made happy will forsake his Ariadne. If Petrarch's passion had been satisfied, his song would have been silenced from that time forth, like that of the bird as soon as the eggs are laid.

Marriages from love are made in the interest of the species, not of the individuals. Certainly the persons concerned imagine they are advancing their own happiness; but their real end is one which is foreign to themselves, for it lies in the production of an individual which is only possible through them. Brought together by this aim, they ought henceforth to try to get on together as well as possible. But very often the pair brought together by that instinctive illusion, which is the essence of passionate love, will, in other respects, be of very different natures. This comes to light when the illusion vanishes, as it necessarily must. Accordingly love marriages, as a rule, turn out unhappy; for through them the coming generation is cared for at the expense of the present. The opposite is the case with marriages contracted for purposes of convenience, generally in accordance with the choice of the parents. The considerations prevailing here, of whatever kind they may be, are at least real, and cannot vanish of themselves. Through them, however, the happiness of the present generation is certainly cared for, to the disadvantage of the coming generation, and notwithstanding this it remains problematical.

The whole metaphysics of love here dealt with stands in close connection with my metaphysics in general, and the light which it throws upon this may be summed up as follows:

We have seen that the careful selection for the satisfaction of the sexual impulse, a selection which rises through innumerable degrees up to that of passionate love, depends upon the highly serious interest which man takes in the special personal constitution of the next generation. Now this exceedingly remarkable interest confirms two truths which have been set forth in the preceding chapters. (1) The indestruct-

ibility of the true nature of man, which lives on in that coming generation. For that interest which is so lively and eager, and does not spring from reflection and intention, but from the inmost characteristics and tendencies of our nature, could not be so indelibly present and exercise such great power over man if he were absolutely perishable, and were merely followed in time by a race actually and entirely different from him. (2) That his true nature lies more in the species than in the individual. For that interest in the special nature of the species, which is the root of all love, from the passing inclination to the serious passion, is for every one really the highest concern, the success or failure of which touches him most sensibly; therefore it is called par excellence the affair of the heart. Moreover, when this interest has expressed itself strongly and decidedly, everything which merely concerns one's own person is postponed and necessarily sacrificed to it. Through this, then, man shows that the species lies closer to him than the individual, and he lives more immediately in the former than in the latter. Why does the lover hang with complete abandonment on the eyes of his chosen one, and is ready to make every sacrifice for her? Because it is his immortal part that longs after her; while it is only his mortal part that desires everything else. That vehement or intense longing directed to a particular woman is accordingly an immediate pledge of the indestructibility of the kernel of our being, and of its continued existence in the species. But to regard this continued existence as something trifling and insufficient is an error which arises from the fact that under the conception of the continued life of the species one thinks nothing more than the future existence of beings similar to us, but in no regard identical with us; and this again because, starting from knowledge directed towards without, one takes into consideration only the external form of the species as we apprehend it in perception, and not its inner nature. But it is just this inner nature which lies at the foundation of our own consciousness as its kernel, and hence indeed is more immediate than this itself, and, as thing in itself, free from the principle of individuation, is really the same and identical in all individuals, whether they exist together or after each other. Now this is the will to live, thus just that which desires life and continuance so vehemently. This accordingly is spared and unaffected by death. It can attain to no better state than its present one; and consequently for it, with life, the constant suffering and striving of the individuals is certain. To free it from this is reserved for the denial of the will to live, as the means by which the individual will breaks away from the stem of the species, and surrenders that existence in it. We lack conceptions for that which it now is; indeed all data for such conceptions are wanting. We can only describe it as that which is free to be will to live or not. Buddhism denotes the latter case

by the word Nirvana. It is the point which remains for ever unattainable to all human knowledge, just as such.

If now, from the standpoint of this last consideration, we contemplate the turmoil of life, we behold all occupied with its want and misery, straining all their powers to satisfy its infinite needs and to ward off its multifarious sorrows, yet without daring to hope anything else than simply the preservation of this tormented existence for a short span of time. In between, however, in the midst of the tumult, we see the glances of two lovers meet longingly: yet why so secretly, fearfully, and stealthily? Because these lovers are the traitors who seek to perpetuate the whole want and drudgery, which would otherwise speedily reach an end; this they wish to frustrate, as others like them have frustrated it before.

IV. EPIPHILOSOPHY

At the conclusion of my exposition a few reflections concerning my philosophy itself may find their place. My philosophy does not pretend to explain the existence of the world in its ultimate grounds: it rather sticks to the facts of external and internal experience as they are accessible to every one, and shows the true and deepest connection of them without really going beyond them to any extra-mundane things and their relations to the world. It therefore arrives at no conclusions as to what lies beyond all possible experience, but affords merely an exposition of what is given in the external world and in self-consciousness, thus contents itself with comprehending the nature of the world in its inner connection with itself. It is consequently immanent, in the Kantian sense of the word. But just on this account it leaves many questions untouched; for example, why what is proved as a fact is as it is and not otherwise, &c. All such questions, however, or rather the answers to them, are really transcendent, i.e., they cannot be thought by the forms and functions of our intellect, do not enter into these; it is therefore related to them as our sensibility is related to the possible properties of bodies for which we have no senses. After all my explanations one may still ask, for example, whence has sprung this will that is free to assert itself, the manifestation of which is the world, or to deny itself, the manifestation of which we do not know. What is the fatality lying beyond all experience which has placed it in the very doubtful dilemma of either appearing as a world in which suffering and death reign, or else denying its very being?—or again, what can have prevailed upon it to forsake the infinitely preferable peace of blessed nothingness? An individual will, one may add, can only turn to its own destruction through error in the choice, thus through the fault of knowledge; but the will in itself, before

all manifestation, consequently still without knowledge, how could it go astrav and fall into the ruin of its present condition? Whence in general is the great discord that permeates this world? It may, further, be asked how deep into the true being of the world the roots of individuality go: to which it may certainly be answered: they go as deep as the assertion of the will to live; where the denial of the will appears they cease, for they have arisen with the assertion. But one might indeed even put the question, "What would I be if I were not will to live?" and more of the same kind. To all such questions we would first have to reply that the expression of the most universal and general form of our intellect is the principle of sufficient reason; but that just on this account that principle finds application only to the phenomenon, not to the being in itself of things. Yet all whence and why depend upon that principle alone. As a result of the Kantian philosophy it is no longer an aterna veritas, but merely the form, i.e., the function, of our intellect, which is essentially cerebral, and originally a mere tool in the service of the will, which it therefore presupposes together with all its objectifications. But our whole knowing and conceiving is bound to its forms; accordingly we must conceive everything in time, consequently as a before and after, then as cause and effect, and also as above and below, whole and part, &c., and cannot by any means escape from this sphere in which all possibility of our knowledge lies. Now these forms are utterly unsuited to the problems raised here, nor are they fit or able to comprehend their solution even if it were given. Therefore with our intellect, this mere tool of the will, we are everywhere striking upon insoluble problems, as against the walls of our prison. But, besides this, it may at least be assumed as probable that not only for us is knowledge of all that has been asked about impossible, but no such knowledge is possible in general, thus never and in no way; that these relations are not only relatively but absolutely insusceptible of investigation; that not only does no one know them, but that they are in themselves unknowable, because they do not enter into the form of knowledge in general. For knowableness in general, with its most essential, and therefore constantly necessary form of subject and object, belongs merely to the phenomenal appearance, not to the being in itself of things. Where knowledge, and consequently idea, is, there is also only phenomenon, and we stand there already in the province of the phenomenal; nay, knowledge in general is known to us only as a phenomenon of brain, and we are not only unjustified in conceiving it otherwise, but also incapable of doing so. What the world is as world may be understood: it is phenomenal manifestation; and we can know that which manifests itself in it, directly from ourselves, by means of a thorough analysis of self-consciousness. Then, however, by means of this key to the nature

of the world, the whole phenomenal manifestation can be deciphered. as I believe I have succeeded in doing. But if we leave the world in order to answer the questions indicated above, we have also left the whole sphere in which not only connection according to reason and consequent, but even knowledge itself is possible. The nature of things before or beyond the world, and consequently beyond the will, is open to no investigation; because knowledge in general is itself only a phenomenon, and therefore exists only in the world as the world exists only in it. The inner being in itself of things is nothing that knows, no intellect. but an unconscious; knowledge is only added as an accident, a means of assistance to the phenomenon of that inner being, and can therefore apprehend that being itself only in proportion to its own nature, which is designed with reference to quite different ends (those of the individual will), consequently very imperfectly. Here lies the reason why a perfect understanding of the existence, nature, and origin of the world, extending to its ultimate ground and satisfying all demands, is impossible. So much as to the limits of my philosophy, and indeed of all philosophy.

The "One and All," i.e., that the inner nature in all things is absolutely one and the same, my age had already grasped and understood, after the Eleatics, Scotus Erigena, Giordano Bruno, and Spinoza had thoroughly taught, and Schelling had revived this doctrine. But what this one is, and how it is able to exhibit itself as the many, is a problem the solution of which is first found in my philosophy. Certainly from the most ancient times man had been called the microcosm. I have reversed the proposition, and shown the world as the macranthropos: because will and idea exhaust its nature as they do that of man. But it is clearly more correct to learn to understand the world from man than man from the world; for one has to explain what is indirectly given, thus external perception from what is directly given, thus self-consciousness—not conversely.

With the Pantheists, then, I have certainly that "One and All" in common, but not the "All God"; because I do not go beyond experience (taken in its widest sense), and still less do I put myself in contradiction with the data which lie before me. Scotus Erigena, quite consistently with the spirit of Pantheism, explains every phenomenon as a theophany; but then this conception must also be applied to the most terrible and abominable phenomena. Fine theophanies! What further distinguishes me from Pantheism is principally the following: (1) That their "God" is an x, an unknown quantity; the will, on the other hand, is of all possible things the one that is known to us most exactly, the only thing given immediately, and therefore exclusively fitted for the explanation of the rest. For what is unknown must always be explained by what is better known; not conversely. (2) That their "God" manifests himself to un-

fold his glory, or, indeed, to let himself be admired. Apart from the vanity here attributed to him, they are placed in the position of being obliged to sophisticate away the colossal evil of the world; but the world remains in glaring and terrible contradiction with that imagined excellence. With me, on the contrary, the will arrives through its objectification, however this may occur, at self-knowledge, whereby its abolition, conversion, salvation becomes possible. And accordingly, with me alone ethics has a sure foundation and is completely worked out in agreement with the sublime and profound religions, Brahmanism, Buddhism, and Christianity, not merely with Judaism and Mohammedanism. The metaphysic of the beautiful also is first fully cleared up as a result of my fundamental truth, and no longer requires to take refuge behind empty words. With me alone is the evil of the world honestly confessed in its whole magnitude: this is rendered possible by the fact that the answer to the question as to its origin coincides with the answer to the question as to the origin of the world. On the other hand, in all other systems, since they are all optimistic, the question as to the origin of evil is the incurable disease, ever breaking out anew, with which they are affected, and in consequence of which they struggle along with palliatives and quack remedies. (3) That I start from experience and the natural self-consciousness given to every one, and lead to the will as that which alone is metaphysical; thus I adopt the ascending, analytical method. The Pantheists, again, adopt the opposite method, the descending or synthetical. They start from their "God," which they beg or take by force, although sometimes under the name substance, or absolute, and this unknown is then supposed to explain everything that is better known. (4) That with me the world does not fill the whole possibility of all being, but in this there still remains much room for that which we denote only negatively as the denial of the will to live. Pantheism, on the other hand, is essentially optimism: but if the world is what is best, then the matter may rest there. (5) That to the Pantheists the perceptible world, thus the world of idea, is just the intentional manifestation of the God indwelling in it, which contains no real explanation of its appearance, but rather requires to be explained itself. With me, on the other hand, the world as idea appears merely per accidens, because the intellect, with its external perception, is primarily only the medium of motives for the more perfect phenomena of will, which gradually rises to that objectivity of perceptibility, in which the world exists. In this sense its origin, as an object of perception, is really accounted for, and not, as with the Pantheists, by means of untenable fictions.

Since, in consequence of the Kantian criticism of all speculative theology, the philosophers of Germany almost all threw themselves back upon Spinoza, so that the whole series of futile attempts known by the

name of the post-Kantian philosophy are simply Spinozism tastelessly dressed up, veiled in all kinds of unintelligible language, and otherwise distorted, I wish, now that I have explained the relation of my philosophy to Pantheism in general, to point out its relation to Spinozism in particular. It stands, then, to Spinozism as the New Testament stands to the Old. What the Old Testament has in common with the New is the same God-Creator. Analogous to this, the world exists, with me as with Spinoza, by its inner power and through itself. But with Spinoza his eternal substance, the inner nature of the world, which he himself calls God, is also, as regards its moral character and worth, Jehovah, the God-Creator, who applauds His own creation, and finds that all is very good. Spinoza has deprived Him of nothing but personality. Thus, according to him also, the world and all in it is wholly excellent and as it ought to be; he is even to reioice in his life as long as it lasts; entirely in accordance with Ecclesiastes ix, 7-10. In short, it is optimism: therefore its ethical side is weak, as in the Old Testament; nay, it is even false, and in part revolting. With me, on the other hand, the will, or the inner nature of the world. is by no means Jehovah, it is rather, as it were, the crucified Saviour, or the crucified thief, according as it resolves. Therefore my ethical teaching agrees with that of Christianity, completely and in its highest tendencies. and not less with that of Brahmanism and Buddhism. Spinoza could not get rid of the Jews. His contempt for the brutes, which, as mere things for our use, he also declares to be without rights, is thoroughly Jewish. and, in union with Pantheism, is at the same time absurd and detestable (Eth., iv., appendix, c. 27). With all this Spinoza remains a very great man. But in order to estimate his work correctly we must keep in view his relation to Descartes. The latter had sharply divided nature into mind and matter, i.e., thinking and extended substance, and had also placed God and the world in complete opposition to each other; Spinoza also. so long as he was a Cartesian, taught all that in his Cogitatis Metaphysics, 1665. Only in his later years did he see the fundamental falseness of that double dualism; and accordingly his own philosophy principally consists of the indirect abolition of these two antitheses. Yet partly to avoid injuring his teacher, partly in order to be less offensive, he gave it a positive appearance by means of a strictly dogmatic form, although its content is chiefly negative. His identification of the world with God has also this negative significance alone. For to call the world God is not to explain it: it remains a riddle under the one name as under the other. But these two negative truths had value for their age, as for every age in which there still are conscious or unconscious Cartesians. He makes the mistake, common to all philosophers before Locke, of starting from conceptions, without having previously investigated their origin, such, for example, as substance, cause, &c., and in such a method of procedure these

conceptions then receive a much too extensive validity. Those who in the most recent times refused to acknowledge the Neo-Spinozism which had appeared, for example, Jacobi, were principally deterred from doing so by the bugbear of fatalism. By this is to be understood every doctrine which refers the existence of the world, together with the critical position of mankind in it, to any absolute necessity, i.e., to a necessity that cannot be further explained. Those who feared fatalism, again, believed that all that was of importance was to deduce the world from the free act of will of a being existing outside it; as if it were antecedently certain which of the two was more correct, or even better merely in relation to us. What is, however, especially assumed here is the there is no third, and accordingly hitherto every philosophy has represented one or the other. I am the first to depart from this: for I have actually established the Third: the act of will from which the world arises is our own. It is free; for the principle of sufficient reason, from which alone all necessity derives its significance, is merely the form of its phenomenon. Just on this account this phenomenon, if it once exists, is absolutely necessary in its course; in consequence of this alone we can recognise in it the nature of the act of will, and accordingly eventualiter will otherwise.

BEYOND GOOD AND EVIL

by

FRIEDRICH WILHELM NIETZSCHE

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FRIEDRICH WILHELM NIETZSCHE

1844-1900

REVOLT is the key word to any understanding of the life and writings of Friedrich Wilhelm Nietzsche—a revolt that was born of a brilliant but sick mind, and of a life which began with great promise and concluded in hopeless insanity.

The son of the pastor at Röcken, near Leipzig, Nietzsche was born on October 15, 1844. He received his education at Schulpforta and at the universities of Bonn and Leipzig. His college work was confined largely to the classics—the ancient civilizations of Greece and Rome.

While still an undergraduate, Nietzsche was appointed (in 1869) to an extraordinary professorship in classical philology at the University of Basel. Here began his famous literary career and his gradual but definite attraction toward the field of philosophy. He was soon promoted to a full professorship, and his popularity grew enormously.

But the rise of this meteoric career was as brief as it was rapid. Just seven years later (1876) eye and brain trouble made it necessary for him to take sick leave from the university. His condition became steadily worse, and he was pensioned in 1879, while yet a young man of only thirty-five.

Nietzsche spent the next few years visiting health resorts and consulting with physicians in an effort to obtain some relief from his steadily growing pain. He tells us that more than two hundred days of every year were spent in "pure pain."

As time went on, Nietzsche's condition became progressively worse. But it could not prevent him from producing many of his most famous essays, most of which were dashed off at high pressure and between moments of the most violent head pains.

Finally, in 1888, Nietzsche was pronounced hopelessly insane and remained in that condition until his death on the twenty-fifth of August, 1900.

The "injustice" of his physical condition dominated Nietzsche's thinking. He could not accept his suffering as a "fair deal." Furthermore, he was a man of intensely emotional temperament. These two factors colored all that he wrote. Since it was possible for him to work only during occasional periods of surcease from pain, his writings are not systematic, but consist rather of frequently inconsistent aphorisms, epigrams, and short essays.

Yet we can find the general trace of a method in the "madness" of Nietzsche's philosophy. It is the method of a man who tries to find happiness through the battle against pain. Accepting in part the philosophy of Schopenhauer. whom he greatly admired, he transformed Schopenhauer's will to live from a negative rejection of the world into a positive defiance of the world. If Nietzsche could will strongly enough, he would overcome his pain. "The will alone can make men free." You must fight for your freedom, the right to emancipate yourself from the shackles of your pain. "The strongest and highest will to life is a will to war, a will to power, a will to overpower." To overpower suffering, so that you can stand forth as a man among men. Nav. as a Superman among men! "I say unto you, what is the ape to man? A laughingstock, a thing of shame. And so too shall man be to Superman. A laughingstock, a thing of shame." "I announce the day," declared Nietzsche, "when man shall disappear from the earth and Superman shall be enthroned in his place."

Thus spake Nietzsche, a pathetic cripple of a man who in his suffering dreamed that some day he might become a god.

BEYOND GOOD AND EVIL

I. PREJUDICES OF PHILOSOPHERS

T

HAVING KEPT a sharp eye on philosophers, and having read between their lines long enough, I now say to myself that the greater part of conscious thinking must be counted amongst the instinctive functions, and it is so even in the case of philosophical thinking; one has here to learn anew. as one learned anew about heredity and "innateness." As little as the act of birth comes into consideration in the whole process and procedure of heredity, just as little is "being-conscious" opposed to the instinctive in any decisive sense; the greater part of the conscious thinking of a philosopher is secretly influenced by his instincts, and forced into definite channels. And behind all logic and its seeming sovereignty of movement, there are valuations, or to speak more plainly, physiological demands, for the maintenance of a definite mode of life. For example, that the certain is worth more than the uncertain, that illusion is less valuable than "truth": such valuations, in spite of their regulative importance for us, might notwithstanding be only superficial valuations, special kinds of niaiserie, such as may be necessary for the maintenance of beings such as ourselves. Supposing, in effect, that man is not just the "measure of things." . . .

II

That which causes philosophers to be regarded half-distrustfully and half-mockingly, is not the oft-repeated discovery how innocent they are—how often and easily they make mistakes and lose their way, in short, how childish and childlike they are,—but that there is not enough honest dealing with them, whereas they all raise a loud and virtuous outcry when the problem of truthfulness is even hinted at in the remotest manner. They all pose as though their real opinions had been discovered and attained through the self-evolving of a cold, pure, divinely indifferent dialectic (in contrast to all sorts of mystics, who, fairer and foolisher,

talk of "inspiration"); whereas, in fact, a prejudiced proposition, idea, or "suggestion," which is generally their heart's desire abstracted and refined, is defended by them with arguments sought out after the event. They are all advocates who do not wish to be regarded as such, generally astute defenders, also, of their prejudices, which they dub "truths,"—and very far from having the conscience which bravely admits this to itself; very far from having the good taste of the courage which goes so far as to let this be understood, perhaps to warn friend or foe, or in cheerful confidence and self-ridicule.

Ш

It has gradually become clear to me what every great philosophy up till now has consisted of-namely, the confession of its originator, and a species of involuntary and unconscious auto-biography; and moreover that the moral (or immoral) purpose in every philosophy has constituted the true vital germ out of which the entire plant has always grown. Indeed, to understand how the abstrusest metaphysical assertions of a philosopher have been arrived at, it is always well (and wise) to first ask oneself: "What morality do they (or does he) aim at?" Accordingly, I do not believe that an "impulse to knowledge" is the father of philosophy; but that another impulse, here as elsewhere, has only made use of knowledge (and mistaken knowledge!) as an instrument. But whoever considers the fundamental impulses of man with a view to determining how far they may have here acted as inspiring genii (or as demons and cobolds), will find that they have all practised philosophy at one time or another, and that each one of them would have been only too glad to look upon itself as the ultimate end of existence and the legitimate lord over all the other impulses. For every impulse is imperious, and as such, attempts to philosophise. To be sure, in the case of scholars, in the case of really scientific men, it may be otherwise—"better," if you will; there there may really be such a thing as an "impulse to knowledge," some kind of small, independent clock-work, which, when well wound up, works away industriously to that end, without the rest of the scholarly impulses taking any material part therein. The actual "interests" of the scholar, therefore, are generally in quite another direction—in the family, perhaps, or in money-making, or in politics; it is, in fact, almost indifferent at what point of research his little machine is placed, and whether the hopeful young worker becomes a good philologist, a mushroom specialist, or a chemist; he is not characterised by becoming this or that. In the philosopher, on the contrary, there is absolutely nothing impersonal; and above all, his morality furnishes a decided and decisive testimony as to who he is,—that is to say, in what order the deepest impulses of his nature stand to each other.

IV

Psychologists should bethink themselves before putting down the instinct of self-preservation as the cardinal instinct of an organic being. A living thing seeks above all to discharge its strength—life itself is Will to Power; self-preservation is only one of the indirect and most frequent results thereof. In short, here, as everywhere else, let us beware of superfluous teleological principles!—one of which is the instinct of self-preservation (we owe it to Spinoza's inconsistency). It is thus, in effect, that method ordains, which must be essentially economy of principles.

V

To study physiology with a clear conscience, one must insist on the fact that the sense-organs are not phenomena in the sense of the idealistic philosophy; as such they certainly could not be causes! Sensualism, therefore, at least as regulative hypothesis, if not as heuristic principle. What? And others say even that the external world is the work of our organs? But then our body, as a part of this external world, would be the work of our organs! But then our organs themselves would be the work of our organs! It seems to me that this is a complete reductio ad absurdum, if the conception causa sui is something fundamentally absurd. Consequently, the external world is not the work of our organs—?

VI

That the separate philosophical ideas are not anything optional or autonomously evolving, but grow up in connection and relationship with each other; that, however suddenly and arbitrarily they seem to appear in the history of thought, they nevertheless belong just as much to a system as the collective members of the fauna of a Continent—is betrayed in the end by the circumstance: how unfailingly the most diverse philosophers always fill in again a definite fundamental scheme of possible philosophies. Under an invisible spell, they always revolve once more in the same orbit; however independent of each other they may feel themselves with their critical or systematic wills, something within them leads them, something impels them in definite order the one after the other—to wit, the innate methodology and relationship of their ideas. Their thinking is, in fact, far less a discovery than a re-recognising, a remember-

ing, a return and a home-coming to a far-off, ancient common-household of the soul, out of which those ideas formerly grew: philosophising is so far a kind of atavism of the highest order. The wonderful family resemblance of all Indian, Greek, and German philosophising is easily enough explained. In fact, where there is affinity of language, owing to the common philosophy of grammar-I mean owing to the unconscious domination and guidance of similar grammatical functions-it cannot but be that everything is prepared at the outset for a similar development and succession of philosophical systems; just as the way seems barred against certain other possibilities of world-interpretation. It is highly probable that philosophers within the domain of the Ural-Altaic languages (where the conception of the subject is least developed) look otherwise "into the world," and will be found on paths of thought different from those of the Indo Germans and Mussulmans, the spell of certain grammatical functions is ultimately also the spell of physiological valuations and racial conditions.—So much by way of rejecting Locke's superficiality with regard to the origin of ideas.

VII

All psychology hitherto has run aground on moral prejudices and timidities, it has not dared to launch out into the depths. In so far as it is allowable to recognise in that which has hitherto been written, evidence of that which has hitherto been kept silent, it seems as if nobody had vet harboured the notion of psychology as the Morphology and Development-doctrine of the Will to Power, as I conceive of it. The power of moral prejudices has penetrated deeply into the most intellectual world, the world apparently most indifferent and unprejudiced, and has obviously operated in an injurious, obstructive, blinding, and distorting manner. A proper physio-psychology has to contend with unconscious antagonism in the heart of the investigator, it has "the heart" against it: even a doctrine of the reciprocal conditionalness of the "good" and the "bad" impulses, causes (as refined immorality) distress and aversion in a still strong and manly conscience—still more so, a doctrine of the derivation of all good impulses from bad ones. If, however, a person should regard even the emotions of hatred, envy, covetousness, and imperiousness as life-conditioning emotions, as factors which must be present, fundamentally and essentially, in the general economy of life (which must, therefore, be further developed if life is to be further developed), he will suffer from such a view of things as from sea-sickness. And yet this hypothesis is far from being the strangest and most painful in this immense and almost new domain of dangerous knowledge; and there are in fact a hundred good reasons why every one should keep away from it who can do so! On the other hand, if one has once drifted hither with one's bark, well! very good! now let us set our teeth firmly! let us open our eyes and keep our hand fast on the helm! We sail away right over morality, we crush out, we destroy perhaps the remains of our own morality by daring to make our voyage thither—but what do we matter! Never yet did a profounder world of insight reveal itself to daring travellers and adventurers, and the psychologist who thus "makes a sacrifice"—it is not the sacrifizio dell' intelletto, on the contrary!—will at least be entitled to demand in return that psychology shall once more be recognised as the queen of the sciences, for whose service and equipment the other sciences exist. For psychology is once more the path to the fundamental problems.

II. THE FREE SPIRIT

I

Every select man strives instinctively for a citadel and a privacy, where he is free from the crowd, the many, the majority—where he may forget "men who are the rule," as their exception;—exclusive only of the case in which he is pushed straight to such men by a still stronger instinct. as a discerner in the great and exceptional sense. Whoever, in intercourse with men, does not occasionally glisten in all the green and grey colours of distress, owing to disgust, satiety, sympathy, gloominess, and solitariness, is assuredly not a man of elevated tastes; supposing, however, that he does not voluntarily take all this burden and disgust upon himself, that he persistently avoids it, and remains, as I said, quietly and proudly hidden in his citadel, one thing is then certain: he was not made, he was not predestined for knowledge. For as such, he would one day have to say to himself: "The devil take my good taste! but 'the rule' is more interesting than the exception—than myself, the exception!" And he would go down, and above all, he would go "inside." The long and serious study of the average man-and consequently much disguise, self-overcoming, familiarity, and bad intercourse (all intercourse is bad intercourse except with one's equals):—that constitutes a necessary part of the lifehistory of every philosopher; perhaps the most disagreeable, odious, and disappointing part. If he is fortunate, however, as a favourite child of knowledge should be, he will meet with suitable auxiliaries who will shorten and lighten his task; I mean so-called cynics, those who simply recognise the animal, the common-place and "the rule" in themselves, and at the same time have so much spirituality and ticklishness as to make them talk of themselves and their like before witnesses-sometimes they wallow, even in books, as on their own dung-hill. Cynicism is the only

form in which base souls approach what is called honesty; and the higher man must open his ears to all the coarser or finer cynicism, and congratulate himself when the clown becomes shameless right before him. or the scientific satyr speaks out. There are even cases where enchantment mixes with the disgust-namely, where by a freak of nature, genius is bound to some such indiscreet billy-goat and ape, as in the case of the Abbe Galiani, the profoundest, acutest, and perhaps also filthiest man of his century—he was far profounder than Voltaire, and consequently also, a good deal more silent. It happens more frequently, as has been hinted, that a scientific head is placed on an ape's body, a fine exceptional understanding in a base soul, an occurrence by no means rare, especially amongst doctors and moral physiologists. And whenever anyone speaks without bitterness, or rather quite innocently, of man as a belly with two requirements, and a head with one; whenever anyone sees, seeks, and wants to see only hunger, sexual instinct, and vanity as the real and only motives of human actions; in short, when anyone speaks "badly"—and not even "ill"-of man, then ought the lover of knowledge to hearken attentively and diligently; he ought, in general, to have an open ear wherever there is talk without indignation. For the indignant man, and he who perpetually tears and lacerates himself with his own teeth (or, in place of himself, the world, God, or society), may indeed, morally speaking, stand higher than the laughing and self-satisfied satyr, but in every other sense he is the more ordinary, more indifferent, and less instructive case. And no one is such a liar as the indignant man.

II

It is the business of the very few to be independent; it is a privilege of the strong. And whoever attempts it, even with the best right, but without being obliged to do so, proves that he is probably not only strong, but also daring beyond measure. He enters into a labyrinth, he multiplies a thousandfold the dangers which life in itself already brings with it; not the least of which is that no one can see how and where he loses his way, becomes isolated, and is torn piece-meal by some minotaur of conscience. Supposing such a one comes to grief, it is so far from the comprehension of men that they neither feel it, nor sympathise with it. And he cannot any longer go back! He cannot even go back again to the sympathy of men!

Ш

At whatever standpoint of philosophy one may place oneself nowadays, seen from every position, the *erroneousness* of the world in which we think we live is the surest and most certain thing our eyes can light

upon: we find proof after proof thereof, which would fain allure us into surmises concerning a deceptive principle in the "nature of things." He, however, who makes thinking itself, and consequently "the spirit," responsible for the falseness of the world—an honourable exit, which every conscious or unconscious advocatus dei avails himself of—he who regards this world, including space, time, form, and movement, as falsely deduced, would have at least good reason in the end to become distrustful also of all thinking; has it not hitherto been playing upon us the worst of scurvy tricks? and what guarantee would it give that it would not continue to do what it has always been doing? In all seriousness, the innocence of thinkers has something touching and respect-inspiring in it, which even nowadays permits them to wait upon consciousness with the request that it will give them honest answers: for example whether it be "real" or not, and why it keeps the outer world so resolutely at a distance, and other questions of the same description. The belief in "immediate certainties" is a moral naïveté which does honour to us philosophers; but-we have now to cease being "merely moral" men! Apart from morality, such belief is a folly which does little honour to us! If in middle-class life an ever-ready distrust is regarded as the sign of a "bad character," and consequently as an imprudence, here amongst us, beyond the middle-class world and its Yeas and Nays, what should prevent our being imprudent and saying: the philosopher has at length a right to "bad character," as the being who has hitherto been most befooled on earth—he is now under obligation to distrustfulness, to the wickedest squinting out of every abyss of suspicion.—Forgive me the joke of this gloomy grimace and turn of expression; for I myself have long ago learned to think and estimate differently with regard to deceiving and being deceived, and I keep at least a couple of pokes in the ribs ready for the blind rage with which philosophers struggle against being deceived. Why not? It is nothing more than a moral prejudice that truth is worth more than semblance; it is, in fact, the worst proved supposition in the world. So much must be conceded: there could have been no life at all except upon the basis of perspective estimates and semblances; and if, with the virtuous enthusiasm and stupidity of many philosophers, one wished to do away altogether with the "seeming world"—well, granted that you could do that,—at least nothing of your "truth" would thereby remain! Indeed, what is it that forces us in general to the supposition that there is an essential opposition of "true" and "false"? Is it not enough to suppose degrees of seemingness, and as it were lighter and darker shades and tones of semblance—different valeurs, as the painters say? Why might not the world which concerns us-be a fiction? And to anyone who suggested: "But to a fiction belongs an originator?"-might it not be bluntly replied: Why? May not this "belong" also belong to the fiction?

Is it not at length permitted to be a little ironical towards the subject, just as towards the predicate and object? Might not the philosopher elevate himself above faith in grammar? All respect to governesses, but is it not time that philosophy should renounce governess-faith?

IV

Supposing that nothing else is "given" as real but our world of desires and passions, that we cannot sink or rise to any other "reality" but just that of our impulses—for thinking is only a relation of these impulses to one another:—are we not permitted to make the attempt and to ask the question whether this which is "given" does not suffice, by means of our counterparts, for the understanding even of the so-called mechanical (or "material") world? I do not mean as an illusion, a "semblance," a "representation" (in the Berkeleyan and Schopenhauerian sense), but as possessing the same degree of reality as our emotions themselves—as a more primitive form of the world of emotions, in which everything still lies locked in a mighty unity, which afterwards branches off and develops itself in organic processes (naturally also, refines and debilitates)—as a kind of instinctive life in which all organic functions, including selfregulation, assimilation, nutrition, secretion, and change of matter, are still synthetically united with one another—as a primary form of life?—In the end, it is not only permitted to make this attempt, it is commanded by the conscience of logical method. Not to assume several kinds of causality, so long as the attempt to get along with a single one has not been pushed to its furtherest extent (to absurdity, if I may be allowed to say so): that is a morality of method which one may not repudiate nowadays-it follows "from its definition," as mathematicians say. The question is ultimately whether we really recognise the will as operating, whether we believe in the causality of the will; if we do so-and fundamentally our belief in this is just our belief in causality itself—we must make the attempt to posit hypothetically the causality of the will as the only causality. "Will" can naturally only operate on "will"—and not on "matter" (not on "nerves," for instance): in short, the hypothesis must be hazarded, whether will does not operate on will wherever "effects" are recognised and whether all mechanical action, inasmuch as a power operates therein, is not just the power of will, the effect of will. Granted, finally, that we succeeded in explaining our entire instinctive life as the development and ramification of one fundamental form of will-namely, the Will to Power, as my thesis puts it; granted that all organic functions could be traced back to this Will to Power, and that the solution of the problem of generation and nutrition—it is one problem—could also be found therein: one would thus have acquired the right to define all active force

unequivocally as Will to Power. The world seen from within, the world defined and designated according to its "intelligible character"—it would simply be "Will to Power," and nothing else.

v

One must subject oneself to one's own tests that one is destined for independence and command, and do so at the right time. One must not avoid one's tests, although they constitute perhaps the most dangerous game one can play, and are in the end tests made only before ourselves and before no other judge. Not to cleave to any person, be it even the dearest—every person is a prison and also a recess. Not to cleave to a fatherland, be it even the most suffering and necessitous—it is even less difficult to detach one's heart from a victorious fatherland. Not to cleave to a sympathy, be it even for higher men, into whose peculiar torture and helplessness chance has given us an insight. Not to cleave to a science, though it tempt one with the most valuable discoveries, apparently specially reserved for us. Not to cleave to one's own liberation, to the voluptuous distance and remoteness of the bird, which always flies further aloft in order always to see more under it—the danger of the flier. Not to cleave to our own virtues, nor become as a whole a victim to any of our specialties, to our "hospitality" for instance, which is the danger of dangers for highly developed and wealthy souls, who deal prodigally, almost indifferently with themselves, and push the virtue of liberality so far that it becomes a vice. One must know how to conserve oneselfthe best test of independence.

III. THE RELIGIOUS MOOD

Ι

FAITH, such as early Christianity desired, and not infrequently achieved in the midst of a sceptical and southernly free-spirited world, which had centuries of struggle between philosophical schools behind it and in it, counting besides the education in tolerance which the *imperium Romanum* gave—this faith is *not* that sincere, austere slave-faith by which perhaps a Luther or a Cromwell, or some other northern barbarian of the spirit remained attached to his God and Christianity; it is much rather the faith of Pascal, which resembles in a terrible manner a continuous suicide of reason—a tough, long-lived, wormlike reason, which is not to be slain at once and with a single blow. The Christian faith, from the beginning, is sacrifice: the sacrifice of all freedom, all pride,

all self-confidence of spirit; it is at the same time subjection, self-derision, and self-mutilation. There is cruelty and religious Phœnicianism in this faith, which is adapted to a tender, many-sided, and very fastidious conscience; it takes for granted that the subjection of the spirit is indescribably painful, that all the past and all the habits of such a spirit resist the absurdissimum, in the form of which "faith" comes to it. Modern men, with their obtuseness as regards all Christian nomenclature, have no longer the sense for the terribly superlative conception which was implied to an antique taste by the paradox of the formula, "God on the Cross." Hitherto there had never and nowhere been such boldness in inversion, nor anything at once so dreadful, questioning, and questionable as this formula: it promised a transvaluation of all ancient values.—It was the Orient, the profound Orient, it was the Oriental slave who thus took revenge on Rome and its noble, light-minded toleration, on the Roman "Catholicism" of non-faith; and it was always, not the faith, but the freedom from the faith, the half-stoical and smiling indifference to the seriousness of the faith, which made the slaves indignant at their masters and revolt against them. "Enlightenment" causes revolt: for the slave desires the unconditioned, he understands nothing but the tyrannous, even in morals; he loves as he hates, without nuance, to the very depths, to the point of pain, to the point of sickness—his many hidden sufferings make him revolt against the noble taste which seems to deny suffering. The scepticism with regard to suffering, fundamentally only an attitude of aristocratic morality, was not the least of the causes, also, of the last great slave-insurrection which began with the French Revolution.

П

Wherever the religious neurosis has appeared on the earth so far, we find it connected with three dangerous prescriptions as to regimen: solitude, fasting, and sexual abstinence—but without its being possible to determine with certainty which is cause and which is effect, or if any relation at all of cause and effect exists there. This latter doubt is justified by the fact that one of the most regular symptoms among savage as well as among civilised peoples is the most sudden and excessive sensuality; which then with equal suddenness transforms into penitential paroxysms, world-renunciation, and will-renunciation: both symptoms perhaps explainable as disguised epilepsy? But nowhere is it more obligatory to put aside explanations: around no other type has there grown such a mass of absurdity and superstition, no other type seems to have been more interesting to men and even to philosophers—perhaps it is time to become just a little indifferent here, to learn caution, or, better still, to look away, to go away.—Yet in the background of the most recent philosophy, that

of Schopenhauer, we find, almost as the problem in itself, this terrible note of interrogation of the religious crisis and awakening. How is the negation of will possible? how is the saint possible?—that seems to have been the very question with which Schopenhauer made a start and became a philosopher. And thus it was a genuine Schopenhauerian consequence. that his most convinced adherent (perhaps also his last, as far as Germany is concerned), namely, Richard Wagner, should bring his own life-work to an end just here, and should finally put that terrible and eternal type upon the stage as Kundry, type vécu, and as it loved and lived, at the very time that the mad-doctors in almost all European countries had an opportunity to study the type close at hand, wherever the religious neurosis -or as I call it, "the religious mood"-made its latest epidemical outbreak and display as the "Salvation Army."—If it be a question, however, as to what has been so extremely interesting to men of all sorts in all ages. and even to philosophers, in the whole phenomenon of the saint, it is undoubtedly the appearance of the miraculous therein-namely, the immediate succession of opposites, of states of the soul regarded as morally antithetical: it was believed here to be self-evident that a "bad man" was all at once turned into a "saint," a good man. The hitherto existing psychology was wrecked at this point; is it not possible it may have happened principally because psychology had placed itself under the dominion of morals, because it believed in oppositions of moral values. and saw, read, and interpreted these oppositions into the text and facts of the case? What? "Miracle" only an error of interpretation? A lack of philology?

Ш

There is a great ladder of religious cruelty, with many rounds; but three of these are the most important. Once on a time men sacrificed human beings to their God, and perhaps just those they loved the best -to this category belong the firstling sacrifices of all primitive religions. and also the sacrifice of the Emperor Tiberius in the Mithra-Grotto on the Island of Capri, that most terrible of all Roman anachronisms. Then, during the moral epoch of mankind, they sacrificed to their God the strongest instincts they possessed, their "nature"; this festal joy shines in the cruel glances of ascetics and "anti-natural" fanatics. Finally, what still remained to be sacrificed? Was it not necessary in the end for men to sacrifice everything comforting, holy, healing, all hope, all faith in hidden harmonies, in future blessedness and justice? Was it not necessary to sacrifice God himself, and out of cruelty to themselves to worship stone, stupidity, gravity, fate, nothingness? To sacrifice God for nothingness-this paradoxical mystery of the ultimate cruelty has been reserved for the rising generation; we all know something thereof already.

IV

Has it been observed to what extent outward idleness, or semiidleness, is necessary to a real religious life (alike for its favourite microscopic labour of self-examination, and for its soft placidity called "prayer," the state of perpetual readiness for the "coming of God"), I mean the idleness with a good conscience, the idleness of olden times and of blood, to which the aristocratic sentiment that work is dishonouring—that it vulgarises body and soul-is not quite unfamiliar? And that consequently the modern, noisy, time-engrossing, conceited, foolishly proud laboriousness educates and prepares for "unbelief" more than anything else? Amongst these, for instance, who are at present living apart from religion in Germany, I find "free-thinkers" of diversified species and origin, but above all a majority of those in whom laboriousness from generation to generation has dissolved the religious instincts; so that they no longer know what purpose religions serve, and only note their existence in the world with a kind of dull astonishment. They feel themselves already fully occupied, these good people, be it by their business or by their pleasures, not to mention the "Fatherland," and the newspapers, and their "family duties"; it seems that they have no time whatever left for religion; and above all, it is not obvious to them whether it is a question of a new business or a new pleasure—for it is impossible, they say to themselves, that people should go to church merely to spoil their tempers. They are by no means enemies of religious customs; should certain circumstances, State affairs perhaps, require their participation in such customs, they do what is required, as so many things are done—with a patient and unassuming seriousness, and without much curiosity or discomfort;they live too much apart and outside to feel even the necessity for a for or against in such matters. Among those indifferent persons may be reckoned nowadays the majority of German Protestants of the middle classes, especially in the great laborious centres of trade and commerce: also the majority of laborious scholars, and the entire University personnel (with the exception of the theologians, whose existence and possibility there always give psychologists new and more subtle puzzles to solve). On the part of pious, or merely church-going people, there is seldom any idea of how much good will, one might say arbitrary will, is now necessary for a German scholar to take the problem of religion seriously; his whole profession (and as I have said, his whole workmanlike laboriousness, to which he is compelled by his modern conscience) inclines him to a lofty and almost charitable serenity as regards religion, with which is occasionally mingled a slight disdain for the "uncleanliness" of spirit which he takes for granted wherever anyone still professes to belong

to the Church. It is only with the help of history (not through his own personal experience, therefore) that the scholar succeeds in bringing himself to a respectful seriousness, and to a certain timid deference in presence of religions: but even when his sentiments have reached the stage of gratitude towards them, he has not personally advanced one step nearer to that which still maintains itself as Church or as piety; perhaps even the contrary. The practical indifference to religious matters in the midst of which he has been born and brought up, usually sublimates itself in his case into circumspection and cleanliness, which shuns contact with religious men and things; and it may be just the depth of his tolerance and humanity which prompts him to avoid the delicate trouble which tolerance itself brings with it.—Every age has its own divine type of naïveté, for the discovery of which other ages may envy it: and how much naïveté—adorable, childlike, and boundlessly foolish naïveté—is involved in this belief of the scholar in his superiority, in the good conscience of his tolerance, in the unsuspecting, simple certainty with which his instinct treats the religious man as a lower and less valuable type, beyond, before, and above which he himself has developed -he, the little arrogant dwarf and mob-man, the sedulously alert, headand-hand drudge of "ideas," of "modern ideas"!

v

The philosopher, as we free spirits understand him—as the man of the greatest responsibility, who has the conscience for the general development of mankind,—will use religion for his disciplining and educating work, just as he will use the contemporary political and economic conditions. The selecting and disciplining influence—destructive, as well as creative and fashioning—which can be exercised by means of religion is manifold and varied, according to the sort of people placed under its spell and protection. For those who are strong and independent, destined and trained to command, in whom the judgment and skill of a ruling race is incorporated, religion is an additional means for overcoming resistance in the exercise of authority—as a bond which binds rulers and subjects in common, betraying and surrendering to the former the conscience of the latter, their inmost heart, which would fain escape obedience. And in the case of the unique natures of noble origin, if by virtue of superior spirituality they should incline to a more retired and contemplative life, reserving to themselves only the more refined forms of government (over chosen disciples or members of an order), religion itself may be used as a means for obtaining peace from the noise and trouble of managing, grosser affairs, and for securing immunity from the unavoidable filth of all political agitation. The Brahmins, for instance,

understood this fact. With the help of a religious organisation, they secured to themselves the power of nominating kings for the people, while their sentiments prompted them to keep apart and outside, as men with a higher and super-regal mission. At the same time religion gives inducement and opportunity to some of the subjects to qualify themselves for future ruling and commanding: the slowly ascending ranks and classes, in which, through fortunate marriage customs, volitional power and delight in self-control are on the increase. To them religion offers sufficient incentives and temptations to aspire to higher intellectuality, and to experience the sentiments of authoritative self-control, of silence, and of solitude. Asceticism and Puritanism are almost indispensable means of educating and ennobling a race which seeks to rise above its hereditary baseness and work itself upward to future supremacy. And finally, to ordinary men, to the majority of the people, who exist for service and general utility, and are only so far entitled to exist, religion gives invaluable contentedness with their lot and condition, peace of heart, ennoblement of obedience, additional social happiness and sympathy, with something of transfiguration and embellishment, something of justification of all the commonplaceness, all the meanness, all the semi-animal poverty of their souls. Religion, together with the religious significance of life, sheds sunshine over such perpetually harassed men, and makes even their own aspect endurable to them; it operates upon them as the Epicurean philosophy usually operates upon sufferers of a higher order, in a refreshing and refining manner, almost turning suffering to account, and in the end even hallowing and vindicating it. There is perhaps nothing so admirable in Christianity and Buddhism as their art of teaching even the lowest to elevate themselves by piety to a seemingly higher order of things, and thereby to retain their satisfaction with the actual world in which they find it difficult enough to live—this very difficulty being necessary.

VI

To be sure—to make also the bad counter-reckoning against such religions, and to bring to light their secret dangers—the cost is always excessive and terrible when religions do not operate as an educational and disciplinary medium in the hands of the philosopher, but rule voluntarily and paramountly, when they wish to be the final end, and not a means along with other means. Among men, as among all other animals, there is a surplus of defective, diseased, degenerating, infirm, and necessarily suffering individuals; the successful cases, among men also, are always the exception; and in view of the fact that man is the animal not yet properly adapted to his environment, the rare exception. But worse still. The higher the type a man represents, the greater is the improbability

that he will succeed; the accidental, the law of irrationality in the general constitution of mankind, manifests itself most terribly in its destructive effect on the higher orders of men, the conditions of whose lives are delicate, diverse, and difficult to determine. What, then, is the attitude of the two greatest religions above-mentioned to the surplus of failures in life? They endeavour to preserve and keep alive whatever can be preserved; in fact, as the religions for sufferers, they take the part of these upon principle; they are always in favour of those who suffer from life as from a disease, and they would fain treat every other experience of life as false and impossible. However highly we may esteem this indulgent and preservative care (inasmuch as in applying to others, it has applied, and applies also to the highest and usually the most suffering type of man), the hitherto paramount religions—to give a general appreciation of them -are among the principal causes which have kept the type of "man" upon a lower level-they have preserved too much that which should have perished. One has to thank them for invaluable services: and who is sufficiently rich in gratitude not to feel poor at the contemplation of all that the "spiritual men" of Christianity have done for Europe hitherto! But when they had given comfort to the sufferers, courage to the oppressed and despairing, a staff and support to the helpless, and when they had allured from society into convents and spiritual penitentiaries the brokenhearted and distracted: what else had they to do in order to work systematically in that fashion, and with a good conscience, for the preservation of all the sick and suffering, which means, in deed and in truth, to work for the deterioration of the European race? To reverse all estimates of value -that is what they had to do! And to shatter the strong, to spoil great hopes, to cast suspicion on the delight in beauty, to break down everything autonomous, manly, conquering, and imperious—all instincts which are natural to the highest and most successful type of "man"-into uncertainty, distress of conscience, and self-destruction; forsooth, to invert all love of the earthly and of supremacy over the earth, into hatred of the earth and earthly things—that is the task the Church imposed on itself, and was obliged to impose, until, according to its standard of value, "unworldliness," "unsensuousness," and "higher man" fused into one sentiment. If one could observe the strangely painful, equally coarse and refined comedy of European Christianity with the derisive and impartial eye of an Epicurean god, I should think one would never cease marvelling and laughing; does it not actually seem that some single will has ruled over Europe for eighteen centuries in order to make a sublime abortion of man? He, however, who, with opposite requirements (no longer Epicurean) and with some divine hammer in his hand, could approach this almost voluntary degeneration and stunting of mankind, as exemplified in the European Christian (Pascal, for instance), would he not have to cry aloud with

rage, pity, and horror: "Oh, you bunglers, presumptuous pitiful bunglers, what have you done! Was that a work for your hands? How you have hacked and botched my finest stone! What have you presumed to do!"—I should say that Christianity has hitherto been the most portentous of presumptions. Men, not great enough, nor hard enough, to be entitled as artists to take part in fashioning man; men, not sufficiently strong and far-sighted to allow, with sublime self-constraint, the obvious law of the thousandfold failures and perishings to prevail; men, not sufficiently noble to see the radically different grades of rank and intervals of rank that separate man from man:—such men, with their "equality before God," have hitherto swayed the destiny of Europe; until at last a dwarfed, almost ludicrous species has been produced, a gregarious animal, something obliging, sickly, mediocre, the European of the present day.

IV. APOTHEGMS AND INTERLUDES

T

Woman learns how to hate in proportion as she—forgets how to charm.

II

Love to one only is a barbarity, for it is exercised at the expense of all others. Love to God also!

Ш

The same emotions are in man and woman, but in different tempo; on that account man and woman never cease to misunderstand each other.

IV

It is a curious thing that God learned Greek when he wished to turn author—and that he did not learn it better.

V

In the background of all their personal vanity, women themselves have still their impersonal scorn—for "woman."

VI

He who attains his ideal, precisely thereby surpasses it.

VII

With his principles a man seeks either to dominate, or justify, or honour, or reproach, or conceal his habits: two men with the same principles probably seek fundamentally different ends therewith.

VIII

The sexes deceive themselves about each other: the reason is that in reality they honour and love only themselves (or their own ideal, to express it more agreeably). Thus man wishes woman to be peaceable: but in fact woman is essentially unpeaceable, like the cat, however well she may have assumed the peaceable demeanour.

IX

The great epochs of our life are at the points when we gain courage to rebaptize our badness as the best in us.

X

When we have to change an opinion about anyone, we charge heavily to his account the inconvenience he thereby causes us.

XI

He who cannot find the way to his ideal, lives more frivolously and shamelessly than the man without an ideal.

XII

"You want to prepossess him in your favour? Then you must be em-

XIII

The immense expectation with regard to sexual love, and the coyness in this expectation, spoils all the perspectives of women at the outset.

XIV

Where there is neither love nor hatred in the game woman's play is mediocre.

XV

To him who feels himself preordained to contemplation and not to belief, all believers are too noisy and obtrusive; he guards against them.

XVI

A nation is a detour of nature to arrive at six or seven great men.—Yes, and then to get round them.

XVII

When a woman has scholarly inclinations there is generally something wrong with her sexual nature. Barrenness itself conduces to a certain virility of taste; man, indeed, if I may say so, is "the barren animal."

XVIII

Comparing man and woman generally, one may say that woman would not have the genius for adornment, if she had not the instinct for the secondary role.

XIX

He who fights with monsters should be careful lest he thereby become a monster. And if thou gaze long into an abyss, the abyss will also gaze into thee.

XX

In the eyes of all true women science is hostile to the sense of shame. They feel as if one wished to peep under their skin with it—or worse still! under their dress and finery.

V. THE NATURAL HISTORY OF MORALS

I

EVERY SYSTEM of morals is a sort of tyranny against "nature" and also against "reason"; that is, however, no objection, unless one should again decree by some system of morals, that all kinds of tyranny and unreasonableness are unlawful. What is essential and invaluable in every system of morals, is that it is a long constraint. In order to understand Stoicism, or Port-Royal, or Puritanism, one should remember the constraint under which every language has attained to strength and freedom—the metrical constraint, the tyranny of rhyme and rhythm. How much trouble have the poets and orators of every nation given themselves!—not excepting some of the prose writers of to-day, in whose ear dwells an inexorable con-

scientiousness-"for the sake of a folly," as utilitarian bunglers say, and thereby deem themselves wise-"from submission to arbitrary laws," as the anarchists say, and thereby fancy themselves "free," even free-spirited. The singular fact remains, however, that everything of the nature of freedom, elegance, boldness, dance, and masterly certainty, which exists or has existed, whether it be in thought itself, or in administration, or in speaking and persuading, in art just as in conduct, has only developed by means of the tyranny of such arbitrary law; and in all seriousness, it is not at all improbable that precisely this is "nature" and "natural"—and not laisser-aller! Every artist knows how different from the state of letting himself go, is his "most natural" condition, the free arranging, locating, disposing, and constructing in the moments of "inspiration"—and how strictly and delicately he then obeys a thousand laws, which, by their very rigidness and precision, defy all formulation by means of ideas (even the most stable idea has, in comparison therewith, something floating, manifold, and ambiguous in it). The essential thing "in heaven and in earth" is, apparently (to repeat it once more), that there should be long obedience in the same direction; there thereby results, and has always resulted in the long run, something which has made life worth living; for instance, virtue, art, music, dancing, reason, spirituality—anything whatever that is transfiguring, refined, foolish, or divine. The long bondage of the spirit, the distrustful constraint in the communicability of ideas, the discipline which the thinker imposed on himself to think in accordance with the rules of a church or a court, or conformable to Aristotelian premises, the persistent spiritual will to interpret everything that happened according to a Christian scheme, and in every occurrence to rediscover and justify the Christian God:-all this violence, arbitrariness, severity, dreadfulness, and unreasonableness has proved itself the disciplinary means whereby the European spirit has attained its strength, its remorseless curiosity and subtle mobility; granted also that much irrecoverable strength and spirit had to be stifled, suffocated, and spoilt in the process (for here, as everywhere, "nature" shows herself as she is, in all her extravagant and indifferent magnificence, which is shocking, but nevertheless noble). That for centuries European thinkers only thought in order to prove somethingnowadays, on the contrary, we are suspicious of every thinker who "wishes to prove something"—that it was always settled beforehand what was to be the result of their strictest thinking, as it was perhaps in the Asiatic astrology of former times, or as it is still at the present day in the innocent, Christian-moral explanation of immediate personal events "for the glory of God," or "for the good of the soul":-this tyranny, this arbitrariness, this severe and magnificent stupidity has educated the spirit; slavery, both in the coarser and the finer sense, is apparently an indispensable means even of spiritual education and discipline. One may look at every system

of morals in this light: it is "nature" therein which teaches to hate the laisser-aller, the too great freedom, and implants the need for limited horizons, for immediate duties—it teaches the narrowing of perspectives, and thus, in a certain sense, that stupidity is a condition of life and development. "Thou must obey someone, and for a long time; otherwise thou wilt come to grief, and lose all respect for thyself"—this seems to me to be the moral imperative of nature, which is certainly neither "categorical," as old Kant wished (consequently the "otherwise"), nor does it address itself to the individual (what does nature care for the individual!), but to nations, races, ages, and ranks, above all, however, to the animal "man" generally, to mankind.

II

The old theological problem of "Faith" and "Knowledge," or more plainly, of instinct and reason—the question whether, in respect to the valuation of things, instinct deserves more authority than rationality, which wants to appreciate and act according to motives, according to a "Why," that is to say, in conformity to purpose and utility—it is always the old moral problem that first appeared in the person of Socrates, and had divided men's minds long before Christianity. Socrates himself, following, of course, the taste of his talent—that of a surpassing dialectician -took first the side of reason; and, in fact, what did he do all his life but laugh at the awkward incapacity of the noble Athenians, who were men of instinct, like all noble men, and could never give satisfactory answers concerning the motives of their actions? In the end, however, though silently and secretly, he laughed also at himself: with his finer conscience and introspection, he found in himself the same difficulty and incapacity. "But why"-he said to himself--"should one on that account separate oneself from the instincts! One must set them right, and the reason also—one must follow the instincts, but at the same time persuade the reason to support them with good arguments." This was the real falseness of that great and mysterious ironist; he brought his conscience up to the point that he was satisfied with a kind of self-outwitting: in fact, he perceived the irrationality in the moral judgment.—Plato, more innocent in such matters, and without the craftiness of the plebeian, wished to prove to himself, at the expenditure of all his strength—the greatest strength a philosopher had ever expended—that reason and instinct lead spontaneously to one goal, to the good, to "God"; and since Plato, all theologians and philosophers have followed the same path—which means that in matters of morality, instinct (or as Christians call it, "Faith," or as I call it, "the herd") has hitherto triumphed. Unless one should make an exception in the case of Descartes, the father of rationalism (and consequently the grandfather of the Revolution), who recognised only the authority of reason: but reason is only a tool, and Descartes was superficial.

Ш

Whoever has followed the history of a single science, finds in its development a clue to the understanding of the oldest and commonest processes of all "knowledge and cognisance": there, as here, the premature hypotheses, the fictions, the good stupid will to "belief," and the lack of distrust and patience are first developed—our senses learn late, and never learn completely, to be subtle, reliable, and cautious organs of knowledge. Our eyes find it easier on a given occasion to produce a picture already often produced, than to seize upon the divergence and novelty of an impression: the latter requires more force, more "morality." It is difficult and painful for the ear to listen to anything new; we hear strange music badly. When we hear another language spoken, we involuntarily attempt to form the sounds into words with which we are more familiar and conversant—it was thus, for example, that the Germans modified the spoken word arcubalista into armbrust (cross-bow). Our senses are also hostile and averse to the new; and generally, even in the "simplest" processes of sensation, the emotions dominate—such as fear, love, hatred, and the passive emotion of indolence.—As little as a reader nowadays reads all the single words (not to speak of syllables) of a page—he rather takes about five out of every twenty words at random, and "guesses" the probably appropriate sense to them—just as little do we see a tree correctly and completely in respect to its leaves, branches, colour, and shape; we find it so much easier to fancy the chance of a tree. Even in the midst of the most remarkable experiences, we still do just the same; we fabricate the greater part of the experience, and can hardly be made to contemplate any event, except as "inventors" thereof. All this goes to prove that from our fundamental nature and from remote ages we have been-accustomed to lying. Or, to express it more politely and hypocritically, in short, more pleasantly—one is much more of an artist than one is aware of.—In an animated conversation, I often see the face of the person with whom I am speaking so clearly and sharply defined before me, according to the thought he expresses, or which I believe to be evoked in his mind, that the degree of distinctness far exceeds the strength of my visual faculty—the delicacy of the play of the muscles and of the expression of the eyes must therefore be imagined by me. Probably the person put on quite a different expression, or none at all.

IV

The difference among men does not manifest itself only in the difference of their lists of desirable things-in their regarding different good things as worth striving for, and being disagreed as to the greater or less value, the order of rank, of the commonly recognised desirable things:it manifests itself much more in what they regard as actually having and possessing a desirable thing. As regards a woman, for instance, the control over her body and her sexual gratification serves as an amply sufficient sign of ownership and possession to the more modest man; another with a more suspicious and ambitious thirst for possession, sees the "questionableness," the mere apparentness of such ownership, and wishes to have finer tests in order to know especially whether the woman not only gives herself to him, but also gives up for his sake what she has or would like to have—only then does he look upon her as "possessed." A third, however, has not even here got to the limit of his distrust and his desire for possession; he asks himself whether the woman, when she gives up everything for him, does not perhaps do so for a phantom of him: he wishes first to be thoroughly, indeed, profoundly well known; in order to be loved at all he ventures to let himself be found out. Only then does he feel the beloved one fully in his possession, when she no longer deceives herself about him, when she loves him just as much for the sake of his devilry and concealed insatiability, as for his goodness. patience, and spirituality. One man would like to possess a nation, and he finds all the higher arts of Cagliostro and Catalina suitable for his purpose. Another, with a more refined thirst for possession, says to himself: "One may not deceive where one desires to possess"—he is irritated and impatient at the idea that a mask of him should rule in the hearts of the people: "I must, therefore, make myself known, and first of all learn to know myself!" Amongst helpful and charitable people, one almost always finds the awkward craftiness which first gets up suitably him who has to be helped, as though, for instance, he should "merit" help, seek just their help, and would show himself deeply grateful, attached, and subservient to them for all help. With these conceits, they take control of the needy as a property, just as in general they are charitable and helpful out of a desire for property. One finds them jealous when they are crossed or forestalled in their charity. Parents involuntarily make something like themselves out of their children—they call that "education"; no mother doubts at the bottom of her heart that the child she has borne is thereby her property, no father hesitates about his right to his own ideas and notions of worth. Indeed, in former times fathers deemed it right to use their discretion concerning the life or death of the newly born (as amongst

the ancient Germans). And like the father, so also do the teacher, the class, the priest, and the prince still see in every new individual an unobjectionable opportunity for a new possession. The consequence is . . .

V

All the systems of morals which address themselves with a view to their "happiness," as it is called-what else are they but suggestions for behaviour adapted to the degree of danger from themselves in which the individuals live; recipes for their passions, their good and bad propensities, in so far as such have the Will to Power and would like to play the master; small and great expediencies and elaborations, permeated with the musty odour of old family medicines and old-wife wisdom; all of them grotesque and absurd in their form-because they address themselves to "all," because they generalise where generalisation is not authorised; all of them speaking unconditionally, and taking themselves unconditionally: all of them flavoured not merely with one grain of salt, but rather endurable only, and sometimes even seductive, when they are over-spiced and begin to smell dangerously, especially of "the other world." That is all of little value when estimated intellectually, and is far from being "science," much less "wisdom"; but, repeated once more, and three times repeated, it is expediency, expediency, expediency, mixed with stupidity, stupidity, stupidity—whether it be the indifference and statuesque coldness towards the heated folly of the emotions, which the Stoics advised and fostered; or the no-more-laughing and no-more-weeping of Spinoza, the destruction of the emotions by their analysis and vivisection which he recommended so naïvely; or the lowering of the emotions to an innocent mean at which they may be satisfied, the Aristotelianism of morals; or even morality as the enjoyment of the emotions in a voluntary attenuation and spiritualisation by the symbolism of art, perhaps as music, or as love of God, and of mankind for God's sake-for in religion the passions are once more enfranchised, provided that . . .; or, finally, even the complaisant and wanton surrender to the emotions, as has been taught by Hafis and Goethe, the bold letting-go of the reins, the spiritual and corporeal licentia morum in the exceptional cases of wise old codgers and drunkards, with whom it "no longer has much danger."

VI

As long as the utility which determines moral estimates is only gregarious utility, as long as the preservation of the community is only kept in view, and the immoral is sought precisely and exclusively in what seems dangerous to the maintenance of the community, there can be no

"morality of love to one's neighbour." Granted even that there is already a little constant exercise of consideration, sympathy, fairness, gentleness, and mutual assistance, granted that even in this condition of society all those instincts are already active which are latterly distinguished by honourable names as "virtues," and eventually almost coincide with the conception "morality": in that period they do not as yet belong to the domain of moral valuations—they are still ultra-moral. A sympathetic action, for instance, is neither called good nor bad, moral nor immoral, in the best period of the Romans; and should it be praised, a sort of resentful disdain is compatible with this praise, even at the best, directly the sympathetic action is compared with one which contributes to the welfare of the whole, to the res publica. After all, "love to our neighbour" is always a secondary matter, partly conventional and arbitrarily manifested in relation to our fear of our neighbour. After the fabric of society seems on the whole established and secured against external dangers, it is this fear of our neighbour which again creates new perspectives of moral valuation. Certain strong and dangerous instincts, such as the love of enterprise, foolhardiness, revengefulness, astuteness, rapacity, and love of power, which up till then had not only to be honoured from the point of view of general utility—under other names, of course, than those here given-but had to be fostered and cultivated (because they were perpetually required in the common danger against the common enemies), are now felt in their dangerousness to be doubly strong—when the outlets for them are lacking—and are gradually branded as immoral and given over to calumny. The contrary instincts and inclinations now attain to moral honour; the gregarious instinct gradually draws its conclusions. How much or how little dangerousness to the community or to equality is contained in an opinion, a condition, an emotion, a disposition, or an endowment—that is now the moral perspective; here again fear is the mother of morals. It is by the loftiest and strongest instincts, when they break out passionately and carry the individual far above and beyond the average, and the low level of the gregarious conscience, that the selfreliance of the community is destroyed; its belief in itself, its backbone, as it were, breaks; consequently these very instincts will be most branded and defamed. The lofty independent spirituality, the will to stand alone, and even the cogent reason, are felt to be dangers; everything that elevates the individual above the herd, and is a source of fear to the neighbour, is henceforth called evil; the tolerant, unassuming, self-adapting, selfequalising disposition, the mediocrity of desires, attains to moral distinction and honour. Finally, under very peaceful circumstances, there is always less opportunity and necessity for training the feelings to severity and rigour; and now every form of severity, even in justice, begins to disturb the conscience; a lofty and rigourous nobleness and self-responsibility almost offends, and awakens distrust, "the lamb," and still more "the sheep," wins respect. There is a point of diseased mellowness and effeminacy in the history of society, at which society itself takes the part of him who injures it, the part of the criminal, and does so, in fact, seriously and honestly. To punish, appears to it to be somehow unfair—it is certain that the idea of "punishment" and "the obligation to punish" are then painful and alarming to people. "Is it not sufficient if the criminal be rendered harmless? Why should we still punish? Punishment itself is terrible!"-with these questions gregarious morality, the morality of fear, draws its ultimate conclusion. If one could at all do away with danger, the cause of fear, one would have done away with this morality at the same time, it would no longer be necessary, it would not consider itself any longer necessary!—Whoever examines the conscience of the present-day European, will always elicit the same imperative from its thousand moral folds and hidden recesses, the imperative of the timidity of the herd: "we wish that some time or other there may be nothing more to fear!" Some time or other—the will and the way thereto is nowadays called "progress" all over Europe.

VII

Let us at once say again what we have already said a hundred times, for people's ears nowadays are unwilling to hear such truths—our truths. We know well enough how offensively it sounds when anyone plainly, and without metaphor, counts man amongst the animals; but it will be accounted to us almost a crime, that it is precisely in respect to men of "modern ideas" that we have constantly applied the terms "herd," "herdinstincts," and suchlike expressions. What avail is it? We cannot do otherwise, for it is precisely here that our new insight is. We have found that in all the principal moral judgments Europe has become unanimous, including likewise the countries where European influence prevails: in Europe people evidently know what Socrates thought he did not know, and what the famous serpent of old once promised to teach-they "know" to-day what is good and evil. It must then sound hard and be distasteful to the ear, when we always insist that that which here thinks it knows, that which here glorifies itself with praise and blame, and calls itself good, is the instinct of the herding human animal: the instinct which has come and is ever coming more and more to the front, to preponderance and supremacy over other instincts, according to the increasing physiological approximation and resemblance of which it is the symptom. Morality in Europe at present is herding-animal morality; and therefore, as we understand the matter, only one kind of human morality, beside which, before which, and after which many other moralities, and above all higher moralities, are or should be possible. Against such a "possibility," against such a "should be," however, this morality defends itself with all its strength: it says obstinately and inexorably: "I am morality itself and nothing else is morality!" Indeed, with the help of a religion which has humoured and flattered the sublimest desires of the herding-animal, things have reached such a point that we always find a more visible expression of this morality even in political and social arrangements: the democratic movement is the inheritance of the Christian movement. That its tempo, however, is much too slow and sleepy for the more impatient ones, for those who are sick and distracted by the herding-instinct, is indicated by the increasingly furious howling, and always less disguised teethgnashing of the anarchist dogs, who are now roving through the highways of European culture. Apparently in opposition to the peacefully industrious democrats and Revolution-ideologues, and still more so to the awkward philosophasters and fraternity-visionaries who call themselves Socialists and want a "free society," those are really at one with them all in their thorough and instinctive hostility to every form of society other than that of the autonomous herd (to the extent even of repudiating the notions "master" and "servant"—ni dieu ni maître, says a socialist formula); at one in their tenacious opposition to every special claim, every special right and privilege (this means ultimately opposition to every right, for when all are equal, no one needs "rights" any longer); at one in their distrust of punitive justice (as though it were a violation of the weak, unfair to the necessary consequences of all former society); but equally at one in their religion of sympathy, in their compassion for all that feels, lives, and suffers (down to the very animals, up even to "God"—the extravagance of "sympathy for God" belongs to a democratic age); altogether at one in the cry and impatience of their sympathy, in their deadly hatred of suffering generally, in their almost feminine incapacity for witnessing it or allowing it; at one in their involuntary beglooming and heart-softening, under the spell of which Europe seems to be threatened with a new Buddhism; at one in their belief in the morality of mutual sympathy, as though it were morality in itself, the climax, the attained climax of mankind, the sole hope of the future, the consolation of the present, the great discharge from all the obligations of the past; altogether at one in their belief in the community as the deliverer, in the herd, and therefore in "themselves."

VIII

We, who hold a different belief—we, who regard the democratic movement, not only as a degenerating form of political organisation, but as equivalent to a degenerating, a waning type of man, as involving his mediocrising and depreciation: where have we to fix our hopes? In new philosophers—there is no other alternative: in minds strong and original

enough to initiate opposite estimates of value, to transvalue and invert "eternal valuations"; in forerunners, in men of the future, who in the present shall fix the constraints and fasten the knots which will compel millenniums to take new paths. To teach man the future of humanity as his will, as depending on human will, and to make preparation for vast hazardous enterprises and collective attempts in rearing and educating, in order thereby to put an end to the frightful rule of folly and chance which has hitherto gone by the name of "history" (the folly of the "greatest number" is only its last form)—for that purpose a new type of philosophers and commanders will some time or other be needed, at the very idea of which everything that has existed in the way of occult, terrible, and benevolent beings might look pale and dwarfed. The image of such leaders hovers before our eyes:—is it lawful for me to say it aloud, ye free spirits? The conditions which one would partly have to create and partly utilise for their genesis; the presumptive methods and tests by virtue of which a soul should grow up to such an elevation and power as to feel a constraint to these tasks: a transvaluation of values, under the new pressure and hammer of which a conscience should be steeled and a heart transformed into brass, so as to bear the weight of such responsibility; and on the other hand the necessity for such leaders, the dreadful danger that they might be lacking, or miscarry and degenerate:—these are our real anxieties and glooms, ye know it well, ye free spirits! these are the heavy distant thoughts and storms which sweep across the heaven of our life. There are few pains so grievous as to have seen, divined, or experienced how an exceptional man has missed his way and deteriorated; but he who has the rare eye for the universal danger of "man" himself deteriorating, he who like us has recognised the extraordinary fortuitousness which has hitherto played its game in respect to the future of mankind—a game in which neither the hand, nor even a "finger of God" has participated!he who divines the fate that is hidden under the idiotic unwariness and blind confidence of "modern ideas," and still more under the whole of Christo-European morality-suffers from an anguish with which no other is to be compared. He sees at a glance all that could still be made out of man through a favourable accumulation and augmentation of human powers and arrangements; he knows with all the knowledge of his conviction how unexhausted man still is for the greatest possibilities, and how often in the past the type man has stood in presence of mysterious decisions and new paths:—he knows still better from his painfulest recollections on what wretched obstacles promising developments of the highest rank have hitherto usually gone to pieces, broken down, sunk, and become contemptible. The universal degeneracy of mankind to the level of the "man of the future"—as idealised by the socialistic fools and shallowpates—this degeneracy and dwarfing of man to an absolutely gregarious

animal (or as they call it, to a man of "free society"), this brutalising of man into a pigmy with equal rights and claims, is undoubtedly possible! He who has thought out this possibility to its ultimate conclusion knows another loathing unknown to the rest of mankind—and perhaps also a new mission!

VI. WE SCHOLARS

T

AT THE RISK that moralising may also reveal itself here as that which it has always been-namely, resolutely montrer ses plaies, according to Balzac-I would venture to protest against an improper and injurious alteration of rank, which quite unnoticed, and as if with the best conscience, threatens nowadays to establish itself in the relations of science and philosophy. I mean to say that one must have the right out of one's own experience—experience, as it seems to me, always implies unfortunate experience?—to treat of such an important question of rank, so as not to speak of colour like the blind, or against science like women and artists. ("Ah! this dreadful science!" sigh their instinct and their shame, "it always finds things out!") The declaration of independence of the scientific man, his emancipation from philosophy, is one of the subtler after-effects of democratic organisation and disorganisation: the self-glorification and self-conceitedness of the learned man is now everywhere in full bloom, and in its best springtime—which does not mean to imply that in this case self-praise smells sweetly. Here also the instinct of the populace cries, "Freedom from all masters!" and after science has, with the happiest results, resisted theology, whose "handmaid" it had been too long, it now proposes in its wantonness and indiscretion to lay down laws for philosophy, and in its turn to play the "master"—what am I saying! to play the philosopher on its own account. My memory—the memory of a scientific man, if you please!-teems with the naïvetés of insolence which I have heard about philosophy and philosophers from young naturalists and old physicians (not to mention the most cultured and most conceited of all learned men, the philologists and schoolmasters, who are both the one and the other by profession). On one occasion it was the specialist and the Jack Horner who instinctively stood on the defensive against all synthetic tasks and capabilities; at another time it was the industrious worker who had got a scent of otium and refined luxuriousness in the internal economy of the philosopher, and felt himself aggrieved and belittled thereby. On another occasion it was the colour-blindness of the utilitarian, who sees nothing in philosophy but a series of refuted systems, and an extravagant expenditure which "does nobody any good." At another time

the fear of disguised mysticism and of the boundary-adjustment of knowledge became conspicuous, at another time the disregard of individual philosophers, which had involuntarily extended to disregard of philosophy generally. In fine, I found most frequently, behind the proud disdain of philosophy in young scholars, the evil after-effect of some particular philosopher, to whom on the whole obedience had been foresworn, without, however, the spell of his scornful estimates of other philosophers having been got rid of—the result being a general ill-will to all philosophy. (Such seems to me, for instance, the after-effect of Schopenhauer on the most modern Germany: by his unintelligent rage against Hegel, he has succeeded in severing the whole of the last generation of Germans from its connection with German culture, which culture, all things considered, has been an elevation and a divining refinement of the historical sense: but precisely at this point Schopenhauer himself was poor, irreceptive, and un-German to the extent of ingeniousness.) On the whole, speaking generally, it may just have been the humanness, all-too-humanness of the modern philosophers themselves, in short, their contemptibleness, which has injured most radically the reverence for philosophy and opened the doors to the instinct of the populace. Let it but be acknowledged to what an extent our modern world diverges from the whole style of the world of Heraclites, Plato, Empedocles, and whatever else all the royal and magnificent anchorites of the spirit were called; and with what justice an honest man of science may feel himself of a better family and origin, in view of such representatives of philosophy, who, owing to the fashion of the present day, are just as much aloft as they are down below—in Germany, for instance, the two lions of Berlin, the anarchist Eugen Dühring and the amalgamist Eduard von Hartmann, It is especially the sight of those hotchpotch philosophers, who call themselves "realists," or "positivists," which is calculated to implant a dangerous distrust in the soul of a young and ambitious scholar: those philosophers, at the best, are themselves but scholars and specialists, that is very evident! All of them are persons who have been vanquished and brought back again under the dominion of science, who at one time or another claimed more from themselves, without having a right to the "more" and its responsibilityand who now, creditably, rancorously, and vindictively, represent in word and deed, disbelief in the master-task and supremacy of philosophy. After all, how could it be otherwise? Science flourishes nowadays and has the good conscience clearly visible on its countenance; while that to which the entire modern philosophy has gradually sunk, the remnant of philosophy of the present day, excites distrust and displeasure, if not scorn and pity. Philosophy reduced to a "theory of knowledge," no more in fact than a diffident science of epochs and doctrine of forbearance: a philosophy that never even gets beyond the threshold, and rigourously denies itself

the right to enter—that is philosophy in its last throes, an end, an agony, something that awakens pity. How could such a philosophy—rule/

П

In relation to the genius, that is to say, a being who either engenders or produces—both words understood in their fullest sense—the man of learning, the scientific average man, has always something of the old maid about him; for, like her, he is not conversant with the two principal functions of man. To both, of course, to the scholar and to the old maid, one concedes respectability, as if by way of indemnification—in these cases one emphasises the respectability—and yet, in the compulsion of this concession, one has the same admixture of vexation. Let us examine more closely: what is the scientific man? Firstly, a commonplace type of man, with commonplace virtues: that is to say, a non-ruling, non-authoritative, and non-self-sufficient type of man; he possesses industry, patient adaptableness to rank and file, equability and moderation in capacity and requirement; he has the instinct for people like himself, and for that which they require-for instance: the portion of independence and green meadow without which there is no rest from labour, the claim to honour and consideration (which first and foremost presupposes recognition and recognisability), the sunshine of a good name, the perpetual ratification of his value and usefulness, with which the inward distrust which lies at the bottom of the heart of all dependent men and gregarious animals, has again and again to be overcome. The learned man, as is appropriate, has also maladies and faults of an ignoble kind: he is full of petty envy, and has a lynx-eye for the weak points in those natures to whose elevations he cannot attain. He is confiding, yet only as one who lets himself go, but does not flow; and precisely before the man of the great current he stands all the colder and more reserved—his eye is then like a smooth and irresponsive lake, which is no longer moved by rapture or sympathy. The worst and most dangerous thing of which a scholar is capable results from the instinct of mediocrity of his type, from the Jesuitism of mediocrity, which labours instinctively for the destruction of the exceptional man, and endeavours to break-or still better, to relax-every bent bow. To relax, of course, with consideration, and naturally with an indulgent hand—to relax with confiding sympathy: that is the real art of Jesuitism, which has always understood how to introduce itself as the religion of sympathy.

Ш

When a philosopher nowadays makes known that he is not a sceptic, people all hear it impatiently; they regard him on that account with some

apprehension, they would like to ask so many, many questions . . . indeed among timid hearers, of whom there are now so many, he is henceforth said to be dangerous. With his repudiation of scepticism, it seems to them as if they heard some evil-threatening sound in the distance, as if a new kind of explosive were being tried somewhere, a dynamite of the spirit, perhaps a newly discovered Russian nihiline, a pessimism bonae voluntatis, that not only denies, means denial, but—dreadful thought !- practises denial. Against this kind of "good will"—a will to the veritable, actual negation of life—there is, as is generally acknowledged nowadays, no better soporific and sedative than scepticism, the mild, pleasing, lulling poppy of scepticism; and Hamlet himself is now prescribed by the doctors of the day as an antidote to the "spirit," and its underground noises. "Are not our ears already full of bad sounds?" say the sceptics, as lovers of repose, and almost as a kind of safety police, "this subterranean Nay is terrible! Be still, ve pessimistic moles!" The sceptic, in effect, that delicate creature, is far too easily frightened; his conscience is schooled so as to start at every Nay, and even at that sharp, decided Yea, and feels something like a bite thereby. Yea! and Nay!—they seem to him opposed to morality; he loves, on the contrary, to make a festival to his virtue by a noble aloofness, while perhaps he says with Montaigne: "What do I know?" Or with Socrates: "I know that I know nothing." Or: "Here I do not trust myself, no door is open to me." Or: "Even if the door were open, why should I enter immediately?" Or: "What is the use of any hasty hypotheses? It might quite well be in good taste to make no hypotheses at all. Are you absolutely obliged to straighten at once what is crooked? to stuff every hole with some kind of oakum? Is there not time enough for that? Has not the time leisure? Oh, ye demons, can ye not at all wait? The uncertain also has its charms, the Sphinx, too, is a Circe, and Circe, too, was a philosopher."-Thus does a sceptic console himself; and in truth he needs some consolation. For scepticism is the most spiritual expression of a certain many-sided physiological temperament, which in ordinary language is called nervous debility and sickliness; it arises whenever races or classes which have been long separated, decisively and suddenly blend with one another. In the new generation, which has inherited as it were different standards and valuations in its blood, everything is disquiet, derangement, doubt, and tentative; the best powers operate restrictively, the very virtues prevent each other's growing and becoming strong, equilibrium, ballast, and perpendicular stability are lacking in body and soul. That, however, which is most diseased and degenerated in such nondescripts is the will; they are no longer familiar with independence of decision, or the courageous feeling of pleasure in willingthey are doubtful of the "freedom of the will" even in their dreams.

IV

It is always more obvious to me that the philosopher, as a man indispensable for the morrow and the day after the morrow, has ever found himself, and has been obliged to find himself, in contradiction to the day in which he lives; his enemy has always been the ideal of his day. Hitherto all those extraordinary furtherers of humanity whom one calls philosophers -who rarely regarded themselves as lovers of wisdom, but rather as disagreeable fools and dangerous interrogators—have found their mission, their hard, involuntary, imperative mission (in the end however the greatness of their mission), in being the bad conscience of their age. In putting the vivisector's knife to the breast of the very virtues of their age, they have betrayed their own secret; it has been for the sake of a new greatness of man, a new untrodden path to his aggrandisement. They have always disclosed how much hypocrisy, indolence, self-indulgence, and self-neglect, how much falsehood was concealed under the most venerated types of contemporary morality, how much virtue was outlived: they have always said: "We must remove hence to where vou are least at home." In face of a world of "modern ideas," which would like to confine every one in a corner, in a "specialty," a philosopher, if there could be philosophers nowadays, would be compelled to place the greatness of man, the conception of "greatness," precisely in his comprehensiveness and multifariousness, in his all-roundness; he would even determine worth and rank according to the amount and variety of that which a man could bear and take upon himself, according to the extent to which a man could stretch his responsibility. Nowadays the taste and virtue of the age weaken and attenuate the will; nothing is so adapted to the spirit of the age as weakness of will: consequently, in the ideal of the philosopher, strength of will, sternness and capacity for prolonged resolution, must specially be included in the conception of "greatness"; with as good a right as the opposite doctrine, with its ideal of a silly, renouncing, humble, selfless humanity, was suited to an opposite age—such as the sixteenth century, which suffered from its accumulated energy of will, and from the wildest torrents and floods of selfishness.

v

It is difficult to learn what a philosopher is, because it cannot be taught: one must "know" it by experience—or one should have the pride not to know it. The fact that at present people all talk of things of which they cannot have any experience, is true more especially and unfortunately as concerns the philosopher and philosophical matters:—the very few

know them, are permitted to know them, and all popular ideas about them are false. Thus, for instance, the truly philosophical combination of a bold. exuberant spirituality which runs at presto pace, and a dialectic rigour and necessity which makes no false step, is unknown to most thinkers and scholars from their own experience, and therefore, should anyone speak of it in their presence, it is incredible to them. They conceive of every necessity as troublesome, as a painful compulsory obedience and state of constraint; thinking itself is regarded by them as something slow and hesitating, almost as a trouble, and often enough as "worthy of the sweat of the noble"—but not at all as something easy and divine, closely related to dancing and exuberance! "To think" and to take a matter "seriously," "arduously"—that is one and the same thing to them; such only has been their "experience."—Artists have here perhaps a finer intuition; they who know only too well that precisely when they no longer do anything "arbitrarily," and everything of necessity, their feeling of freedom, of subtlety, of power, of creatively fixing, disposing, and shaping, reaches its climax—in short, that necessity and "freedom of will" are then the same thing with them. There is, in fine, a gradation of rank in psychical states, to which the gradation of rank in the problems corresponds; and the highest problems repel ruthlessly every one who ventures too near them, without being predestined for their solution by the loftiness and power of his spirituality. Of what use is it for nimble, everyday intellects, or clumsy, honest mechanics and empiricists to press, in their plebeian ambition, close to such problems, and as it were into this "holy of holies"—as so often happens nowadays!

VII. OUR VIRTUES

I

Our virtues?—It is probable that we, too, have still our virtues, although naturally they are not those sincere and massive virtues on account of which we hold our grandfathers in esteem and also at a little distance from us. We Europeans of the day after to-morrow, we firstlings of the twentieth century—with all our dangerous curiosity, our multifariousness and art of disguising, our mellow and seemingly sweetened cruelty in sense and spirit—we shall presumably, if we must have virtues, have those only which have come to agreement with our most secret and heartfelt inclinations, with our most ardent requirements: well, then, let us look for them in our labyrinths!—where, as we know, so many things lose themselves, so many things get quite lost! And is there anything finer than to search for one's own virtues? Is it not almost to believe in one's own

virtues? But this "believing in one's own virtues"—is it not practically the same as what was formerly called one's "good conscience," that long, respectable pigtail of an idea, which our grandfathers used to hang behind their heads, and often enough also behind their understandings? It seems, therefore, that however little we may imagine ourselves to be old-fashioned and grandfatherly respectable in other respects, in one thing we are nevertheless the worthy grandchildren of our grandfathers, we last Europeans with good consciences: we also still wear their pigtail.—Ah! if you only knew how soon, so very soon—it will be different!

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Now that the praise of the "disinterested person" is so popular one must-probably not without some danger-get an idea of what people actually take an interest in, and what are the things generally which fundamentally and profoundly concern ordinary men-including the cultured, even the learned, and perhaps philosophers also, if appearances do not deceive. The fact thereby becomes obvious that the greater part of what interests and charms higher natures, and more refined and fastidious tastes, seems absolutely "uninteresting" to the average man:-if, notwithstanding, he perceive devotion to these interests, he calls it désintéressé, and wonders how it is possible to act "disinterestedly." There have been philosophers who could give this popular astonishment a seductive and mystical, other-world expression (perhaps because they did not know the higher nature by experience?), instead of stating the naked and candidly reasonable truth that "disinterested" action is very interesting and "interested" action, provided that . . . "And love?"—What! Even an action for love's sake shall be "unegoistic"? But you fools-! "And the praise of the self-sacrificer?"—But whoever has really offered sacrifice knows that he wanted and obtained something for it-perhaps something from himself for something from himself; that he relinquished here in order to have more there, perhaps in general to be more, or even feel himself "more." But this is a realm of questions and answers in which a more fastidious spirit does not like to stay: for here truth has to stifle her yawns so much when she is obliged to answer. And after all, truth is a woman; one must not use force with her.

Ш

Wherever sympathy (fellow-suffering) is preached nowadays—and, if I gather rightly, no other religion is any longer preached—let the psychologist have his ears open; through all the vanity, through all the noise which is natural to these preachers (as to all preachers), he will hear a hoarse, groaning, genuine note of self-contempt. It belongs to the over-

shadowing and uglifying of Europe, which has been on the increase for a century (the first symptoms of which are already specified documentarily in a thoughtful letter of Galiani to Madame d'Epinay)—if it is not really the cause thereof! The man of "modern ideas," the conceited ape, is excessively dissatisfied with himself—this is perfectly certain. He suffers, and his vanity wants him only "to suffer with his fellows."

IV

Whether it be hedonism, pessimism, utilitarianism, or eudæmonism. all those modes of thinking which measure the worth of things according to pleasure and pain, that is, according to accompanying circumstances and secondary considerations, are plausible modes of thought and naïvetés, which every one conscious of creative powers and an artist's conscience will look down upon with scorn, though not without sympathy. Sympathy for you!—to be sure, that is not sympathy as you understand it: it is not sympathy for social "distress," for "society" with its sick and misfortuned, for the hereditarily vicious and defective who lie on the ground around us; still less is it sympathy for the grumbling, vexed, revolutionary slave-classes who strive after power—they call it "freedom." Our sympathy is a loftier and further-sighted sympathy:—we see how man dwarfs himself, how you dwarf him! and there are moments when we view your sympathy with an indescribable anguish, when we resist it,—when we regard your seriousness as more dangerous than any kind of levity. You want, if possible-and there is not a more foolish "if possible"-to do away with suffering; and we?-it really seems that we would rather have it increased and made worse than it has ever been! Well-being, as you understand it—is certainly not a goal; it seems to us an end; a condition which at once renders man ludicrous and contemptible—and makes his destruction desirable! The discipline of suffering, of great suffering-know ye not that it is only this discipline that has produced all the elevations of humanity hitherto? The tension of soul in misfortune which communicates to it its energy, its shuddering in view of rack and ruin, its inventiveness and bravery in undergoing, enduring, interpreting, and exploiting misfortune, and whatever depth, mystery, disguise, spirit, artifice, or greatness has been bestowed upon the soulhas it not been bestowed through suffering, through the discipline of great suffering? In man creature and creator are united: in man there is not only matter, shred, excess, clay, mire, folly, chaos; but there is also the creator, the sculptor, the hardness of the hammer, the divinity of the spectator, and the seventh day—do ye understand this contrast? And that your sympathy for the "creature in man" applies to that which has to be fashioned, bruised, forged, stretched, roasted, annealed, refined-to that

which must necessarily suffer, and is meant to suffer? And our sympathy—do ye not understand what our reverse sympathy applies to, when it resists your sympathy as the worst of all pampering and enervation?—So it is sympathy against sympathy!—But to repeat it once more, there are higher problems than the problems of pleasure and pain and sympathy; and all systems of philosophy which deal only with these are naïvetés.

V

We Immoralists.—This world with which we are concerned, in which we have to fear and love, this almost invisible, inaudible world of delicate command and delicate obedience, a world of "almost" in every respect, captious, insidious, sharp, and tender—yes, it is well protected from clumsy spectators and familiar curiosity! We are woven into a strong net and garment of duties, and cannot disengage ourselves—precisely here, we are "men of duty," even we! Occasionally it is true we dance in our "chains" and betwixt our "swords"; it is none the less true that more often we gnash our teeth under the circumstances, and are impatient at the secret hardship of our lot. But do what we will, fools and appearances say of us: "These are men without duty,"—we have always fools and appearances against us!

VI

Honesty, granting that it is the virtue from which we cannot rid ourselves, we free spirits—well, we will labour at it with all our perversity
and love, and not tire of "perfecting" ourselves in our virtue, which alone
remains: may its glance some day overspread like a gilded, blue, mocking
twilight this aging civilisation with its dull gloomy seriousness! And if,
nevertheless, our honesty should one day grow weary, and sigh, and
stretch its limbs, and find us too hard, and would fain have it pleasanter,
easier, and gentler, like an agreeable vice, let us remain hard, we latest
Stoics, and let us send to its help whatever devilry we have in us:—our
disgust at the clumsy and undefined, our "nitimur in vetitum," our love
of adventure, our sharpened and fastidious curiosity, our most subtle,
disguised, intellectual Will to Power and universal conquest, which
rambles and roves avidiously around all the realms of the future—let us go
with all our "devils" to the help of our "God"!

VII

Woman wishes to be independent, and therefore she begins to enlighten men about "woman as she is"—this is one of the worst developments of the general uglifying of Europe. For what must these clumsy

attempts of feminine scientificality and self-exposure bring to light! Woman has so much cause for shame: in woman there is so much pedantry, superficiality, schoolmasterliness, petty presumption, unbridledness, and indiscretion concealed—study only woman's behaviour towards children!—which has really been best restrained and dominated hitherto by the fear of man. Alas, if ever the "eternally tedious in woman"—she has plenty of it!—is allowed to venture forth! if she begins radically and on principle to unlearn her wisdom and art-of charming, of playing, of frightening away sorrow, of alleviating and taking easily; if she forgets her delicate aptitude for agreeable desires! Female voices are already raised, which, by Saint Aristophanes! make one afraid:—with medical explicitness it is stated in a threatening manner what woman first and last requires from man. Is it not in the very worst taste that woman thus sets herself up to be scientific? Enlightenment hitherto has fortunately been men's affair, men's gift—we remained therewith "among ourselves": and in the end, in view of all that women write about "woman," we may well have considerable doubt as to whether woman really desires enlightenment about herself—and can desire it. If woman does not thereby seek a new ornament for herself-I believe ornamentation belongs to the eternally feminine?—why, then, she wishes to make herself feared: perhaps she thereby wishes to get the mastery. But she does not want truth what does woman care for truth? From the very first nothing is more foreign, more repugnant, or more hostile to woman than truth—her great art is falsehood, her chief concern is appearance and beauty.

VIII

To be mistaken in the fundamental problem of "man and woman," to deny here the profoundest antagonism and the necessity for an eternally hostile tension, to dream here perhaps of equal rights, equal training, equal claims and obligations: that is a typical sign of shallow-mindedness; and a thinker who has proved himself shallow at this dangerous spotshallow in instinct!-may generally be regarded as suspicious, nay more, as betrayed, as discovered; he will probably prove too "short" for all fundamental questions of life, future as well as present, and will be unable to descend into any of the depths. On the other hand, a man who has depth of spirit as well as of desires, and has also the depth of benevolence which is capable of severity and harshness, and easily confounded with them, can only think of woman as Orientals do: he must conceive of her as a possession, as confinable property, as a being predestined for service and accomplishing her mission therein—he must take his stand in this matter upon the immense rationality of Asia, upon the superiority of the instinct of Asia, as the Greeks did formerly; those best heirs and scholars of Asia—who, as is well known, with their increasing culture and amplitude of power, from Homer to the time of Pericles, became gradually stricter towards woman, in short, more oriental. How necessary, how logical, even how humanely desirable this was, let us consider for ourselves!

IX

The weaker sex has in no previous age been treated with so much respect by men as at present—this belongs to the tendency and fundamental taste of democracy, in the same way as disrespectfulness to old age—what wonder is it that abuse should be immediately made of this respect? They want more, they learn to make claims, the tribute of respect is at last felt to be well-nigh galling; rivalry for rights, indeed actual strife itself, would be preferred: in a word, woman is losing modesty. And let us immediately add that she is also losing taste. She is unlearning to fear man: but the woman who "unlearns to fear" sacrifices her most womanly instincts. That woman should venture forward when the fear-inspiring quality in man—or more definitely, the man in man—is no longer either desired or fully developed, is reasonable enough and also intelligible enough; what is more difficult to understand is that precisely thereby—woman deteriorates. This is what is happening nowadays: let us not deceive ourselves about it! Wherever the industrial spirit has triumphed over the military and aristocratic spirit, woman strives for the economic and legal independence of a clerk: "woman as clerkess" is inscribed on the portal of the modern society which is in course of formation. While she thus appropriates new rights, aspires to be "master," and inscribes "progress" of woman on her flags and banners, the very opposite realises itself with terrible obviousness: woman retrogrades.

VIII. PEOPLES AND COUNTRIES

I

THERE WAS A TIME when it was customary to call Germans "deep" by way of distinction; but now that the most successful type of new Germanism is covetous of quite other honours, and perhaps misses "smartness" in all that has depth, it is almost opportune and patriotic to doubt whether we did not formerly deceive ourselves with that commendation: in short, whether German depth is not at bottom something different and worse—and something from which, thank God, we are on the point of successfully ridding ourselves. Let us try, then, to relearn with regard to German depth; the only thing necessary for the purpose is a little vivisection of

the German soul.—The German soul is above all manifold, varied in its source, aggregated and superimposed, rather than actually built: this is owing to its origin. A German who would embolden himself to assert: "Two souls, alas, dwell in my breast," would make a bad guess at the truth, or, more correctly, he would come far short of the truth about the number of souls. As a people made up of the most extraordinary mixing and mingling of races, perhaps even with a preponderance of the pre-Aryan element, as the "people of the centre" in every sense of the term, the Germans are more intangible, more ample, more contradictory, more unknown, more incalculable, more surprising, and even more terrifying than other peoples are to themselves:—they escape definition, and are thereby alone the despair of the French. It is characteristic of the Germans that the question: "What is German?" never dies out among them.

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The German drags at his soul, he drags at everything he experiences. He digests his events badly; he never gets "done" with them; and German depth is often only a difficult, hesitating "digestion." And just as all chronic invalids, all dyspeptics, like what is convenient, so the German loves "frankness" and "honesty"; it is so convenient to be frank and honest!-This confidingness, this complaisance, this showing-the-cards of German honesty, is probably the most dangerous and most successful disguise which the German is up to nowadays: it is his proper Mephistophelean art; with this he can "still achieve much"! The German lets himself go, and thereby gazes with faithful, blue, empty German eyes-and other countries immediately confound him with his dressing-gown -I meant to say that, let "German depth" be what it will-among ourselves alone we perhaps take the liberty to laugh at it—we shall do well to continue henceforth to honour its appearance and good name, and not barter away too cheaply our old reputation as a people of depth for Prussian "smartness," and Berlin wit and sand. It is wise for a people to pose, and let itself be regarded, as profound, clumsy, good-natured, honest, and foolish: it might even be-profound to do so! Finally, we should do honour to our name-we are not called the "tiusche Volk" (deceptive people) for nothing. . . .

III

There are two kinds of geniuses: one which above all engenders and seeks to engender, and another which willingly lets itself be fructified and brings forth. And similarly, among the gifted nations, there are those on whom the woman's problem of pregnancy has devolved, and the secret task of forming, maturing, and perfecting—the Greeks, for instance, were

a nation of this kind, and so are the French; and others which have to fructify and become the cause of new modes of life—like the Jews, the Romans, and, in all modesty be it asked: like the Germans?—nations tortured and enraptured by unknown fevers and irresistibly forced out of themselves, amorous and longing for foreign races (for such as "let themselves be fructified"), and withal imperious, like everything conscious of being full of generative force, and consequently empowered "by the grace of God." These two kinds of geniuses seek each other like man and woman; but they also misunderstand each other—like man and woman.

IV

They are not a philosophical race—the English: Bacon represents an attack on the philosophical spirit generally, Hobbes, Hume, and Locke, an abasement, and a depreciation of the idea of a "philosopher" for more than a century. It was against Hume that Kant uprose and raised himself; it was Locke of whom Schelling rightly said, "Je méprise Locke"; in the struggle against the English mechanical stultification of the world. Hegel and Schopenhauer (along with Goethe) were of one accord; the two hostile brother-geniuses in philosophy, who pushed in different directions towards the opposite poles of German thought, and thereby wronged each other as only brothers will do.—What is lacking in England, and has always been lacking, that half-actor and rhetorician knew well enough, the absurd muddle-head, Carlyle, who sought to conceal under passionate grimaces what he knew about himself: namely, what was lacking in Carlyle—real power of intellect, real depth of intellectual perception, in short, philosophy. It is characteristic of such an unphilosophical race to hold on firmly to Christianity—they need its discipline for "moralising" and humanising. The Englishman, more gloomy, sensual, headstrong, and brutal than the German—is for that very reason, as the baser of the two, also the most pious: he has all the more need of Christianity. To finer nostrils, this English Christianity itself has still a characteristic English taint of spleen and alcoholic excess, for which, owing to good reasons, it is used as an antidote—the finer poison to neutralise the coarser: a finer form of poisoning is in fact a step in advance with coarse-mannered people, a step towards spiritualisation.

V

There are truths which are best recognised by mediocre minds, because they are best adapted for them, there are truths which only possess charms and seductive power for mediocre spirits:—one is pushed to this probably unpleasant conclusion, now that the influence of respectable but

mediocre Englishmen—I may mention Darwin, John Stuart Mill, and Herbert Spencer—begins to gain the ascendency in the middle-class region of European taste. Indeed, who could doubt that it is a useful thing for such minds to have the ascendency for a time? It would be an error to consider the highly developed and independently soaring minds as specially qualified for determining and collecting many little common facts, and deducing conclusions from them; as exceptions, they are rather from the first in no very favourable position towards those who are "the rules." After all, they have more to do than merely to perceive:—in effect, they have to be something new, they have to signify something new, they have to represent new values!

IX. WHAT IS NOBLE?

I

To REFRAIN MUTUALLY from injury, from violence, from exploitation, and put one's will on a par with that of others: this may result in a certain rough sense in good conduct among individuals when the necessary conditions are given (namely, the actual similarity of the individuals in amount of force and degree of worth, and their co-relation within one organisation). As soon, however, as one wished to take this principle more generally, and if possible even as the fundamental principle of society, it would immediately disclose what it really is-namely, a Will to the denial of life, a principle of dissolution and decay. Here one must think profoundly to the very basis and resist all sentimental weakness: life itself is essentially appropriation, injury, conquest of the strange and weak, suppression, severity, obtrusion of peculiar forms, incorporation, and at the least, putting it mildest, exploitation;—but why should one for ever use precisely these words on which for ages a disparaging purpose has been stamped? Even the organisation within which, as was previously supposed, the individuals treat each other as equal—it takes place in every healthy aristocracy-must itself, if it be a living and not a dying organisation, do all that towards other bodies, which the individuals within it refrain from doing to each other: it will have to be the incarnated Will to Power, it will endeavour to grow, to gain ground, attract to itself and acquire ascendency—not owing to any morality or immorality, but because it lives, and because life is precisely Will to Power.

II

In a tour through the many finer and coarser moralities which have hitherto prevailed or still prevail on the earth, I found certain traits

recurring regularly together, and connected with one another, until finally two primary types revealed themselves to me, and a radical distinction was brought to light. There is master-morality and slave-morality;--I would at once add, however, that in all higher and mixed civilisations, there are also attempts at the reconciliation of the two moralities; but one finds still oftener the confusion and mutual misunderstanding of them, indeed, sometimes their close juxtaposition—even in the same man, within one soul. The distinctions of moral values have either originated in a ruling caste, pleasantly conscious of being different from the ruled—or among the ruled class, the slaves and dependents of all sorts. In the first case, when it is the rulers who determine the conception "good," it is the exalted, proud disposition which is regarded as the distinguishing feature, and that which determines the order of rank. The noble type of man separates from himself the beings in whom the opposite of this exalted, proud disposition displays itself: he despises them. Let it at once be noted that in this first kind of morality the antithesis "good" and "bad" means practically the same as "noble" and "despicable";—the antithesis "good" and "evil" is of a different origin.

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It is otherwise with the second type of morality, slave-morality. Supposing that the abused, the oppressed, the suffering, the unemancipated, the weary, and those uncertain of themselves, should moralise, what will be the common element in their moral estimates? Probably a pessimistic suspicion with regard to the entire situation of man will find expression. perhaps a condemnation of man, together with his situation. The slave has an unfavourable eye for the virtues of the powerful; he has a scepticism and distrust, a refinement of distrust of everything "good" that is there honoured—he would fain persuade himself that the very happiness there is not genuine. On the other hand, those qualities which serve to alleviate the existence of sufferers are brought into prominence and flooded with light; it is here that sympathy, the kind, helping hand, the warm heart, patience, diligence, humility, and friendliness attain to honour; for here these are the most useful qualities, and almost the only means of supporting the burden of existence. Slave-morality is essentially the morality of utility. Here is the seat of the origin of the famous antithesis "good" and "evil":—power and dangerousness are assumed to reside in the evil, a certain dreadfulness, subtlety, and strength, which do not admit of being despised. According to slave-morality, therefore, the "evil" man arouses fear; according to master-morality, it is precisely the "good" man who arouses fear and seeks to arouse it, while the bad man is regarded as the despicable being.

PRAGMATISM

by
WILLIAM JAMES

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WILLIAM JAMES

1842-1910

WILLIAM JAMES, born in New York City on January 11, 1842, was the son of the Swedenborgian theologian, Henry James, and the brother of the famous American novelist by the same name. In 1870 he was graduated from Harvard University with the degree of M.D. and two years later received an appointment as lecturer in psychology and anatomy at his alma mater. Later this appointment was transferred to the department of psychology and philosophy. These last two fields became his consuming interest. By 1880 he was assistant professor of philosophy, and five years later he became full professor in that field. In 1889 we find him raised to a full professorship in psychology.

His work and his writings in both these departments made him world-famous. He established at Harvard the first laboratory of experimental psychology in this country. In 1890 he published a two-volume work, *Principles of Psychology*, and became almost immediately the recognized leader of the

physical school of psychologists.

James's most important work, however, was done in the field of philosophy. The quintessence of his genius in this field is to be found in his book of lectures on *Pragmatism*. He developed a philosophic point of view which tended to dominate American, and a great deal of European, thought during the first quarter of the twentieth century, and which is the basis for much present-day philosophic thinking and writing. The complete title of his book is *Pragmatism—A New Name for Old Ways of Thinking*.

The writing of James is the healthy work of a sick man. For many years he suffered from a weak heart. One day, while on his vacation in the Adirondacks, he lost his way. His ex-

ertion to find the road brought about his collapse. From that time on, he was never himself again.

In 1907 he was obliged, because of his ill health, to resign from the Harvard faculty. He took a trip to Europe. It was a triumphant tour for the "Great Professor Weelyam Yames." But upon his return (in the summer of 1910) he suffered another attack. This attack proved fatal.

The philosophy of William James is based upon a foundation of three cardinal points:

Meliorism, Pluralism, Pragmatism.

I—Meliorism. This term is derived from the Latin word melior, which means better. The philosophy of meliorism is the philosophy of betterment, or improvement. It stands half-way between optimism, the credo that all's right with the world, and pessimism, the theory that all's wrong with the world. The meliorist admits that the world is full of evil, but he believes that man is put into it in order to eliminate the evil and to make the world better.

For the world is not a *singular* world—that is, a finished unit, but a *plural* world—that is, "an aggregation of separate and contradictory (and imperfect) elements." This is the doctrine of

2—Pluralism. It is our business, in this plural world, to conquer the evil elements and to establish the good elements. Is success certain? No. Is it possible? Yes. And it is this possibility of success that makes life worth living. It is a joy to fight this good fight—with hope as the guiding star, and with God as the inspiring guide.

Let us then, with God's help, struggle on to shape the world nearer to our heart's desire. Let us live the *practical* life. And this brings us to

3—Pragmatism. The world we live in is a pragmatic—or practical—world. This is the fact to which we have to adapt ourselves. Let us accept those truths which enable us to make the world better for ourselves and for our neighbors. The pragmatism of James is a sensible urge to co-operation among free members of a democratic society. The meaning of life, he believed, lies not in an isolated struggle between individual and individual or between group and group, but in a united struggle of all individuals and of all groups against the forces that would hold back the general progress of mankind.

PRAGMATISM

LECTURE 1: THE PRESENT DILEMMA IN PHILOSOPHY

In Philosophy we have a contrast expressed in the pair of terms 'rationalist' and 'empiricist,' 'empiricist' meaning your lover of facts in all their crude variety, 'rationalist' meaning your devotee to abstract and eternal principles. No one can live an hour without both facts and principles, so it is a difference rather of emphasis; yet it breeds antipathies of the most pungent character between those who lay the emphasis differently; and we shall find it extraordinarily convenient to express a certain contrast in men's ways of taking their universe, by talking of the 'empiricist' and of the 'rationalist' temper.

Historically we find the terms 'intellectualism' and 'sensationalism' used as synonyms of 'rationalism' and 'empiricism.' Well, nature seems to combine most frequently with intellectualism an idealistic and optimistic tendency. Empiricists on the other hand are not uncommonly materialistic, and their optimism is apt to be decidedly conditional and tremulous. Rationalism is always monistic. It starts from wholes and universals, and makes much of the unity of things. Empiricism starts from the parts, and makes of the whole a collection—is not averse therefore to calling itself pluralistic. Rationalism usually considers itself more religious than empiricism, but there is much to say about this claim, so I merely mention it. It is a true claim when the individual rationalist is what is called a man of feeling, and when the individual empiricist prides himself on being hard-headed. In that case the rationalist will usually also be in favor of what is called free-will, and the empiricist will be a fatalist-I use the terms most popularly current. The rationalist finally will be of dogmatic temper in his affirmations, while the empiricist may be more sceptical and open to discussion.

I will write these traits down in two columns. I think you will practically recognize the two types of mental make-up that I mean if I head the columns by the titles 'tender-minded' and 'tough-minded' respectively.

THE TENDER-MINDED
Rationalistic (going by 'principles'),
Intellectualistic,
Idealistic,
Optimistic,

Religious, Free-willist, Monistic, Dogmatical. Empiricist (going by 'facts'), Sensationalistic, Materialistic, Pessimistic, Irreligious, Fatalistic, Pluralistic, Sceptical.

THE TOUGH-MINDED

Most of us have a hankering for the good things on both sides of the line. Facts are good, of course—give us lots of facts. Principles are good—give us plenty of principles. The world is indubitably one if you look at it in one way, but as indubitably is it many, if you look at it in another. And so forth—your ordinary philosophic layman never being a radical, never straightening out his system, but living vaguely in one plausible compartment of it or another to suit the temptations of successive hours.

But some of us are more than mere laymen in philosophy. We are worthy of the name of amateur athletes, and are vexed by too much inconsistency and vacillation in our creed. We cannot preserve a good intellectual conscience so long as we keep mixing incompatibles from opposite sides of the line.

Never were as many men of a decidedly empiricist proclivity in existence as there are at the present day. Our children, one may say, are almost born scientific. But our esteem for facts has not neutralized in us all religiousness. It is itself almost religious. Our scientific temper is devout. Now take a man of this type, and let him be also a philosophic amateur, unwilling to mix a hodge-podge system after the fashion of a common layman, and what does he find his situation to be? He wants facts; he wants science; but he also wants a religion.

Now what kinds of philosophy do you find actually offered to meet your need? You find an empirical philosophy that is not religious enough, and a religious philosophy that is not empirical enough for your purpose. If you look to the quarter where facts are most considered you find the whole tough-minded program in operation, and the 'conflict between science and religion' in full blast.

If now, on the other hand, you turn to the religious quarter for consolation, and take counsel of the tender-minded philosophies, what do you find?

Religious philosophy in our day and generation is, among us English-reading people, of two main types. One of these is more radical and aggressive, the other has more the air of fighting a slow retreat. By the more radical wing of religious philosophy I mean the so-called transcendental idealism of the Anglo-Hegelian school, the philosophy of such men as Green, the Cairds, Bosanquet, and Royce. This philosophy has

greatly influenced the more studious members of our Protestant ministry. It is pantheistic, and undoubtedly it has already blunted the edge of the traditional theism in Protestantism at large.

That theism remains, however. It is the lineal descendant, through one stage of concession after another, of the dogmatic scholastic theism still taught rigorously in the seminaries of the Catholic Church. For a long time it used to be called among us the philosophy of the Scottish school.

These two systems are what you have to choose between if you turn to the tender-minded school. And if you are the lovers of facts I have supposed you to be, you find the trail of the serpent of rationalism, of intellectualism, over everything that lies on that side of the line. You escape indeed the materialism that goes with the reigning empiricism; but you pay for your escape by losing contact with the concrete parts of life.

It is at this point that my own solution begins to appear. I offer the oddly named thing pragmatism as a philosophy that can satisfy both kinds of demand. It can remain religious like the rationalisms, but at the same time, like the empiricisms, it can preserve the richest intimacy with facts.

If any of you here are professional philosophers, and some of you I know to be such, you will doubtless have felt my discourse so far to have been crude in an unpardonable, nay, in an almost incredible degree. Tender-minded and tough-minded, what a barbaric disjunction!

Believe me, I feel the full force of the indictment. The picture I have given is indeed monstrously over-simplified and rude. But like all abstractions, it will prove to have its use. If philosophers can treat the life of the universe abstractly, they must not complain of an abstract treatment of the life of philosophy itself. In point of fact the picture I have given is, however coarse and sketchy, literally true. Temperaments with their cravings and refusals do determine men in their philosophies, and always will. The details of systems may be reasoned out piecemeal, and when the student is working at a system, he may often forget the forest for the single tree. But when the labor is accomplished, the mind always performs its big summarizing act, and the system forthwith stands over against one like a living thing, with that strange simple note of individuality which haunts our memory, like the wraith of the man, when a friend or enemy of ours is dead.

Our work over the details of his system is indeed what gives us our resultant impression of the philosopher, but it is on the resultant impression itself that we react. Expertness in philosophy is measured by the definiteness of our summarizing reactions, by the immediate perceptive epithet with which the expert hits such complex objects off. But great expertness is not necessary for the epithet to come. Few people have

definitely articulated philosophies of their own. But almost every one has his own peculiar sense of a certain total character in the universe, and of the inadequacy fully to match it of the peculiar systems that he knows. They don't just cover his world.

One word more—namely about philosophies necessarily being abstract outlines. There are outlines and outlines, outlines of buildings that are fat, conceived in the cube by their planner, and outlines of buildings invented flat on paper, with the aid of ruler and compass. These remain skinny and emaciated even when set up in stone and mortar, and the outline already suggests that result. An outline in itself is meagre, truly, but it does not necessarily suggest a meagre thing. It is the essential meagreness of what is suggested by the usual rationalistic philosophies that moves empiricists to their gesture of rejection. The case of Herbert Spencer's system is much to the point here. Rationalists feel his fearful array of insufficiencies, yet the half of England wants to bury him in Westminster Abbey.

Why? Simply because we feel his heart to be in the right place philosophically. His principles may be all skin and bone, but at any rate his books try to mould themselves upon the particular shape of this particular world's carcase. The noise of facts resounds through all his chapters, the citations of fact never cease, he emphasizes facts, turns his face towards their quarter; and that is enough. It means the right kind of thing for the empiricist mind.

The pragmatistic philosophy of which I hope to begin talking in my next lecture preserves as cordial a relation with facts, and, unlike Spencer's philosophy, it neither begins nor ends by turning positive religious constructions out of doors—it treats them cordially as well.

LECTURE II: WHAT PRAGMATISM MEANS

THE PRAGMATIC METHOD is primarily a method of settling metaphysical disputes that otherwise might be interminable. Is the world one or many?—fated or free?—material or spiritual?—here are notions either of which may or may not hold good of the world; and disputes over such notions are unending. The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences. What difference would it practically make to anyone if this notion rather than that notion were true? If no practical difference whatever can be traced, then the alternatives mean practically the same thing, and all dispute is idle. Whenever a dispute is serious, we ought to be able to show some practical difference that must follow from one side or the other's being right.

It is astonishing to see how many philosophical disputes collapse into insignificance the moment you subject them to this simple test of tracing a concrete consequence. There can be no difference anywhere that doesn't make a difference elsewhere—no difference in abstract truth that doesn't express itself in a difference in concrete fact and in conduct consequent upon that fact, imposed on somebody, somehow, somewhere, and somewhen. The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one.

Pragmatism represents a perfectly familiar attitude in philosophy, the empiricist attitude, but it represents it, as it seems to me, both in a more radical and in a less objectionable form than it has ever yet assumed.

At the same time it does not stand for any special results. It is a method only. But the general triumph of that method would mean an enormous change in what I called in my last lecture the 'temperament' of philosophy. It appears less as a solution than as a program for more work, and more particularly as an indication of the ways in which existing realities may be *changed*.

Theories thus become instruments, not answers to enigmas, in which we can rest. We don't lie back upon them, we move forward, and, on occasion, make nature over again by their aid. Pragmatism unstiffens all our theories, limbers them up and sets each one at work. Being nothing essentially new, it harmonizes with many ancient philosophic tendencies.

No particular results then, so far, but only an attitude of orientation, is what the pragmatic method means. The attitude of looking away from first things, principles, 'categories,' supposed necessities; and of looking towards last things, fruits, consequences, facts.

So much for the pragmatic method! The word pragmatism has come to be used in a still wider sense, as meaning also a certain theory of truth.

One of the most successfully cultivated branches of philosophy in our time is what is called inductive logic, the study of the conditions under which our sciences have evolved. Writers on this subject have begun to show a singular unanimity as to what the laws of nature and elements of fact mean, when formulated by mathematicians, physicists, and chemists. When the first mathematical, logical, and natural uniformities, the first laws, were discovered, men were so carried away by the clearness, beauty, and simplification that resulted, that they believed themselves to have deciphered authentically the eternal thoughts of the Almighty.

But as the sciences have developed farther, the notion has gained ground that most, perhaps all, of our laws are only approximations. The laws themselves, moreover, have grown so numerous that there is no counting them; and so many rival formulations are proposed in all the branches of science that investigators have become accustomed to the notion that no theory is absolutely a transcript of reality, but that any one of them may from some point of view be useful. Thus human arbitrariness has driven divine necessity from scientific logic.

Riding now on the front of this wave of scientific logic, Messrs. Schiller and Dewey appear with their pragmatistic account of what truth everywhere signifies. Everywhere, these teachers say, 'truth' in our ideas and beliefs means the same thing that it means in science. It means, they say, nothing but this, that ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience, to summarize them and get about among them by conceptual short-cuts instead of following the interminable succession of particular phenomena. Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying, saving labor; is true for just so much, true in so far forth, true instrumentally. This is the 'instrumental' view of truth.

The observable process which Schiller and Dewey particularly singled out for generalization is the familiar one by which any individual settles into new opinions. The process here is always the same. The individual has a stock of old opinions already, but he meets a new experience that puts them to a strain. The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions. He saves as much of it as he can, for in this matter of belief we are all extreme conservatives. So he tries to change first this opinion, and then that (for they resist change very variously), until at last some new idea comes up which he can graft upon the ancient stock with a minimum of disturbance of the latter, some idea that mediates between the stock and the new experience and runs them into one another most felicitously and expediently.

This new idea is then adopted as the true one. It preserves the older stock of truths with a minimum of modification, stretching them just enough to make them admit the novelty, but conceiving that in ways as familiar as the case leaves possible.

The point I now urge you to observe particularly is the part played by the older truths. Failure to take account of it is the source of much of the unjust criticism levelled against pragmatism. Their influence is absolutely controlling. Loyalty to them is the first principle—in most cases it is the only principle; for by far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconception is to ignore them altogether, or to abuse those who bear witness for them.

A new opinion counts as 'true' just in proportion as it gratifies the individual's desire to assimilate the novel in his experience to his beliefs in stock. It must both lean on old truth and grasp new fact; and its success in doing this is a matter for the individual's appreciation. When old truth grows, then, by new truth's addition, it is for subjective reasons. We are in the process and obey the reasons. That new idea is truest which performs most felicitously its function of satisfying our double urgency. It makes itself true, gets itself classed as true, by the way it works; grafting itself then upon the ancient body of truth, which thus grows much as a tree grows by the activity of a new layer of cambium.

Such then would be the scope of pragmatism—first, a method; and second, a genetic theory of what is meant by truth.

But enough of this at present. The justification of what I say must be postponed. I wish now to add a word in further explanation of the claim I made at our last meeting, that pragmatism may be a happy harmonizer of empiricist ways of thinking with the more religious demands of human beings.

Men who are strongly of the fact-loving temperament are liable to be kept at a distance by the small sympathy with facts which that philosophy from the present-day fashion of idealism offers them. It is far too intellectualistic. Aspirants to a philosophic religion turn, as a rule, more hopefully nowadays towards idealistic pantheism than towards the older dualistic theism, in spite of the fact that the latter still counts able defenders.

But the brand of pantheism offered is hard for them to assimilate if they are lovers of facts, or empirically minded. It is the absolutistic brand, spurning the dust and reared upon pure logic. It keeps no connexion whatever with concreteness. Affirming the Absolute Mind, which is its substitute for God, to be the rational presupposition of all particulars of fact, whatever they may be, it remains supremely indifferent to what the particular facts in our world actually are. Be they what they may, the Absolute will father them.

Far be it from me to deny the majesty of this conception, or its capacity to yield religious comfort to a most respectable class of minds. But from the human point of view, no one can pretend that it doesn't suffer from the faults of remoteness and abstractness. It is eminently a product of what I have ventured to call the rationalistic temper. It disdains empiricism's needs.

Now pragmatism, devoted though she be to facts, has no such materialistic bias as ordinary empiricism labors under. Moreover, she has no objection whatever to the realizing of abstractions, so long as you get about among particulars with their aid and they actually carry you somewhere. Interested in no conclusions but those which our minds and our experiences work out together, she has no a priori prejudices against theology. If theological ideas prove to have a value for concrete life, they will be true, for pragmatism, in the sense of being good for so much. For how much more they are true, will depend entirely on their relations to the other truths that also have to be acknowledged.

I am well aware how odd it must seem to some of you to hear me say that an idea is 'true' so long as to believe it is profitable to our lives. That it is good, for as much as it profits, you will gladly admit. If what we do by its aid is good, you will allow the idea itself to be good in so far forth, for we are the better for possessing it. But is it not a strange misuse of the word truth, you will say, to call ideas also 'true' for this reason?

To answer this difficulty fully is impossible at this stage of my account. Let me now say only this, that truth is one species of good, and not, as is usually supposed, a category distinct from good, and co-ordinate with it. The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons.

You see by this what I meant when I called pragmatism a mediator and reconciler and said, borrowing the word from Papini, that she 'unstiffens' our theories. She has in fact no prejudices whatever, no obstructive dogmas, no rigid canons of what shall count as proof. She is completely genial. She will entertain any hypothesis, she will consider any evidence. It follows that in the religious field she is at a great advantage both over positivistic empiricism, with its anti-theological bias, and over religious rationalism, with its exclusive interest in the remote, the noble, the simple, and the abstract in the way of conception.

In short, she widens the field of search for God. Rationalism sticks to logic and the empyrean. Empiricism sticks to the external senses. Pragmatism is willing to take anything, to follow either logic or the senses and to count the humblest and most personal experiences. She will count mystical experiences if they have practical consequences. She will take a God who lives in the very dirt of private fact—if that should seem a likely place to find him.

Her only test of probable truth is what works best in the way of leading us, what fits every part of life best and combines with the collectivity of experience's demands, nothing being omitted. If theological ideas should do this, if the notion of God, in particular, should prove to do it, how could pragmatism possibly deny God's existence? She could see no meaning in treating as 'not true' a notion that was pragmatically so successful. What other kind of truth could there be, for her, than all this agreement with concrete reality?

LECTURE III: SOME METAPHYSICAL PROBLEMS PRAGMATICALLY CONSIDERED

I AM NOW to make the pragmatic method more familiar by giving you some illustrations of its application to particular problems. I will begin with what is driest, and the first thing I shall take will be the problem of *Substance*. Here is a bit of blackboard crayon. Its modes, attributes, properties, accidents, or affections,—use which term you will,—are whiteness, friability, cylindrical shape, insolubility in water, etc., etc. But the bearer of these attributes is so much *chalk*, which thereupon is called the substance in which they inhere.

Now it was very early seen that all we know of the chalk is the whiteness, friability, etc. A group of attributes is what each substance here is known as, they form its sole cash-value for our actual experience.

Material substance was criticised by Berkeley with such telling effect that his name has reverberated through all subsequent philosophy. So far from denying the external world which we know, Berkeley corroborated it. It was the scholastic notion of a material substance unapproachable by us, behind the external world, deeper and more real than it, and needed to support it, which Berkeley maintained to be the most effective of all reducers of the external world to unreality. Abolish that substance, he said, believe that God, whom you can understand and approach, sends you the sensible world directly, and you confirm the latter and back it up by his divine authority. Berkeley's criticism of 'matter' was consequently absolutely pragmatistic. Matter is known as our sensations of colour, figure, hardness, and the like. They are the cash-value of the term. The difference matter makes to us by truly being is that we then get such sensations; by not being, is that we lack them. These sensations then are its sole meaning. Berkeley doesn't deny matter, then; he simply tells us what it consists of. It is a true name for just so much in the way of sensations.

What do we *mean* by matter? What practical difference can it make *now* that the world should be run by matter or by spirit?

It makes not a single jot of difference so far as the past of the world goes, whether we deem it to have been the work of matter or whether we think a divine spirit was its author. Both theories have shown all their consequences and, by the hypothesis we are adopting, these are identical. The pragmatist must consequently say that the two theories, in spite of their different-sounding names, mean exactly the same thing, and that the dispute is purely verbal.

Thus if no future detail of experience or conduct is to be deduced from our hypothesis, the debate between materialism and theism becomes quite idle and insignificant. Matter and God in that event mean exactly the same thing—the power, namely, neither more nor less, that could make just this completed world—and the wise man is he who in such a case would turn his back on such a supererogatory discussion.

But philosophy is prospective also, and, after finding what the world has been and done, and yielded, still asks the further question, 'What does the world *promise?'*

Theism and materialism, so indifferent when taken retrospectively, point, when we take them prospectively, to wholly different outlooks of experience. For, according to the theory of mechanical evolution, the laws of redistribution of matter and motion, though they are certainly to thank for all the good hours which our organisms have ever yielded us and for all the ideals which our minds now frame, are yet fatally certain to undo their work again, and to redissolve everything that they have once evolved.

Materialism means simply the denial that the moral order is eternal, and the cutting off of ultimate hopes; spiritualism means the affirmation of an eternal moral order and the letting loose of hope. Surely here is an issue genuine enough, for anyone who feels it; and, as long as men are men, it will yield matter for a serious philosophic debate.

Let me take up another well-worn controversy, the free-will problem. Most persons who believe in what is called their free will do so after the rationalistic fashion. It is a principle, a positive faculty or virtue added to man, by which his dignity is enigmatically augmented. He ought to believe it for this reason. Determinists, who deny it, who say that individual men originate nothing, but merely transmit to the future the whole push of the past cosmos of which they are so small an expression, diminish man. He is less admirable, stripped of this creative principle.

Free will pragmatically means novelties in the world, the right to expect that in its deepest elements as well as in its surface phenomena, the future may not identically repeat and imitate the past. Free will is thus a general cosmological theory of promise.

LECTURE IV: THE ONE AND THE MANY

WE SAW in the last lecture that the pragmatic method, in its dealings with certain concepts, instead of ending with admiring contemplation, plunges forward into the river of experience with them and prolongs the perspective by their means.

In this present hour I wish to illustrate the pragmatic method by

one more application. I wish to turn its light upon the ancient problem of 'the one and the many.'

Philosophy has often been defined as the quest or the vision of the world's unity. Few persons ever challenge this definition, which is true as far as it goes, for philosophy has indeed manifested above all things its interest in unity. But how about the variety in things? Is that such an irrelevant matter? If instead of using the term philosophy, we talk in general of our intellect and its needs, we quickly see that unity is only one of them. What our intellect really aims at is neither variety nor unity taken singly, but totality. In this, acquaintance with reality's diversities is as important as understanding their connexion. Curiosity goes pari passu with the systematizing passion.

'The world is One!'—the formula may become a sort of number-worship. 'Three' and 'seven' have, it is true, been reckoned sacred numbers; but, abstractly taken, why is 'one' more excellent than 'forty-three,' or than 'two million and ten'? In this first vague conviction of the world's unity, there is so little to take hold of that we hardly know what we mean by it.

The only way to get forward with our notion is to treat it pragmatically. Granting the oneness to exist, what facts will be different in consequence? What will the unity be known as? The world is One—yes, but how one? What is the practical value of the oneness for us?

Asking such questions, we pass from the vague to the definite, from the abstract to the concrete. Many distinct ways in which a oneness predicated of the universe might make a difference, come to view. I will note successively the more obvious of these ways.

- 1. First, the world is at least one subject of discourse. If its manyness were so irremediable as to permit no union whatever of its parts, not even our minds could 'mean' the whole of it at once: they would be like eyes trying to look in opposite directions. Well, let things be one in so far forth! You can then fling such a word as universe at the whole collection of them, but what matters it? It still remains to be ascertained whether they are one in any further or more valuable sense.
- 2. Are they, for example, continuous? Can you pass from one to another, keeping always in your one universe without any danger of falling out? In other words, do the parts of our universe hang together, instead of being like detached grains of sand?

Even grains of sand hang together through the space in which they are embedded, and if you can in any way move through such space, you can pass continuously from number one of them to number two. Space and time are thus vehicles of continuity by which the world's parts hang together. The practical difference to us, resultant from these forms of union, is immense. Our whole motor life is based upon them.

3. There are innumerable other paths of practical continuity among things. Lines of *influence* can be traced by which they hang together. Following any such line you pass from one thing to another till you may have covered a good part of the universe's extent.

Human efforts are daily unifying the world more and more in definite systematic ways. The result is innumerable little hangings-together of the world's parts within the larger hangings-together, little worlds, not only of discourse but of operation, within the wider universe. Each system exemplifies one type or grade of union, its parts being strung on that peculiar kind of relation, and the same part may figure in many different systems, as a man may hold various offices and belong to several clubs. From this 'systematic' point of view, therefore, the pragmatic value of the world's unity is that all these definite networks actually and practically exist.

- 4. All these systems of influence may be listed under the general problem of the world's causal unity. If the minor causal influences among things should converge towards one common causal origin of them in the past, one great first cause for all that is, one might then speak of the absolute causal unity of the world. Against this notion of the unity of origin of all things there has always stood the pluralistic notion of an eternal self-existing many in the shape of atoms or even of spiritual units of some sort.
- 5. The most important sort of union that obtains among things, pragmatically speaking, is their generic unity. Things exist in kinds, there are many specimens in each kind, and what the 'kind' implies for one specimen, it implies also for every other specimen of that kind. We can easily conceive that every fact in the world might be singular, that is, unlike any other fact and sole of its kind. In such a world of singulars our logic would be useless, for logic works by predicating of the single instance what is true of all its kind. With no two things alike in the world, we should be unable to reason from our past experiences to our future ones. The existence of so much generic unity in things is thus perhaps the most momentous pragmatic specification of what it may mean to say 'the world is One.' Absolute generic unity would obtain if there were one summum genus under which all things without exception could be eventually subsumed. 'Beings,' 'thinkables,' 'experiences,' would be tandidates for this position.
- 6. Another specification of what the phrase 'the world is One' may mean is unity of purpose. An enormous number of things in the world subserve a common purpose. All the man-made systems, administrative, industrial, military, or what not, exist each for its controlling purpose.

Our different purposes are at war with each other. Where one can't crush the other out, they compromise; and the result is again different

from what anyone distinctly proposed beforehand. Vaguely and generally, much of what was purposed may be gained; but everything makes strongly for the view that our world is incompletely unified teleologically and is still trying to get its unification better organized.

- 7. Æsthetic union among things also obtains, and is very analogous to teleological union. Things tell a story. Their parts hang together so as to work out a climax. They play into each other's hands expressively.
- 8. The great monistic denkmittel for a hundred years past has been the notion of the one Knower. The many exist only as objects for his thought—exist in his dream, as it were; and as he knows them, they have one purpose, form one system, tell one tale for him. This notion of an all-enveloping noetic unity in things is the sublimest achievement of intellectualist philosophy.

'The world is One,' therefore, just so far as we experience it to be concatenated, One by as many definite conjunctions as appear. But then also not One by just as many definite dis-junctions as we find. The oneness and the manyness of it thus obtain in respects which can be separately named. It is neither a universe pure and simple nor a multiverse pure and simple. And its various manners of being One suggest, for their accurate ascertainment, so many distinct programs of scientific work. Thus the pragmatic question 'What is the oneness known as? What practical difference will it make?' saves us from all feverish excitement over it as a principle of sublimity and carries us forward into the stream of experience with a cool head. The stream may indeed reveal far more connexion and union than we now suspect, but we are not entitled on pragmatic principles to claim absolute oneness in any respect in advance.

Pragmatism, pending the final empirical ascertainment of just what the balance of union and disunion among things may be, must obviously range herself upon the pluralistic side. Some day, she admits, even total union, with one knower, one origin, and a universe consolidated in every conceivable way, may turn out to be the most acceptable of all hypotheses. Meanwhile the opposite hypothesis, of a world imperfectly unified still, and perhaps always to remain so, must be sincerely entertained. This latter hypothesis is pluralism's doctrine. Since absolute monism forbids its being even considered seriously, branding it as irrational from the start, it is clear that pragmatism must turn its back on absolute monism, and follow pluralism's more empirical path.

This leave us with the common-sense world, in which we find things partly joined and partly disjoined. 'Things,' then, and their 'conjunctions'—what do such words mean, pragmatically handled? In my next lecture, I will apply the pragmatic method to the stage of philosophizing known as Common Sense.

LECTURE V: PRAGMATISM AND COMMON SENSE

Our knowledge grows in spots. The spots may be large or small, but the knowledge never grows all over: some old knowledge always remains what it was. Your knowledge of pragmatism, let us suppose, is growing now. Later, its growth may involve considerable modification of opinions which you previously held to be true. But such modifications are apt to be gradual.

New truths are resultants of new experiences and of old truths combined and mutually modifying one another. And since this is the case in the changes of opinion of to-day, there is no reason to assume that it has not been so at all times. It follows that very ancient modes of thought may have survived through all the later changes in men's opinions.

My thesis now is this, that our fundamental ways of thinking about things are discoveries of exceedingly remote ancestors, which have been able to preserve themselves throughout the experience of all subsequent time. They form one great stage of equilibrium in the human mind's development, the stage of common sense. Other stages have grafted themselves upon this stage, but have never succeeded in displacing it. Let us consider this common-sense stage first, as if it might be final.

In practical talk, a man's common sense means his good judgment, his freedom from excentricity, his gumption, to use the vernacular word. In philosophy it means something entirely different, it means his use of certain intellectual forms or categories of thought. Were we lobsters, or bees, it might be that our organization would have led to our using quite different modes from these of apprehending our experiences. It might be too that such categories, unimaginable by us to-day, would have proved on the whole as serviceable for handling our experiences mentally as those which we actually use.

The old common-sense way of rationalizing your sense-impressions is by a set of concepts of which the most important are these:

Thing;
The same or different;
Kinds;
Minds;
Bodies;
One Time;
One Space;
Subjects and attributes;
Causal influences;
The fancied;
The real.

We are now so familiar with the order that these notions have woven for us out of the everlasting weather of our perceptions that we find it hard to realize how little of a fixed routine the perceptions follow when taken by themselves.

Common sense appears thus as a perfectly definite stage in our understanding of things, a stage that satisfies in an extraordinarily successful way the purposes for which we think. 'Things' do exist, even when we do not see them. Their 'kinds' also exist. Their 'qualities' are what they act by, and are what we act on; and these also exist.

But when we look back, and speculate as to how the common-sense categories may have achieved their wonderful supremacy, no reason appears why it may not have been by a process just like that by which the conceptions due to Democritus, Berkeley, or Darwin achieved their similar triumphs in more recent times.

The peripatetic philosophy, obeying rationalist propensities, has tried to eternalize the common-sense categories by treating them very technically and articulately. A 'thing' for instance is a being, or ens. An ens is a subject in which qualities 'inhere.' A subject is a substance. Substances are of kinds, and kinds are definite in number, and discrete. These distinctions are fundamental and eternal. As terms of discourse they are indeed magnificently useful, but what they mean, apart from their use in steering our discourse to profitable issues, does not appear. If you ask a scholastic philosopher what a substance may be in itself, apart from its being the support of attributes, he simply says that your intellect knows perfectly what the word means.

But what the intellect knows clearly is only the word itself and its steering function. So it comes about that intellects sibi permissi, intellects only curious and idle, have forsaken the common-sense level for what in general terms may be called the 'critical' level of thought. Not merely such intellects either-your Humes and Berkeleys and Hegels; but practical observers of facts, your Galileos, Daltons, Faradays, have found it impossible to treat the naïfs sense-termini of common sense as ultimately real. As common sense interpolates her constant 'things' between our intermittent sensations, so science extrapolates her world of 'primary' qualities, her atoms, her ether, her magnetic fields, and the like, beyond the common-sense world. The 'things' are now invisible impalpable things; and the old visible common-sense things are supposed to result from the mixture of these invisibles. Or else the whole naïf conception of thing gets superseded, and a thing's name is interpreted as denoting only the law or regel der verbindung by which certain of our sensations habitually succeed or coexist.

Science and critical philosophy thus burst the bounds of common sense. With science naïf realism ceases: 'Secondary' qualities become

unreal; primary ones alone remain. With critical philosophy, havoc is made of everything. The common-sense categories one and all cease to represent anything in the way of being; they are but sublime tricks of human thought, our ways of escaping bewilderment in the midst of sensation's irremediable flow.

But the scientific tendency in critical thought, though inspired at first by purely intellectual motives, has opened an entirely unexpected range of practical utilities to our astonished view.

The philosophic stage of criticism, much more thorough in its negations than the scientific stage, so far gives us no new range of practical power. Locke, Hume, Berkeley, Kant, Hegel, have all been utterly sterile, so far as shedding any light on the details of nature goes, and I can think of no invention or discovery that can be directly traced to anything in their peculiar thought, for neither with Berkeley's tar-water nor with Kant's nebular hypothesis had their respective philosophic tenets anything to do. The satisfactions they yield to their disciples are intellectual, not practical; and even then we have to confess that there is a large minusside to the account.

There are thus at least three well-characterized levels, stages, or types of thought about the world we live in, and the notions of one stage have one kind of merit, those of another stage another kind. It is impossible, however, to say that any stage as yet in sight is absolutely more true than any other. Common sense is the more consolidated stage, because it got its innings first, and made all language into its ally. Whether it or science be the more august stage may be left to private judgment. But neither consolidation nor augustness are decisive marks of truth.

There is no ringing conclusion possible when we compare these types of thinking, with a view to telling which is the more absolutely true. Their naturalness, their intellectual economy, their fruitfulness for practice, all start up as distinct tests of their veracity, and as a result we get confused. Common sense is better for one sphere of life, science for another, philosophic criticism for a third; but whether either be truer absolutely, Heaven only knows.

There are only two points that I wish you to retain from the present lecture. The first one relates to common sense. We have seen reason to suspect it, to suspect that in spite of their being so venerable, of their being so universally used and built into the very structure of language, its categories may after all be only a collection of extraordinarily successful hypotheses by which our forefathers have from time immemorial unified and straightened the discontinuity of their immediate experiences, and put themselves into an equilibrium with the surface of nature so satisfactory for ordinary practical purposes that it certainly would have lasted forever, but for the excessive intellectual vivacity of Democritus,

Archimedes, Galileo, Berkeley, and of other excentric geniuses whom the example of such men inflamed.

The other point is this. Ought not the existence of the various types of thinking which we have reviewed, each so splendid for certain purposes, yet all conflicting still, and neither one of them able to support a claim of absolute veracity, to awaken a presumption favorable to the pragmatistic view that all our theories are instrumental, are mental modes of adaptation to reality, rather than revelations or gnostic answers to some divinely instituted world-enigma?

LECTURE VI: PRAGMATISM'S CONCEPTION OF TRUTH

TRUTH, as any dictionary will tell you, is a property of certain of our ideas. It means their 'agreement,' as falsity means their disagreement, with 'reality.' Pragmatists and intellectualists both accept this definition as a matter of course. They begin to quarrel only after the question is raised as to what may precisely be meant by the term 'agreement,' and what by the term 'reality,' when reality is taken as something for our ideas to agree with.

Pragmatism asks its usual question. 'Grant an idea or belief to be true,' it says, 'what concrete difference will its being true make in any one's actual life?'

The moment pragmatism asks this question, it sees the answer: True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we can not. That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known as.

This thesis is what I have to defend. The truth of an idea is not a stagnant property inherent in it. Truth happens to an idea. It becomes true, is made true by events. Its verity is in fact an event, a process: the process namely of its verifying itself, its veri-fication. Its validity is the process of its valid-ation.

But what do the words verification and validation themselves pragmatically mean? They again signify certain practical consequences of the verified and validated idea. It is hard to find any one phrase that characterizes these consequences better than the ordinary agreement-formula—just such consequences being what we have in mind whenever we say that our ideas 'agree' with reality. They lead us, namely, through the acts and other ideas which they instigate, into or up to, or towards, other parts of experience with which we feel all the while—such feeling being among our potentialities—that the original ideas remain in agreement. The connexions and transitions come to us from point to point as being pro-

gressive, harmonious, satisfactory. This function of agreeable leading is what we mean by an idea's verification.

The importance to human life of having true beliefs about matters of fact is a thing too notorious. We live in a world of realities that can be infinitely useful or infinitely harmful. Ideas that tell us which of them to expect count as the true ideas in all this primary sphere of verification, and the pursuit of such ideas is a primary human duty. The possession of truth, so far from being here an end in itself, is only a preliminary means towards other vital satisfactions. True is the name for whatever idea starts the verification-process, useful is the name for its completed function in experience. True ideas would never have been singled out as such, would never have acquired a class-name, least of all a name suggesting value, unless they had been useful from the outset in this way.

From this simple cue pragmatism gets her general notion of truth as something essentially bound up with the way in which one moment in our experience may lead us towards other moments which it will be worth while to have been led to. Primarily, and on the common-sense level, the truth of a state of mind means this function of a leading that is worth while. When a moment in our experience, of any kind whatever, inspires us with a thought that is true, that means that sooner or later we dip by that thought's guidance into the particulars of experience again and make advantageous connexion with them.

To 'agree' in the widest sense with a reality can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed. Better either intellectually or practically! And often agreement will only mean the negative fact that nothing contradictory from the quarter of that reality comes to interfere with the way in which our ideas guide us elsewhere. To copy a reality is, indeed, one very important way of agreeing with it, but it is far from being essential. The essential thing is the process of being guided. Any idea that helps us to deal, whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that fits, in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will hold true of that reality.

Such is the large loose way in which the pragmatist interprets the word agreement. He treats it altogether practically. He lets it cover any process of conduction from a present idea to a future terminus, provided only it run prosperously. It is only thus that 'scientific' ideas, flying as they do beyond common sense, can be said to agree with their realities. It is, as I have already said, as if reality were made of ether, atoms, or electrons, but we mustn't think so literally. The term 'energy' doesn't even pretend to stand for anything 'objective.' It is only a way of measur-

ing the surface of phenomena so as to string their changes on a simple formula,

LECTURE VII: PRAGMATISM AND HUMANISM

What hardens the heart of every one I approach with the view of truth sketched in my last lecture is that typical idol of the tribe, the notion of the Truth, conceived as the one answer, determinate and complete, to the one fixed enigma which the world is believed to propound. It never occurs to most of us that the question 'What is the truth?' is no real question and that the whole notion of the truth is an abstraction from the fact of truths in the plural, a mere useful summarizing phrase like the Latin Language or the Law.

Laws and languages are man-made things. Mr. Schiller applies the analogy to beliefs, and proposes the name of 'Humanism' for the doctrine that to an unascertainable extent our truths are man-made products too. Human motives sharpen all our questions, human satisfactions lurk in all our answers, all our formulas have a human twist. This element is so inextricable in the products that Mr. Schiller sometimes seems almost to leave it an open question whether there be anything else. 'The world,' he says, 'is what we make it. It is fruitless to define it by what it originally was or by what it is apart from us; it is what is made of it. Hence . . . the world is plastic.' He adds that we can learn the limits of the plasticity only by trying, and that we ought to start as if it were wholly plastic, acting methodically on that assumption, and stopping only when we are decisively rebuked.

Lotze has in several places made a deep suggestion. We naïvely assume, he says, a relation between reality and our minds which may be just the opposite of the true one. Reality, we naturally think, stands readymade and complete, and our intellects supervene with the one simple duty of describing it as it is already. But may not our descriptions, Lotze asks, be themselves important additions to reality? And may not previous reality itself be there, far less for the purpose of reappearing unaltered in our knowledge, than for the very purpose of stimulating our minds to such additions as shall enhance the universe's total value. 'Die erhöhung des vorgefundenen daseins' is a phrase used by Professor Eucken somewhere, which reminds one of this suggestion by the great Lotze.

It is identically our pragmatistic conception. In our cognitive as well as in our active life we are creative. We add, both to the subject and to the predicate part of reality. The world stands really malleable, waiting to receive its final touches at our hands. Like the kingdom of heaven, it suffers human violence willingly. Man engenders truths upon it.

The import of the difference between pragmatism and rationalism

is now in sight throughout its whole extent. The essential contrast is that for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making, and awaits part of its complexion from the future. On the one side the universe is absolutely secure, on the other it is still pursuing its adventures.

The alternative between pragmatism and rationalism, in the shape in which we now have it before us, is no longer a question in the theory of knowledge, it concerns the structure of the universe itself.

On the pragmatist side we have only one edition of the universe, unfinished, growing in all sorts of places, especially in the places where thinking beings are at work.

On the rationalist side we have a universe in many editions, one real one, the infinite folio, or édition de luxe, eternally complete; and then the various finite editions, full of false readings, distorted and mutilated each in its own way.

LECTURE VIII: PRAGMATISM AND RELIGION

ON PRAGMATIC PRINCIPLES we cannot reject any hypothesis if consequences useful to life flow from it. Universal conceptions, as things to take account of, may be as real for pragmatism as particular sensations are.

The use of the Absolute is proved by the whole course of men's religious history. The eternal arms are then beneath. Remember Vivekananda's use of the Atman—not indeed a scientific use, for we can make no particular deductions from it. It is emotional and spiritual altogether.

It is always best to discuss things by the help of concrete examples. Let me read therefore some of those verses entitled "To You' by Walt Whitman—'You' of course meaning the reader or hearer of the poem whosover he or she may be.

Whoever you are, now I place my hand upon you that you be my poem;

I whisper with my lips close to your ear,

I have loved many men and women and men, but I love none better than you.

O I have been dilatory and dumb;

I should have made my way to you long ago;

I should have blabbed nothing but you, I should have chanted nothing but you.

I will leave all and come and make the hymns of you;

None have understood you, but I understand you;

None have done justice to you—you have not done justice to yourself;

None but have found you imperfect—I only find no imperfection in you.

O I could sing such glories and grandeurs about you;

You have not known what you are—you have slumbered upon yourself all your life;

What you have done returns already in mockeries.

But the mockeries are not you;

Underneath them and within them, I see you lurk;

I pursue you where none else has pursued you.

Silence, the desk, the flippant expression, the night, the accustomed routine, if these conceal you from others, or from yourself, they do not conceal you from me;

The shaved face, the unsteady eye, the impure complexion, if these balk others, they do not balk me;

The pert apparel, the deformed attitude, drunkenness, greed, premature death, all these I part aside.

There is no endowment in man or woman that is not tallied in you; There is no virtue, no beauty, in man or woman, but as good is in you; No pluck nor endurance in others, but as good is in you; No pleasure waiting for others, but an equal pleasure waits for you.

Whoever you are! claim your own at any hazard!

These shows of the east and west are tame, compared with you;

These immense meadows—these interminable rivers—you are immense and interminable as they;

You are he or she who is master or mistress over them,

Master or mistress in your own right over Nature, elements, pain, passion, dissolution.

The hopples fall from your ankles—you find an unfailing sufficiency;

Old or young, male or female, rude, low, rejected by the rest whatever you are promulges itself;

Through birth, life, death, burial, the means are provided, nothing is scanted; Through angers, losses, ambition, ignorance, ennui, what you are picks its way.

Verily a fine and moving poem, in any case, but there are two ways of taking it, both useful.

One is the monistic way, the mystical way of pure cosmic emotion. The glories and grandeurs, they are yours absolutely, even in the midst of your defacements. Whatever may happen to you, whatever you may appear to be, inwardly you are safe.

But pragmatism sees another way to be respected also, the pluralistic way of interpreting the poem. The you so glorified, to which the hymn is sung, may mean your better possibilities phenomenally taken, or the specific redemptive effects even of your failures, upon yourself or others. It may mean your loyalty to the possibilities of others whom you admire and love so that you are willing to accept your own poor life, for it is that glory's partner. You can at least appreciate, applaud, furnish the audience, of so brave a total world. Forget the low in yourself, then, think only of the high. Identify your life therewith; then, through angers, losses, ignorance, ennui, whatever you thus make yourself, whatever you thus most deeply are, picks its way.

Noble enough is either way of reading the poem; but plainly the pluralistic way agrees with the pragmatic temper best, for it immedi-

ately suggests an infinitely larger number of the details of future experience to our mind. It sets definite activities in us at work. Although this second way seems prosaic and earth-born in comparison with the first way, yet no one can accuse it of tough-mindedness in any brutal sense of the term. Yet if, as pragmatists, you should positively set up the second way against the first way, you would very likely be misunderstood. You would be accused of denying nobler conceptions, and of being an ally of tough-mindedness in the worst sense.

Is then this you of yous, this absolutely real world, this unity that yields the moral inspiration and has the religious value, to be taken monistically or pluralistically? Is it ante rem or in rebus? Is it a principle or an end, an absolute or an ultimate, a first or a last? Does it make you look forward or lie back? It is certainly worth while not to clump the two things together, for if discriminated, they have decidedly diverse meanings for life.

Please observe that the whole dilemma revolves pragmatically about the notion of the world's possibilities. It is necessary therefore to begin by focusing upon that word. What may the word 'possible' definitely mean? To unreflecting men it means a sort of third estate of being, less real than existence, more real than non-existence, a twilight realm, a hybrid status, a limbo into which and out of which realities ever and anon are made to pass.

Such a conception is of course too vague and nondescript to satisfy us. Here, as elsewhere, the only way to extract a term's meaning is to use the pragmatic method on it. When you say that a thing is possible, what difference does it make?

It makes at least this negative difference that if the statement be true, it follows that there is nothing extant capable of preventing the possible thing. The absence of real grounds of interference may thus be said to make things not impossible, possible therefore in the bare or abstract sense.

But most possibles are not bare, they are concretely grounded, or well grounded, as we say. What does this mean pragmatically? It means not only that there are no preventive conditions present, but that some of the conditions of production of the possible thing actually are here.

Let us apply this notion to the salvation of the world. What does it pragmatically mean to say that this is possible? It means that some of the conditions of the world's deliverance do actually exist. The more of them there are existent, the fewer preventing conditions you can find, the better grounded is the salvation's possibility, the more *probable* does the fact of the deliverance become.

There are unhappy men who think the salvation of the world impossible. Theirs is the doctrine known as pessimism.

Optimism in turn would be the doctrine that thinks the world's salvation inevitable.

Midway between the two there stands what may be called the doctrine of meliorism, though it has hitherto figured less as a doctrine than as an attitude in human affairs. Meliorism treats salvation as neither necessary nor impossible. It treats it as a possibility, which becomes more and more of a probability the more numerous the actual conditions of salvation become.

It is clear that pragmatism must incline towards meliorism. Some conditions of the world's salvation are actually extant, and she cannot possibly close her eyes to this fact: and should the residual conditions come, salvation would become an accomplished reality. Naturally the terms I use here are exceedingly summary. You may interpret the word 'salvation' in any way you like, and make it as diffuse and distributive, or as climacteric and integral a phenomenon as you please.

Take, for example, any one of us in this room with the ideals which he cherishes and is willing to live and work for. Every such ideal realized will be one moment in the world's salvation. But these particular ideals are not bare abstract possibilities. They are grounded, they are *live* possibilities, for we are their live champions and pledges, and if the complementary conditions come and add themselves, our ideals will become actual things. What now are the complementary conditions? They are first such a mixture of things as will in the fulness of time give us a chance, a gap that we can spring into, and, finally, our act.

Does our act then *create* the world's salvation so far as it makes room for itself, so far as it leaps into the gap? Does it create, not the whole world's salvation of course, but just so much of this as itself covers of the world's extent?

Here I take the bull by the horns, and in spite of the whole crew of rationalists and monists, of whatever brand they be, I ask why not? Our acts, our turning-places, where we seem to ourselves to make ourselves and grow, are the parts of the world to which we are closest, the parts of which our knowledge is the most intimate and complete. Why should we not take them at their face value? Why may they not be the actual turning-places and growing-places which they seem to be, of the world—why not the workshop of being, where we catch fact in the making, so that nowhere may the world grow in any other kind of way than this?

Take the hypothesis seriously and as a live one. Suppose that the world's author put the case to you before creation, saying: 'I am going to make a world not certain to be saved, a world the perfection of which shall be conditional merely, the condition being that each several agent does its own "level best." I offer you the chance of taking part in such a world. Its safety, you see, is unwarranted. It is a real adventure, with

real danger, yet it may win through. It is a social scheme of co-operative work genuinely to be done. Will you join the procession? Will you trust yourself and trust the other agents enough to face the risk?'

Most of us would welcome the proposition and add our *fiat* to the *fiat* of the creator. Yet perhaps some would not; for there are morbid minds in every human collection, and to them the prospect of a universe with only a fighting chance of safety would probably make no appeal. There are moments of discouragement in us all, when we are sick of self and tired of vainly striving. Our own life breaks down, and we fall into the attitude of the prodigal son. We mistrust the chances of things. We want a universe where we can just give up, fall on our father's neck, and be absorbed into the absolute life as a drop of water melts into the river or the sea.

So we see concretely two types of religion in sharp contrast. Using our old terms of comparison, we may say that the absolutistic scheme appeals to the tender-minded while the pluralistic scheme appeals to the tough.

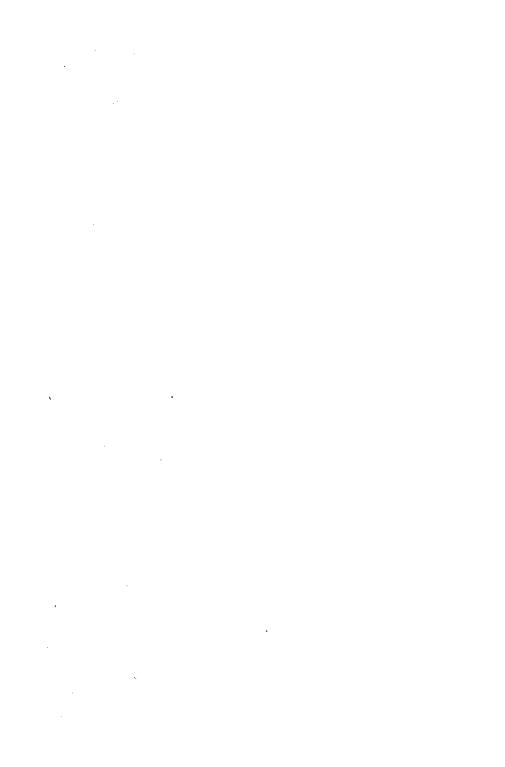
May not the claims of tender-mindedness go too far? May not the notion of a world already saved in toto anyhow, be too saccharine to stand? May not religious optimism be too idyllic? Must all be saved? Is no price to be paid in the work of salvation? Is the last word sweet? Is all 'yes, yes' in the universe? Doesn't the fact of 'no' stand at the very core of life? Doesn't the very 'seriousness' that we attribute to life mean that ineluctable noes and losses form a part of it, that there are genuine sacrifices somewhere, and that something permanently drastic and bitter always remains at the bottom of its cup?

I cannot speak officially as a pragmatist here; all I can say is that my own pragmatism offers no objection to my taking sides with this more moralistic view, and giving up the claim of total reconciliation. The possibility of this is involved in the pragmatistic willingness to treat pluralism as a serious hypothesis. In the end it is our faith and not our logic that decides such questions, and I deny the right of any pretended logic to veto my own faith. I find myself willing to take the universe to be really dangerous and adventurous, without therefore backing out and crying 'no play.' I am willing to think that the prodigal-son attitude, open to us as it is in many vicissitudes, is not the right and final attitude towards the whole of life. I am willing that there should be real losses and real losers, and no total preservation of all that is. I can believe in the ideal as an ultimate, not as an origin, and as an extract, not the whole. When the cup is poured off, the dregs are left behind for ever, but the possibility of what is poured off is sweet enough to accept.

I fear that my previous lectures, confined as they have been to human and humanistic aspects, may have left the impression on many of you that pragmatism means methodically to leave the superhuman out. I have shown small respect indeed for the Absolute, and I have until this moment spoken of no other superhuman hypothesis but that. But I trust that you see sufficiently that the Absolute has nothing but its superhumanness in common with the theistic God. On pragmatistic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is true. Now whatever its residual difficulties may be, experience shows that it certainly does work, and that the problem is to build it out and determine it so that it will combine satisfactorily with all the other working truths. I firmly disbelieve, myself, that our human experience is the highest form of experience extant in the universe. I believe rather that we stand in much the same relation to the whole of the universe as our canine and feline pets do to the whole of human life. They inhabit our drawing-rooms and libraries. They take part in scenes of whose significance they have no inkling. They are merely tangent to curves of history the beginnings and ends and forms of which pass wholly beyond their ken. So we are tangent to the wider life of things. But, just as many of the dog's and cat's ideals coincide with our ideals, and the dogs and cats have daily living proof of the fact, so we may well believe, on the proofs that religious experience affords, that higher powers exist and are at work to save the world on ideal lines similar to our own.

You see that pragmatism can be called religious, if you allow that religion can be pluralistic or merely melioristic in type. But whether you will finally put up with that type of religion or not is a question that only you yourself can decide. Pragmatism has to postpone dogmatic answer, for we do not yet know certainly which type of religion is going to work best in the long run. The various overbeliefs of men, their several faith-ventures, are in fact what are needed to bring the evidence in. You will probably make your own ventures severally. If radically tough, the hurly-burly of the sensible facts of nature will be enough for you, and you will need no religion at all. If radically tender, you will take up with the more monistic form of religion: the pluralistic form, with its reliance on possibilities that are not necessities, will not seem to afford you security enough.

But if you are neither tough nor tender in an extreme and radical sense, but mixed as most of us are, it may seem to you that the type of pluralistic and moralistic religion that I have offered is as good a religious synthesis as you are likely to find. Between the two extremes of crude naturalism on the one hand and transcendental absolutism on the other, you may find that what I take the liberty of calling the pragmatistic or melioristic type of theism is exactly what you require.



CREATIVE EVOLUTION

by HENRI BERGSON

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Creative Evolution

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HENRI BERGSON

1859-1941

BORN IN Paris on October 18, 1859, Bergson entered the École Normale Supérieure at the age of seventeen. His interests at that time were definitely scientific. There is no Providence in life, he believed, no purpose, no reason for hope. His fellow students called him "the atheist."

Upon his graduation from the normal school he accepted a teaching position in the country town of Clermont-Ferrand. Here he took long walks and found the opportunity to "think things out." These beautiful hills, this majestic sunset, this rhythmical rippling of the times and the tides, were they the result of mere chance? Were they not rather the revealing figures of a definite design—a moving and evolving pattern of eternal creation?

This "poetical realization" of an endlessly creative impulse gradually permeated "every fiber of his body and every cell of his mind." Bergson had come to Clermont a skeptic. He returned to Paris an idealist. He had lost his interest in the "microscopic explanation of the parts" and began to direct his intellect to the "philosophic contemplation of the whole." Once in a lecture, referring to the difference between scientific research and philosophical insight, he said: "You have all handled a microscope. Suppose you examine through it some anatomical preparation. . . . Slip the glass along and observe how one cell succeeds another cell, each clearly distinguishable. But what is the object, and what have you seen? If you want to get the answer to this question, you will be obliged to abandon the microscope and to consider as a whole, with your naked eye, that ugly spider's foot."

Bergson's way of looking at life-with the inner rather

than with the outer eye—met with the popular fancy. In 1900 he was appointed professor of philosophy at the Collège de France. Throngs flocked to his lectures, and to the bookstalls to buy his books—Time and Free Will, Matter and Memory, Mind Energy, Laughter and Metaphysics, and Creative Evolution. For forty years he enchanted his audiences with the beauty of his mind and the simplicity of his heart. And then, in 1940, the Hitler-dominated French Government passed an order that all Jewish professors in France must resign from their positions in the state universities. Bergson was offered an exemption from this order. But he refused the favor. He was willing to share the fate of his coreligionists. He resigned from the Collège de France. The following year he died.

Bergson's philosophy is based upon the principle of creative evolution—a term which he employed to express his theory that the creation of the world was not a single act of the past, but is a progressive action that continues to the present day. Evolution, maintains Bergson, is not a mechanical process but a designed purpose. And man is not the plaything of a blind struggle for existence but the cocreator, along with God, of his own destiny, of the whole world's destiny.

For the drama of creation is being written eternally, and man partakes of the nature both of the actor and of the playwright. The play goes on; and at every moment it promises, with the help of man, to blossom into something new and unforeseeable and grand.

The creative impulse—Bergson calls it the élan vital, the vital spark—lies within us all. It is the energy that gives birth to every noble thought, every beautiful emotion, every generous act. It is the urge that impels life ever onward and upward, from the lowest plant to the highest man. "The animal takes its stand upon the plant, man bestrides animality, and the whole of humanity, in space and time, is one immense army galloping beside and before and behind each of us in an overwhelming charge able to beat down every resistance and to clear every obstacle" not only in life, but even in death. For through the power of creative evolution, this vital spark in God and man, life conquers death.

CREATIVE EVOLUTION

I: THE EVOLUTION OF LIFE—MECHANISM AND TELEOLOGY

THE EXISTENCE of which we are most assured and which we know best is unquestionably our own, for of every other object we have notions which may be considered external and superficial, whereas, of ourselves, our perception is internal and profound. What, then, do we find? In this privileged case, what is the precise meaning of the word "exist"?

I find, first of all, that I pass from state to state. But this is not saying enough. Change is far more radical than we are at first inclined to suppose.

For I speak of each of my states as if it formed a block and were a separate whole. I say indeed that I change, but the change seems to me to reside in the passage from one state to the next: of each state, taken separately, I am apt to think that it remains the same during all the time that it prevails. Nevertheless, a slight effort of attention would reveal to me that there is no feeling, no idea, no volition which is not undergoing change every moment: if a mental state ceased to vary, its duration would cease to flow.

For our duration is not merely one instant replacing another; if it were, there would never be anything but the present—no prolonging of the past into the actual, no evolution, no concrete duration. Duration is the continuous progress of the past which gnaws into the future and which swells as it advances. And as the past grows without ceasing, so also there is no limit to its preservation. Memory is not a faculty of putting away recollections in a drawer, or of inscribing them in a register. There is no register, no drawer; there is not even, properly speaking, a faculty, for a faculty works intermittently, when it will or when it can, whilst the piling up of the past upon the past goes on without relaxation. In reality, the past is preserved by itself, automatically. In its entirety, probably, it follows us at every instant; all that we have felt, thought, and willed from our earliest infancy is there, leaning over the present which is about to join it, pressing against the portals of consciousness that would fain leave it outside.

From this survival of the past it follows that consciousness cannot go

through the same state twice. The circumstances may still be the same, but they will act no longer on the same person, since they find him at a new moment of his history. Our personality, which is being built up each instant with its accumulated experience, changes without ceasing. By changing, it prevents any state, although superficially identical with another, from ever repeating it in its very depth. That is why our duration is irreversible. We could not live over again a single moment, for we should have to begin by effacing the memory of all that had followed. Even could we erase this memory from our intellect, we could not from our will.

Thus our personality shoots, grows, and ripens without ceasing. Each of its moments is something new added to what was before. We may go further: it is not only something new, but something unforeseeable. Doubtless, my present state is explained by what was in me and by what was acting on me a moment ago. In analyzing it I should find no other elements. But even a superhuman intelligence would not have been able to foresee the simple indivisible form which gives to these purely abstract elements their concrete organization. For to foresee consists of projecting into the future what has been perceived in the past, or of imagining for a later time a new grouping, in a new order, of elements already perceived. But that which has never been perceived, and which is at the same time simple, is necessarily unforeseeable. It is then right to say that what we do depends on what we are; but it is necessary to add also that we are, to a certain extent, what we do, and that we are creating ourselves continually. This creation of self by self is the more complete, the more one reasons on what one does. But we need not go more deeply into this. We are seeking only the precise meaning that our consciousness gives to this word "exist," and we find that, for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly. Should the same be said of existence in general?

A material object, of whatever kind, presents opposite characters to those which we have just been describing. Either it remains as it is, or else, if it changes under the influence of an external force, our idea of this change is that of a displacement of parts which themselves do not change. If these parts took to changing, we should split them up in their turn. We should thus descend to the molecules of which the fragments are made, to the atoms that make up the molecules, to the corpuscles that generate the atoms, to the "imponderable" within which the corpuscle is perhaps a mere vortex. In short, we should push the division or analysis as far as necessary. But we should stop only before the unchangeable.

All our belief in objects, all our operations on the systems that science isolates, rest in fact on the idea that time does not bite into them. The abstract time t attributed by science to a material object or to an isolated

system consists only in a certain number of simultaneities or more generally of correspondences, and this number remains the same, whatever be the nature of the intervals between the correspondences. With these intervals we are never concerned when dealing with inert matter; or, if they are considered, it is in order to count therein fresh correspondences, between which again we shall not care what happens. Common sense, which is occupied with detached objects, and also science, which considers isolated systems, are concerned only with the ends of the intervals and not with the intervals themselves. Therefore the flow of time might assume an infinite rapidity, the entire past, present, and future of material objects or of isolated systems might be spread out all at once in space, without there being anything to change either in the formulae of the scientist or even in the language of common sense. The number t would always stand for the same thing; it would still count the same number of correspondences between the states of the objects or systems and the points of the line, ready drawn, which would be then the "course of time."

Yet succession is an undeniable fact, even in the material world. Though our reasoning on isolated systems may imply that their history, past, present, and future, might be instantaneously unfurled like a fan, this history, in point of fact, unfolds itself gradually, as if it occupied a duration like our own.

Certainly, the operation by which science isolates and closes a system is not altogether artificial. If it had no objective foundation, we could not explain why it is clearly indicated in some cases and impossible in others. We shall see that matter has a tendency to constitute *isolable* systems, that can be treated geometrically. In fact, we shall define matter by just this tendency. But it is only a tendency. Matter does not go to the end, and the isolation is never complete.

There is no reason, therefore, why a duration, and so a form of existence like our own, should not be attributed to the systems that science isolates, provided such systems are reintegrated into the Whole. But they must be so reintegrated.

Now, we have considered material objects generally. Are there not some objects privileged? The bodies we perceive are, so to speak, cut out of the stuff of nature by our perception, and the scissors follow, in some way, the marking of lines along which action might be taken. But the body which is to perform this action, the body which marks out upon matter the design of its eventual actions even before they are actual, the body that has only to point its sensory organs on the flow of the real in order to make that flow crystallize into definite forms and thus to create all the other bodies—in short, the living body—is this a body as others are?

Doubtless it, also, consists in a portion of extension bound up with the rest of extension, an intimate part of the Whole, subject to the same

physical and chemical laws that govern any and every portion of matter. But, while the subdivision of matter into separate bodies is relative to our perception, while the building up of closed-off systems of material points is relative to our science, the living body has been separated and closed off by nature herself. It is composed of unlike parts that complete each other. It performs diverse functions that involve each other. It is an individual. and of no other object, not even of the crystal, can this be said, for a crystal has neither difference of parts nor diversity of functions. No doubt, it is hard to decide, even in the organized world, what is individual and what is not. The difficulty is great, even in the animal kingdom; with plants it is almost insurmountable. The biologist who proceeds as a geometrician is too ready to take advantage here of our inability to give a precise and general definition of individuality. A perfect definition applies only to a completed reality; now, vital properties are never entirely realized, though always on the way to become so; they are not so much states as tendencies. And a tendency achieves all that it aims at only if it is not thwarted by another tendency. How, then, could this occur in the domain of life, where the interaction of antagonistic tendencies is always implied? In particular, it may be said of individuality that, while the tendency to individuate is everywhere present in the organized world, it is everywhere opposed by the tendency towards reproduction. For the individuality to be perfect, it would be necessary that no detached part of the organism could live separately. But then reproduction would be impossible. For what is reproduction, but the building up of a new organism with a detached fragment of the old? Individuality therefore harbors its enemy at home. Its very need of perpetuating itself in time condemns it never to be complete in space. The biologist must take due account of both tendencies in every instance, and it is therefore useless to ask him for a definition of individuality that shall fit all cases and work automatically.

But too often one reasons about the things of life in the same way as about the conditions of crude matter. Nowhere is the confusion so evident as in discussions about individuality. Generally speaking, unorganized bodies, which are what we have need of in order that we may act, and on which we have modelled our fashion of thinking, are regulated by this simple law: the present contains nothing more than the past, and what is found in the effect was already in the cause. But suppose that the distinctive feature of the organized body is that it grows and changes without ceasing, as indeed the most superficial observation testifies, there would be nothing astonishing in the fact that it was one in the first instance, and afterwards many. True, in the more complex animals, nature localizes in the almost independent sexual cells the power of producing the whole anew. But something of this power may remain diffused in the rest of the organism, as the facts of regeneration prove, and it is conceiv-

able that in certain privileged cases the faculty may persist integrally in a latent condition and manifest itself on the first opportunity. In truth, that I may have the right to speak of individuality, it is not necessary that the organism should be without the power to divide into fragments that are able to live. It is sufficient that it should have presented a certain systematization of parts before the division, and that the same systematization tend to be reproduced in each separate portion afterwards. Now, that is precisely what we observe in the organic world. We may conclude, then, that individuality is never perfect, and that it is often difficult, sometimes impossible, to tell what is an individual, and what is not, but that life nevertheless manifests a search for individuality, as if it strove to constitute systems naturally isolated, naturally closed.

By this is a living being distinguished from all that our perception or our science isolates or closes artificially. It would therefore be wrong to compare it to an object. Should we wish to find a term of comparison in the inorganic world, it is not to a determinate material object, but much rather to the totality of the material universe that we ought to compare the living organism. Like the universe as a whole, like each conscious being taken separately, the organism which lives is a thing that endures. Its past. in its entirety, is prolonged into its present, and abides there, actual and acting. How otherwise could we understand that it passes through distinct and well-marked phases, that it changes its age-in short, that it has a history? Once more, there is no universal biological law which applies precisely and automatically to every living thing. There are only directions in which life throws out species in general. Each particular species, in the very act by which it is constituted, affirms its independence, follows its cap:ice, deviates more or less from the straight line, sometimes even remounts the slope and seems to turn its back on its original direction. It is easy enough to argue that a tree never grows old, since the tips of its branches are always equally young, always equally capable of engendering new trees by budding. But in such an organism—which is, after all, a society rather than an individual-something ages, if only the leaves and the interior of the trunk. And each cell, considered separately, evolves in a specific way. Wherever anything lives, there is, open somewhere, a register in which time is being inscribed.

True, biologists are not agreed on what is gained and what is lost between the day of birth and the day of death. There are those who hold to the continual growth in the volume of protoplasm from the birth of the cell right on to its death. More probable and more profound is the theory according to which the diminution bears on the quantity of nutritive substance contained in that "inner environment" in which the organism is being renewed, and the increase on the quantity of unexcreted residual substances which, accumulating in the body, finally "crust it

over." Must we however—with an eminent bacteriologist—declare any explanation of growing old insufficient that does not take account of phagocytosis? We do not feel qualified to settle the question. But the fact that the two theories agree in affirming the constant accumulation or loss of a certain kind of matter, even though they have little in common as to what is gained and lost, shows pretty well that the frame of the explanation has been furnished a priori.

The cause of growing old must lie deeper. We hold that there is unbroken continuity between the evolution of the embryo and that of the complete organism. The impetus which causes a living being to grow larger, to develop and to age, is the same that has caused it to pass through the phases of the embryonic life. The development of the embryo is a perpetual change of form. Anyone who attempts to note all its successive aspects becomes lost in an infinity, as is inevitable in dealing with a continuum. Life does but prolong this prenatal evolution. In short, what is properly vital in growing old is the insensible, infinitely graduated, continuance of the change of form. Now, this change is undoubtedly accompanied by phenomena of organic destruction: to these, and to these alone, will a mechanistic explanation of aging be confined. It will note the facts of sclerosis, the gradual accumulation of residual substances, the growing hypertrophy of the protoplasm of the cell. But under these visible effects an inner cause lies hidden. The evolution of the living being, like that of the embryo, implies a continual recording of duration, a persistence of the past in the present, and so an appearance, at least, of organic memory.

The present state of an unorganized body depends exclusively on what happened at the previous instant; and likewise the position of the material points of a system defined and isolated by science is determined by the position of these same points at the moment immediately before. In other words, the laws that govern unorganized matter are expressible, in principle, by differential equations in which time (in the sense in which the mathematician takes this word) would play the role of independent variable. Is it so with the laws of life? Does the state of a living body find its complete explanation in the state immediately before? Yes, if it is agreed a priori to liken the living body to other bodies, and to identify it, for the sake of the argument, with the artificial systems on which the chemist, physicist, and astronomer operate. But in astronomy, physics, and chemistry the proposition has a perfectly definite meaning: it signifies that certain aspects of the present, important for science, are calculable as functions of the immediate past. Nothing of the sort in the domain of life. Here calculation touches, at most, certain phenomena of organic destruction, Organic creation, on the contrary, the evolutionary phenomena which properly constitute life, we cannot in any way subject to a mathematical treatment. It will be said that this impotence is due only to our ignorance.

But it may equally well express the fact that the present moment of a living body does not find its explanation in the moment immediately before, that all the past of the organism must be added to that moment, its heredity-in fact, the whole of a very long history. In the second of these two hypotheses, not in the first, is really expressed the present state of the biological sciences, as well as their direction. As for the idea that the living body might be treated by some superhuman calculator in the same mathematical way as our solar system, this has gradually arisen from a metaphysic which has taken a more precise form since the physical discoveries of Galileo, but which was always the natural metaphysic of the human mind. Its apparent clearness, our impatient desire to find it true, the enthusiasm with which so many excellent minds accept it without proof-all the seductions, in short, that it exercises on our thought, should put us on our guard against it. The attraction it has for us proves well enough that it gives satisfaction to an innate inclination. But, as will be seen further on, the intellectual tendencies innate to-day, which life must have created in the course of its evolution, are not at all meant to supply us with an explanation of life: they have something else to do.

Any attempt to distinguish between an artificial and a natural system, between the dead and the living, runs counter to this tendency at once. Thus it happens that we find it equally difficult to imagine that the organized has duration and that the unorganized has not. When we say that the state of an artificial system depends exclusively on its state at the moment before, does it not seem as if we were bringing time in, as if the system had something to do with real duration? And, on the other hand, though the whole of the past goes into the making of the living being's present moment, does not organic memory press it into the moment immediately before the present, so that the moment immediately before becomes the sole cause of the present one?—To speak thus is to ignore the cardinal difference between concrete time, along which a real system develops, and that abstract time which enters into our speculations on artificial systems. What does it mean, to say that the state of an artificial system depends on what it was at the moment immediately before? There is no instant immediately before another instant; there could not be, any more than there could be one mathematical point touching another. The instant "immediately before" is, in reality, that which is connected with the present instant by the interval dt. All that you mean to say, therefore, is that the present state of the system is defined by equations into which differential coefficients enter, such as ds/dt, dv/dt, that is to say, at bottom, present velocities and present accelerations. You are therefore really speaking only of the present-a present, it is true, considered along with its tendency. The systems science works with are, in fact, in an instantaneous present that is always being renewed; such systems are never in that real, concrete duration in which the past remains bound up with the present. When the mathematician calculates the future state of a system at the end of a time t, there is nothing to prevent him from supposing that the universe vanishes from this moment till that, and suddenly reappears. It is the t-th moment only that counts—and that will be a mere instant. What will flow on in the interval—that is to say, real time—does not count, and cannot enter into the calculation. If the mathematician says that he puts himself inside this interval, he means that he is placing himself at a certain point, at a particular moment, therefore at the extremity again of a certain time t'; with the interval up to T' he is not concerned. If he divides the interval into infinitely small parts by considering the differential dt. he thereby expresses merely the fact that he will consider accelerations and velocities—that is to say, numbers which denote tendencies and enable him to calculate the state of the system at a given moment. But he is al ways speaking of a given moment—a static moment, that is—and not of flowing time. In short, the world the mathematician deals with is a world that dies and is reborn at every instant—the world which Descartes was thinking of when he spoke of continued creation. But, in time thus conceived, how could evolution, which is the very essence of life, ever take place? Evolution implies a real persistence of the past in the present, a duration which is, as it were, a hyphen, a connecting link. In other words, to know a living being or natural system is to get at the very interval of duration, while the knowledge of an artificial or mathematical system applies only to the extremity.

Continuity of change, preservation of the past in the present, real duration—the living being seems, then, to share these attributes with consciousness. Can we go further and say that life, like conscious activity, is invention, is unceasing creation?

The idea of transformism is already in germ in the natural classification of organized beings. The naturalist, in fact, brings together the organisms that are like each other, then divides the group into sub-groups within which the likeness is still greater, and so on: all through the operation, the characters of the group appear as general themes on which each of the sub-groups performs its particular variation. Now, such is just the relation we find, in the animal and in the vegetable world between the generator and the generated: on the canvas which the ancestor passes on, and which his descendants possess in common, each puts his own original embroidery. True, the differences between the descendant and the ancestor are slight, and it may be asked whether the same living matter presents enough plasticity to take in turn such different forms as those of a fish, a reptile, and a bird. But, to this question, observation gives a peremptory answer. It shows that up to a certain period in its development the embryo of the bird is hardly distinguishable from that of the reptile, and that the individual develops, throughout the embryonic life in general, a

series of transformations comparable to those through which, according to the theory of evolution, one species passes into another. A single cell, the result of the combination of two cells, male and female, accomplishes this work by dividing. Every day, before our eyes, the highest forms of life are springing from a very elementary form, Experience, then, shows that the most complex has been able to issue from the most simple by way of evolution. Now, has it arisen so, as a matter of fact? Paleontology, in spite of the insufficiency of its evidence, invites us to believe it has; for, where it makes out the order of succession of species with any precision, this order is just what considerations drawn from embryogeny and comparative anatomy would lead anyone to suppose, and each new paleontological discovery brings transformism a new confirmation. Thus, the proof drawn from mere observation is ever being strengthened, while, on the other hand, experiment is removing the objections one by one. The recent experiments of H. de Vries, for instance, by showing that important variations can be produced suddenly and transmitted regularly, have overthrown some of the greatest difficulties raised by the theory. They have enabled us greatly to shorten the time biological evolution seems to demand. They also render us less exacting toward paleontology. So that, all things considered, the transformist hypothesis looks more and more like a close approximation to the truth. It is not rigorously demonstrable; but, failing the certainty of theoretical or experimental demonstration, there is a probability which is continually growing, due to evidence which, while coming short of direct proof, seems to point persistently in its direction: such is the kind of probability that the theory of transformism offers.

So we come back, by a somewhat roundabout way, to the idea we started from, that of an original impetus of life, passing from one generation of germs to the following generation of germs through the developed organisms which bridge the interval between the generations. This impetus, sustained right along the lines of evolution among which it gets divided, is the fundamental cause of variations, at least of those that are regularly passed on, that accumulate and create new species. In general, when species have begun to diverge from a common stock, they accentuate their divergence as they progress in their evolution. Yet, in certain definite points, they may evolve identically; in fact, they must do so if the hypothesis of a common impetus be accepted.

II: THE DIVERGENT DIRECTIONS OF THE EVOLUTION OF LIFE—TORPOR, INTELLIGENCE, INSTINCT

THE EVOLUTION MOVEMENT would be a simple one, and we should soon have been able to determine its direction, if life had described a single

course, like that of a solid ball shot from a cannon. But it proceeds rather like a shell, which suddenly bursts into fragments, which fragments, being themselves shells, burst in their turn into fragments destined to burst again, and so on for a time incommensurably long. We perceive only what is nearest to us, namely, the scattered movements of the pulverized explosions. From them we have to go back, stage by stage, to the original movement.

When a shell bursts, the particular way it breaks is explained both by the explosive force of the powder it contains and by the resistance of the metal. So of the way life breaks into individuals and species. It depends, we think, on two series of causes: the resistance life meets from inert matter, and the explosive force—due to an unstable balance of tendencies—which life bears within itself.

The resistance of inert matter was the obstacle that had first to be overcome. Life seems to have succeeded in this by dint of humility, by making itself very small and very insinuating, bending to physical and chemical forces, consenting even to go a part of the way with them, like the switch that adopts for a while the direction of the rail it is endeavoring to leave. Of phenomena in the simplest forms of life, it is hard to say whether they are still physical and chemical or whether they are already vital.

But the real and profound causes of division were those which life bore within its bosom. For life is tendency, and the essence of a tendency is to develop in the form of a sheaf, creating, by its very growth, divergent directions among which its impetus is divided.

So our study of the evolution movement will have to unravel a certain number of divergent directions, and to appreciate the importance of what has happened along each of them—in a word, to determine the nature of the dissociated tendencies and estimate their relative proportion. Combining these tendencies, then, we shall get an approximation, or rather an imitation, of the indivisible motor principle whence their impetus proceeds. Evolution will thus prove to be something entirely different from a series of adaptations to circumstances, as mechanism claims; entirely different also from the realization of a plan of the whole, as maintained by the doctrine of finality.

That adaptation to environment is the necessary condition of evolution we do not question for a moment. It is quite evident that a species would disappear, should it fail to bend to the conditions of existence which are imposed on it. But it is one thing to recognize that outer circumstances are forces evolution must reckon with, another to claim that they are the directing causes of evolution. This latter theory is that of mechanism. It excludes absolutely the hypothesis of an original impetus,

I mean an internal push that has carried life, by more and more complex forms, to higher and higher destinies. Yet this impetus is evident, and a mere glance at fossil species shows us that life need not have evolved at all, or might have evolved only in very restricted limits, if it had chosen the alternative, much more convenient to itself, of becoming anchylosed in its primitive forms.

But, if the evolution of life is something other than a scries of adaptations to accidental circumstances, so also it is not the realization of a plan. A plan is given in advance. It is represented, or at least representable, before its realization. The complete execution of it may be put off to a distant future, or even indefinitely; but the idea is none the less formulable at the present time, in terms actually given. If, on the contrary, evolution is a creation unceasingly renewed, it creates, as it goes on, not only the forms of life, but the ideas that will enable the intellect to understand it, the terms which will serve to express it. That is to say that its future overflows its present, and cannot be sketched out therein in an idea.

There is the first error of finalism. It involves another, yet more serious.

If life realizes a plan, it ought to manifest a greater harmony the further it advances, just as the house shows better and better the idea of the architect as stone is set upon stone. If, on the contrary, the unity of life is to be found solely in the impetus that pushes it along the road of time, the harmony is not in front, but behind.

To begin with the second point, let us say that no definite characteristic distinguishes the plant from the animal. Attempts to define the two kingdoms strictly have always come to naught. There is not a single property of vegetable life that is not found, in some degree, in certain animals; not a single characteristic feature of the animal that has not been seen in certain species or at certain moments in the vegetable world. Naturally, therefore, biologists enamored of clean-cut concepts have regarded the distinction between the two kingdoms as artificial. They would be right, if definition in this case must be made, as in the mathematical and physical sciences, according to certain statical attributes which belong to the object defined and are not found in any other. Very different, in our opinion, is the kind of definition which befits the sciences of life. There is no manifestation of life which does not contain, in a rudimentary state-either latent or potential,-the essential characters of most other manifestations. The difference is in the proportions. But this very difference of proportion will suffice to define the group, if we can establish that it is not accidental, and that the group as it evolves, tends more and more to emphasize these particular characters. In a word, the group must not be defined by the possession of certain characters, but by its tendency to emphasize them. From this point of view, taking tendencies rather than states into account, we find that vegetables and animals may be precisely defined and distinguished, and that they correspond to two divergent developments of life.

Now, it seems to us most probable that the animal cell and the vegetable cell are derived from a common stock, and that the first living organisms oscillated between the vegetable and animal form, participating in both at once. Ordinarily, one of the two tendencies covers or crushes down the other, but in exceptional circumstances the suppressed one starts up and regains the place it had lost. The mobility and consciousness of the vegetable cell are not so sound asleep that they cannot rouse themselves when circumstances permit or demand it; and, on the other hand, the evolution of the animal kingdom has always been retarded, or stopped, or dragged back, by the tendency it has kept toward the vegetative life. However full, however overflowing the activity of an animal species may appear, torpor and unconsciousness are always lying in wait for it. It keeps up its rôle only by effort, at the price of fatigue. Along the route on which the animal has evolved, there have been numberless shortcomings and cases of decay, generally associated with parasitic habits; they are so many shuntings on to the vegetative life. Thus, everything bears out the belief that vegetable and animal are descended from a common ancestor which united the tendencies of both in a rudimentary state.

But the two tendencies mutually implied in this rudimentary form became dissociated as they grew. Hence the world of plants with its fixity and insensibility, hence the animals with their mobility and consciousness. There is no need, in order to explain this dividing into two, to bring in any mysterious force. It is enough to point out that the living being leans naturally toward what is most convenient to it, and that vegetables and animals have chosen two different kinds of convenience in the way of procuring the carbon and nitrogen they need. Vegetables continually and mechanically draw these elements from an environment that continually provides it. Animals, by action that is discontinuous, concentrated in certain moments, and conscious, go to find these bodies in organisms that have already fixed them. They are two different ways of being industrious, or perhaps we may prefer to say, of being idle. For this very reason we doubt whether nervous elements, however rudimentary, will ever be found in the plant. What corresponds in it to the directing will of the animal is, we believe, the direction in which it bends the energy of the solar radiation when it uses it to break the connection of the carbon with the oxygen in carbonic acid. What corresponds in it to the sensibility of the animal is the impressionability, quite of its kind, of its chlorophyl to light. Now, a nervous system being pre-eminently a mechanism which serves as intermediary between sensations and volitions, the true "nervous system" of the plant seems to be the mechanism or

rather chemicism sui generis which serves as intermediary between the impressionability of its chlorophyl to light and the producing of starch: which amounts to saying that the plant can have no nervous elements, and that the same impetus that has led the animal to give itself nerves and nerve centres must have ended, in the plant, in the chlorophyllian function.

It must not be forgotten that the force which is evolving throughout the organized world is a limited force, which is always seeking to transcend itself and always remains inadequate to the work it would fain produce.

From the bottom to the top of the organized world we do indeed find one great effort; but most often this effort turns short, sometimes paralyzed by contrary forces, sometimes diverted from what it should do by what it does, absorbed by the form it is engaged in taking, hypnotized by it as by a mirror. Even in its most perfect works, though it seems to have triumphed over external resistances and also over its own, it is at the mercy of the materiality which it has had to assume.

Vegetative torpor, instinct, and intelligence—these, then, are the elements that coincided in the vital impulsion common to plants and animals, and which, in the course of a development in which they were made manifest in the most unforeseen forms, have been dissociated by the very fact of their growth. The cardinal error which, from Aristotle onwards, has vitiated most of the philosophies of nature, is to see in vegetative, instinctive, and rational life, three successive degrees of the development of one and the same tendency, whereas they are three divergent directions of an activity that has split up as it grew. The difference between them is not a difference of intensity, nor, more generally, of degree, but of kind.

It is important to investigate this point. We have seen in the case of vegetable and animal life how they are at once mutually complementary and mutually antagonistic. Now we must show that intelligence and instinct also are opposite and complementary. But let us first explain why we are generally led to regard them as activities of which one is superior to the other and based upon it, whereas in reality they are not things of the same order: they have not succeeded one another, nor can we assign to them different grades.

It is because intelligence and instinct, having originally been interpenetrating, retain something of their common origin. Neither is ever found in a pure state. We said that in the plant the consciousness and mobility of the animal, which lie dormant, can be awakened; and that the animal lives under the constant menace of being drawn aside to the vegetative life. The two tendencies—that of the plant and that of the animal—were so thoroughly interpenetrating, to begin with, that there has never been a complete severance between them: they haunt each other continually; everywhere we find them mingled; it is the proportion that differs.

So with intelligence and instinct. There is no intelligence in which some traces of instinct are not to be discovered, more especially no instinct that is not surrounded with a fringe of intelligence. It is this fringe of intelligence that has been the cause of so many misunderstandings. From the fact that instinct is always more or less intelligent, it has been concluded that instinct and intelligence are things of the same kind, that there is only a difference of complexity or perfection between them, and, above all, that one of the two is expressible in terms of the other. In reality, they accompany each other only because they are complementary, and they are complementary only because they are different, what is instinctive in instinct being opposite to what is intelligent in intelligence.

III: ON THE MEANING OF LIFE—THE ORDER OF NATURE AND THE FORM OF INTELLIGENCE

IN THE COURSE of our first chapter we traced a line of demarcation between the inorganic and the organized, but we pointed out that the division of unorganized matter into separate bodies is relative to our senses and to our intellect, and that matter, looked at as an undivided whole, must be a flux rather than a thing. In this we were preparing the way for a reconciliation between the inert and the living.

On the other side, we have shown in our second chapter that the same opposition is found again between instinct and intelligence, the one turned to certain determinations of life, the other molded on the configuration of matter. But instinct and intelligence, we have also said, stand out from the same background, which, for want of a better name, we may call consciousness in general, and which must be coextensive with universal life. In this way, we have disclosed the possibility of showing the genesis of intelligence in setting out from general consciousness, which embraces it.

We are now, then, to attempt a genesis of intellect at the same time as a genesis of material bodies—two enterprises that are evidently correlative, if it be true that the main lines of our intellect mark out the general form of our action on matter, and that the detail of matter is ruled by the requirements of our action. Intellectuality and materiality have been constituted, in detail, by reciprocal adaptation. Both are derived from a wider and higher form of existence. It is there that we must replace them, in order to see them issue forth.

From this point of view, the general considerations we have presented concerning the evolution of life will be cleared up and completed. We will distinguish more sharply what is accidental from what is essential in this evolution.

The impetus of life, of which we are speaking, consists in a need of creation. It cannot create absolutely, because it is confronted with matter, that is to say with the movement that is the inverse of its own. But it seizes upon this matter, which is necessity itself, and strives to introduce into it the largest possible amount of indetermination and liberty. How does it go to work?

An animal high in the scale may be represented in a general way, we said, as a sensori-motor nervous system imposed on digestive, respiratory, circulatory systems, etc. The function of these latter is to cleanse, repair, and protect the nervous system, to make it as independent as possible of external circumstances, but, above all, to furnish it with energy to be expended in movements. The increasing complexity of the organism is therefore due theoretically (in spite of innumerable exceptions due to accidents of evolution) to the necessity of complexity in the nervous system. No doubt, each complication of any part of the organism involves many others in addition, because this part itself must live, and every change in one point of the body reverberates, as it were, throughout. The complication may therefore go on to infinity in all directions; but it is the complication of the nervous system which conditions the others in right, if not always in fact. Now, in what does the progress of the nervous system itself consist? In a simultaneous development of automatic activity and of voluntary activity, the first furnishing the second with an appropriate instrument. Thus, in an organism such as ours, a considerable number of motor mechanisms are set up in the medulla and in the spinal cord, awaiting only a signal to release the corresponding act: the will is employed, in some cases, in setting up the mechanism itself, and in the others in choosing the mechanisms to be released, the manner of combining them, and the moment of releasing them. The will of an animal is the more effective and the more intense, the greater the number of the mechanisms it can choose from, the more complicated the switchboard on which all the motor paths cross, or, in other words, the more developed its brain. Thus, the progress of the nervous system assures to the act increasing precision, increasing variety, increasing efficiency and independence. The organism behaves more and more like a machine for action, which reconstructs itself entirely for every new act, as if it were made of india-rubber and could, at any moment, change the shape of all its parts. But, prior to the nervous system, prior even to the organism properly so called, already in the undifferentiated mass of the amoeba, this essential property of animal life is found. The amoeba deforms itself in varying directions; its entire mass does what the differentiation of parts will localize in a sensori-motor system in the developed animal. Doing it only in a rudimentary manner, it is dispensed from the complexity of the higher organisms; there is no need here of the auxiliary elements that pass on to motor elements the energy to expend; the animal moves as a whole, and, as a whole also, procures energy by means of the organic substances it assimilates. Thus, whether low or high in the animal scale, we always find that animal life consists (1) in procuring a provision of energy; (2) in expending it, by means of a matter as supple as possible, in directions variable and unforeseen.

Now, whence comes the energy? From the ingested food, for food is a kind of explosive, which needs only the spark to discharge the energy it stores. Who has made this explosive? The food may be the flesh of an animal nourished on animals and so on; but in the end it is to the vegetable we always come back. Vegetables alone gather in the solar energy, and the animals do but borrow it from them, either directly or by some passing it on to others. How then has the plant stored up this energy? Chiefly by the chlorophyllian function, a chemicism sui generis of which we do not possess the key, and which is probably unlike that of our laboratories. The process consists in using solar energy to fix the carbon of carbonic acid, and thereby to store this energy as we should store that of a water-carrier by employing him to fill an elevated reservoir: the water, once brought up, can set in motion a mill or a turbine, as we will and when we will. Each atom of carbon fixed represents something like the elevation of the weight of water, or like the stretching of an elastic thread uniting the carbon to the oxygen in the carbonic acid. The elastic is relaxed, the weight falls back again, in short the energy held in reserve is restored, when, by a simple release, the carbon is permitted to rejoin its oxygen.

So that all life, animal and vegetable, seems in its essence like an effort to accumulate energy and then to let it flow into flexible channels, changeable in shape, at the end of which it will accomplish infinitely varied kinds of work. That is what the vital impetus, passing through matter, would fain do all at once. It would succeed, no doubt, if its power were unlimited, or if some reinforcement could come to it from without. But the impetus is finite, and it has been given once for all. It cannot overcome all obstacles. The movement it starts is sometimes turned aside, sometimes divided, always opposed; and the evolution of the organized world is the unrolling of this conflict. The first great scission that had to be effected was that of the two kingdoms, vegetable and animal, which thus happen to be mutually complementary, without, however, any agreement having been made between them. It is not for the animal that the plant accumulates energy, it is for its own consumption; but its expenditure on itself is less discontinuous, and less concentrated, and therefore less efficacious, than was required by the initial impetus of life, essentially directed toward free actions: the same organism could not with equal force sustain the two functions at once, of gradual storage and sudden use. Of themselves, therefore, and without any external intervention, simply by the effect of the duality of the tendency involved in the original impetus and of the resistance opposed by matter to this impetus, the organisms leaned some in the first direction, others in the second. To this scission there succeeded many others. Hence the diverging lines of evolution, at least what is essential in them. But we must take into account retrogressions, arrests, accidents of every kind. And we must remember, above all, that each species behaves as if the general movement of life stopped at it instead of passing through it. It thinks only of itself, it lives only for itself. Hence the numberless struggles that we behold in nature. Hence a discord, striking and terrible, but for which the original principle of life must not be held responsible.

The part played by contingency in evolution is therefore great. Contingent, generally, are the forms adopted, or rather invented. Contingent, relative to the obstacles encountered in a given place and at a given moment, is the dissociation of the primordial tendency into such and such complementary tendencies which create divergent lines of evolution. Contingent the arrests and set-backs; contingent, in large measure, the adaptations. Two things only are necessary: (1) a gradual accumulation of energy; (2) an elastic canalization of this energy in variable and indeterminable directions, at the end of which are free acts.

This twofold result has been obtained in a particular way on our planet. But it might have been obtained by entirely different means. It was not necessary that life should fix its choice mainly upon the carbon of carbonic acid. What was essential for it was to store solar energy; but, instead of asking the sun to separate, for instance, atoms of oxygen and carpon, it might (theoretically at least, and, apart from practical difficulties possibly insurmountable) have put forth other chemical elements, which would then have had to be associated or dissociated by entirely different physical means. And if the element characteristic of the substances that supply energy to the organism had been other than carbon, the element characteristic of the plastic substances would probably have been other than nitrogen, and the chemistry of living bodies would then have been radically different from what it is. The result would have been living forms without any analogy to those we know, whose anatomy would have been different, whose physiology also would have been different. Alone, the sensori-motor function would have been preserved, if not in its mechanism, at least in its effects. It is therefore probable that life goes on in other planets, in other solar systems also, under forms of which we have no idea, in physical conditions to which it seems to us, from the point of view of our physiology, to be absolutely opposed. If its essential aim is to catch up usable energy in order to expend it in explosive actions, it probably chooses, in each solar system and on each planet, as

it does on the earth, the fittest means to get this result in the circumstances with which it is confronted. That is at least what reasoning by analogy leads to, and we use analogy the wrong way when we declare life to be impossible wherever the circumstances with which it is confronted are other than those on the earth. The truth is that life is possible wherever energy descends the incline indicated by Carnot's law and where a cause of inverse direction can retard the descent—that is to say, probably, in all the worlds suspended from all the stars. We go further: it is not even necessary that life should be concentrated and determined in organisms properly so called, that is, in definite bodies presenting to the flow of energy ready-made though elastic canals. It can be conceived (although it can hardly be imagined) that energy might be saved up, and then expended on varying lines running across a matter not yet solidified. Every essential of life would still be there, since there would still be slow accumulation of energy and sudden release. There would hardly be more difference between this vitality, vague and formless, and the definite vitality we know, than there is, in our psychical life, between the state of dream and the state of waking. Such may have been the condition of life in our nebula before the condensation of matter was complete, if it be true that life springs forward at the very moment when, as the effect of an inverse movement, the nebular matter appears.

It is therefore conceivable that life might have assumed a totally different outward appearance and designed forms very different from those we know. With another chemical substratum, in other physical conditions, the impulsion would have remained the same, but it would have split up very differently in course of progress; and the whole would have traveled another road—whether shorter or longer who can tell? In any case, in the entire series of living beings no term would have been what it now is. Now, was it necessary that there should be a series, or terms? Why should not the unique impetus have been impressed on a unique body, which might have gone on evolving?

This question arises, no doubt, from the comparison of life to an impetus. And it must be compared to an impetus, because no image borrowed from the physical world can give more nearly the idea of it. But it is only an image. In reality, life is of the psychological order, and it is of the essence of the psychical to enfold a confused plurality of interpenetrating terms. In space, and in space only, is distinct multiplicity possible: a point is absolutely external to another point. But pure and empty unity, also, is met with only in space; it is that of a mathematical point. Abstract unity and abstract multiplicity are determinations of space or categories of the understanding, whichever we will, spatiality and intellectuality being molded on each other. But what is of psychical nature cannot entirely correspond with space, nor enter perfectly into

the categories of the understanding. Is my own person, at a given moment, one or manifold? If I declare it one, inner voices arise and protestthose of the sensations, feelings, ideas, among which my individuality is distributed. But, if I make it distinctly manifold, my consciousness rebels quite as strongly; it affirms that my sensations, my feelings, my thoughts are abstractions which I effect on myself, and that each of my states implies all the others. I am then (we must adopt the language of the understanding, since only the understanding has a language) a unity that is multiple and a multiplicity that is one; but unity and multiplicity are only views of my personality taken by an understanding that directs its categories at me; I enter neither into one nor into the other nor into both at once, although both, united, may give a fair imitation of the mutual interpenetration and continuity that I find at the base of my own self. Such is my inner life, and such also is life in general. While, in its contact with matter, life is comparable to an impulsion or an impetus, regarded in itself it is an immensity of potentiality, a mutual encroachment of thousands and thousands of tendencies which nevertheless are "thousands and thousands" only when once regarded as outside of each other, that is, when spatialized. Contact with matter is what determines this dissociation. Matter divides actually what was but potentially manifold; and, in this sense, individuation is in part the work of matter, in part the result of life's own inclination. Thus, a poetic sentiment, which bursts into distinct verses, lines, and words, may be said to have already contained this multiplicity of individuated elements, and yet, in fact, it is the materiality of language that creates it.

But through the words, lines, and verses runs the simple inspiration which is the whole poem. So, among the dissociated individuals, one life goes on moving: everywhere the tendency to individualize is opposed and at the same time completed by an antagonistic and complementary tendency to associate, as if the manifold unity of life, drawn in the direction of multiplicity, made so much the more effort to withdraw itself on to itself. A part is no sooner detached than it tends to reunite itself. if not to all the rest, at least to what is nearest to it. Hence, throughout the whole realm of life, a balancing between individuation and association. Individuals join together into a society; but the society, as soon as formed, tends to melt the associated individuals into a new organism, so as to become itself an individual, able in its turn to be part and parcel of a new association. At the lowest degree of the scale of organisms we already find veritable associations, microbial colonies, and in these associations, according to a recent work, a tendency to individuate by the constitution of a nucleus. The same tendency is met with again at a higher stage, in the protophytes, which, once having quitted the parent cell by way of division, remain united to each other by the gelatinous

substance that surrounds them-also in those protozoa which begin by mingling their pseudopodia and end by welding themselves together. The "colonial" theory of the genesis of higher organisms is well known. The protozoa, consisting of one single cell, are supposed to have formed. by assemblage, aggregates which, relating themselves together in their turn, have given rise to aggregates of aggregates; so organisms more and more complicated, and also more and more differentiated, are born of the association of organisms barely differentiated and elementary. In this extreme form, the theory is open to grave objections: more and more the idea seems to be gaining ground, that polyzoism is an exceptional and abnormal fact. But it is none the less true that things happen as if every higher organism was born of an association of cells that have subdivided the work between them. Very probably it is not the cells that have made the individual by means of association; it is rather the individual that has made the cells by means of dissociation. But this itself reveals to us, in the genesis of the individual, a haunting of the social form, as if the individual could develop only on the condition that its substance should be split up into elements having themselves an appearance of individuality and united among themselves by an appearance of sociality. There are numerous cases in which nature seems to hesitate between the two forms. and to ask herself if she shall make a society or an individual. The slightest push is enough, then, to make the balance weigh on one side or the other. If we take an infusorian sufficiently large, such as the Stentor, and cut it into two halves each containing a part of the nucleus, each of the two halves will generate an independent Stentor; but if we divide it incompletely, so that a protoplasmic communication is left between the two halves, we shall see them execute, each from its side, corresponding movements: so that in this case it is enough that a thread should be maintained or cut in order that life should affect the social or the individual form. Thus, in rudimentary organisms consisting of a single cell, we already find that the apparent individuality of the whole is the composition of an undefined number of potential individualities potentially associated. But, from top to bottom of the series of living beings, the same law is manifested. And it is this that we express when we say that unity and multiplicity are categories of inert matter, that the vital impetus is neither pure unity nor pure multiplicity, and that if the matter to which it communicates itself compels it to choose one of the two, its choice will never be definitive: it will leap from one to the other indefinitely. The evolution of life in the double direction of individuality and association has therefore nothing accidental about it: it is due to the very nature of life.

Essential also is the progress to reflexion. If our analysis is correct, it is consciousness, or rather supra-consciousness, that is at the origin of

life. Consciousness, or supra-consciousness, is the name for the rocket whose extinguished fragments fall back as matter; consciousness, again, is the name for that which subsists of the rocket itself, passing through the fragments and lighting them up into organisms. But this consciousness, which is a need of creation, is made manifest to itself only where creation is possible. It lies dormant when life is condemned to automatism; it wakens as soon as the possibility of a choice is restored. That is why, in organisms unprovided with a nervous system, it varies according to the power of locomotion and of deformation of which the organism disposes. And in animals with a nervous system, it is proportional to the complexity of the switchboard on which the paths called sensory and the paths called motor intersect—that is, of the brain. How must this solidarity between the organism and consciousness be understood?

We will not dwell here on a point that we have dealt with in former works. Let us merely recall that a theory such as that according to which consciousness is attached to certain neurons, and is thrown off from their work like a phosphorescence, may be accepted by the scientist for the detail of analysis; it is a convenient mode of expression. But it is nothing else. In reality, a living being is a centre of action. It represents a certain sum of contingency entering into the world, that is to say, a certain quantity of possible action—a quantity variable with individuals and especially with species. The nervous system of an animal marks out the flexible lines on which its action will run (although the potential energy is accumulated in the muscles rather than in the nervous system itself); its nervous centres indicate, by their development and their configuration, the more or less extended choice it will have among more or less numerous and complicated actions. Now, since the awakening of consciousness in a living creature is the more complete, the greater the latitude of choice allowed to it and the larger the amount of action bestowed upon it, it is clear that the development of consciousness will appear to be dependent on that of the nervous centres. On the other hand, every state of consciousness being, in one aspect of it, a question put to the motor activity and even the beginning of a reply, there is no psychical event that does not imply the entry into play of the cortical mechanisms. Everything seems, therefore, to happen as if consciousness sprang from the brain, and as if the detail of conscious activity were modeled on that of the cerebral activity. In reality, consciousness does not spring from the brain; but brain and consciousness correspond because equally they measure, the one by the complexity of its structure and the other by the intensity of its awareness, the quantity of choice that the living being has at its disposal.

It is precisely because a cerebral state expresses simply what there is of nascent action in the corresponding psychical state, that the psychical state tells us more than the cerebral state. The consciousness of a living being, as we have tried to prove elsewhere, is inseparable from its brain in the sense in which a sharp knife is inseparable from its edge: the brain is the sharp edge by which consciousness cuts into the compact tissue of events, but the brain is no more coextensive with consciousness than the edge is with the knife. Thus, from the fact that two brains, like that of the ape and that of the man, are very much alike, we cannot conclude that the corresponding consciousnesses are comparable or commensurable.

But the two brains may perhaps be less alike than we suppose. How can we help being struck by the fact that, while man is capable of learning any sort of exercise, of constructing any sort of object, in short of acquiring any kind of motor habit whatsoever, the faculty of combining new movements is strictly limited in the best-endowed animal, even in the ape? The cerebral characteristic of man is there. The human brain is made, like every brain, to set up motor mechanisms and to enable us to choose among them, at any instant, the one we shall put in motion by the pull of a trigger. But it differs from other brains in this, that the number of mechanisms it can set up, and consequently the choice that it gives as to which among them shall be released, is unlimited. Now, from the limited to the unlimited there is all the distance between the closed and the open. It is not a difference of degree, but of kind.

Radical therefore, also, is the difference between animal consciousness, even the most intelligent, and human consciousness. For consciousness corresponds exactly to the living being's power of choice; it is coextensive with the fringe of possible action that surrounds the real action: consciousness is synonymous with invention and with freedom. Now, in the animal, invention is never anything but a variation on the theme of routine. Shut up in the habits of the species, it succeeds, no doubt, in enlarging them by its individual initiative; but it escapes automatism only for an instant, for just the time to create a new automatism. The gates of its prison close as soon as they are opened; by pulling at its chain it succeeds only in stretching it. With man, consciousness breaks the chain. In man, and in man alone, it sets itself free. The whole history of life until man has been that of the effort of consciousness to raise matter, and of the more or less complete overwhelming of consciousness by the matter which has fallen back on it. The enterprise was paradoxical, if, indeed, we may speak here otherwise than by metaphor of enterprise and of effort. It was to create with matter, which is necessity itself, an instrument of freedom, to make a machine which should triumph over mechanism, and to use the determinism of nature to pass through the meshes of the net which this very determinism had spread. But, everywhere except in man, consciousness has let itself be caught in the net whose meshes it tried to pass through: it has remained the captive of

the mechanisms it has set up. Automatism, which it tries to draw in the direction of freedom, winds about it and drags it down. It has not the power to escape, because the energy it has provided for acts is almost all employed in maintaining the infinitely subtle and essentially unstable equilibrium into which it has brought matter. But man not only maintains his machine, he succeeds in using it as he pleases. Doubtless he owes this to the superiority of his brain, which enables him to build an unlimited number of motor mechanisms, to oppose new habits to the old ones unceasingly, and, by dividing automatism against itself, to rule it. He owes it to his language, which furnishes consciousness with an immaterial body in which to incarnate itself and thus exempts it from dwelling exclusively on material bodies, whose flux would soon drag it along and finally swallow it up. He owes it to social life, which stores and preserves efforts as language stores thought, fixes thereby a mean level to which individuals must raise themselves at the outset, and by this initial stimulation prevents the average man from slumbering and drives the superior man to mount still higher. But our brain, our society, and our language are only the external and various signs of one and the same internal superiority. They tell, each after its manner, the unique, exceptional success which life has won at a given moment of its evolution. They express the difference of kind, and not only of degree, which separates man from the rest of the animal world. They let us guess that while at the end of the vast spring-board from which life has taken its leap, all the others have stepped down, finding the cord stretched too high, man alone has cleared the obstacle.

It is in this quite special sense that man is the "term" and the "end" of evolution. Life, we have said, transcends finality as it transcends the other categories. It is essentially a current sent through matter, drawing from it what it can. There has not, therefore, properly speaking, been any project or plan. On the other hand, it is abundantly evident that the rest of nature is not for the sake of man: we struggle like the other species, we have struggled against other species. Moreover, if the evolution of life had encountered other accidents in its course, if, thereby, the current of life had been otherwise divided, we should have been, physically and morally, far different from what we are. For these various reasons it would be wrong to regard humanity, such as we have it before our eyes, as pre-figured in the evolutionary movement. It cannot even be said to be the outcome of the whole of evolution, for evolution has been accomplished on several divergent lines, and while the human species is at the end of one of them, other lines have been followed with other species at their end. It is in a quite different sense that we hold humanity to be the ground of evolution.

From our point of view, life appears in its entirety as an immense

wave which, starting from a centre, spreads outwards, and which on almost the whole of its circumference is stopped and converted into oscillation: at one single point the obstacle has been forced, the impulsion has passed freely. It is this freedom that the human form registers. Everywhere but in man, consciousness has had to come to a stand; in man alone it has kept on its way. Man, then, continues the vital movement indefinitely, although he does not draw along with him all that life carries in itself. On other lines of evolution there have traveled other tendencies which life implied, and of which, since everything interpenetrates, man has, doubtless, kept something, but of which he has kept only very little. It is as if a vague and formless being, whom we may call, as we will, man or superman, had sought to realize himself, and had succeeded only by abandoning a part of himself on the way. The losses are represented by the rest of the animal world, and even by the vegetable world, at least in what these have that is positive and above the accidents of evolution.

From this point of view, the discordances of which nature offers us the spectacle are singularly weakened. The organized world as a whole becomes as the soil on which was to grow either man himself or a being who morally must resemble him. The animals, however distant they may be from our species, however hostile to it, have none the less been useful traveling companions, on whom consciousness has unloaded whatever encumbrances it was dragging along, and who have enabled it to rise, in man, to heights from which it sees an unlimited horizon open again before it.

It is true that it has not only abandoned cumbersome baggage on the way; it has also had to give up valuable goods. Consciousness, in man, is pre-eminently intellect. It might have been, it ought, so it seems, to have been also intuition. Intuition and intellect represent two opposite directions of the work of consciousness: intuition goes in the very direction of life, intellect goes in the inverse direction, and thus finds itself naturally in accordance with the movement of matter. A complete and perfect humanity would be that in which these two forms of conscious activity should attain their full development. And, between this humanity and ours, we may conceive any number of possible stages, corresponding to all the degrees imaginable of intelligence and of intuition. In this lies the part of contingency in the mental structure of our species. A different evolution might have led to a humanity either more intellectual still or more intuitive. In the humanity of which we are a part, intuition is, in fact, almost completely sacrificed to intellect. It seems that to conquer matter, and to reconquer its own self, consciousness has had to exhaust the best part of its power. This conquest, in the particular conditions in which it has been accomplished, has required that consciousness should adapt itself to the habits of matter and concentrate all its attention on them, in fact determine itself more especially as intellect. Intuition is there, however, but vague and above all discontinuous. It is a lamp almost extinguished, which only glimmers now and then, for a few moments at most. But it glimmers wherever a vital interest is at stake. On our personality, on our liberty, on the place we occupy in the whole of nature, on our origin and perhaps also on our destiny, it throws a light feeble and vacillating, but which none the less pierces the darkness of the night in which the intellect leaves us.

These fleeting intuitions, which light up their object only at distant intervals, philosophy ought to seize, first to sustain them, then to expand them and so unite them together. The more it advances in this work, the more will it perceive that intuition is mind itself, and, in a certain sense, life itself: the intellect has been cut out of it by a process resembling that which has generated matter. Thus is revealed the unity of the spiritual life. We recognize it only when we place ourselves in intuition in order to go from intuition to the intellect, for from the intellect we shall never pass to intuition.

Philosophy introduces us thus into the spiritual life. And it shows us at the same time the relation of the life of the spirit to that of the body. The great error of the doctrines on the spirit has been the idea that by isolating the spiritual life from all the rest, by suspending it in space as high as possible above the earth, they were placing it beyond attack, as if they were not thereby simply exposing it to be taken as an effect of mirage! Certainly they are right to listen to conscience when conscience affirms human freedom; but the intellect is there, which says that the cause determines its effect, that like conditions like, that all is repeated and that all is given. They are right to believe in the absolute reality of the person and in his independence toward matter; but science is there, which shows the interdependence of conscious life and cerebral activity. They are right to attribute to man a privileged place in nature, to hold that the distance is infinite between the animal and man; but the history of life is there, which makes us witness the genesis of species by gradual transformation, and seems thus to reintegrate man in animality. When a strong instinct assures the probability of personal survival, they are right not to close their ears to its voice; but if there exist "souls" capable of an independent life, whence do they come? When, how, and why do they enter into this body which we see arise, quite naturally, from a mixed cell derived from the bodies of its two parents? All these questions will remain unanswered, a philosophy of intuition will be a negation of science, will be sooner or later swept away by science, if it does not resolve to see the life of the body just where it really is, on the road that leads to the life of the spirit. But it will then no longer have to do with definite living beings. Life as a whole, from the initial im-

pulsion that thrust it into the world, will appear as a wave which rises. and which is opposed by the descending movement of matter. On the greater part of its surface, at different heights, the current is converted by matter into a vortex. At one point alone it passes freely, dragging with it the obstacle which will weigh on its progress but will not stop it. At this point is humanity; it is our privileged situation. On the other hand, this rising wave is consciousness, and, like all consciousness, it includes potentialities without number which interpenetrate and to which consequently neither the category of unity nor that of multiplicity is appropriate, made as they both are for inert matter. The matter that it bears along with it, and in the interstices of which it inserts itself, alone can divide it into distinct individualities. On flows the current, running through human generations, subdividing itself into individuals. This subdivision was vaguely indicated in it, but could not have been made clear without matter. Thus souls are continually being created, which, nevertheless, in a certain sense pre-existed. They are nothing else than the little rills into which the great river of life divides itself, flowing through the body of humanity. The movement of the stream is distinct from the river bed, although it must adopt its winding course. Consciousness is distinct from the organism it animates, although it must undergo its vicissitudes. As the possible actions which a state of consciousness indicates are at every instant beginning to be carried out in the nervous centres, the brain underlies at every instant the motor indications of the state of consciousness; but the interdependency of consciousness and brain is limited to this; the destiny of consciousness is not bound up on that account with the destiny of cerebral matter. Finally, consciousness is essentially free; it is freedom itself; but it cannot pass through matter without settling on it, without adapting itself to it: this adaptation is what we call intellectuality; and the intellect, turning itself back toward active, that is to say free, consciousness, naturally makes it enter into the conceptual forms into which it is accustomed to see matter fit. It will therefore always perceive freedom in the form of necessity; it will always neglect the part of novelty or of creation inherent in the free act; it will always substitute for action itself an imitation artificial, approximative, obtained by compounding the old with the old and the same with the same. Thus, to the eyes of a philosophy that attempts to reabsorb intellect in intuition, many difficulties vanish or become light. But such a doctrine does not only facilitate speculation; it gives us also more power to act and to live. For, with it, we feel ourselves no longer isolated in humanity, humanity no longer seems isolated in the nature that it dominates. As the smallest grain of dust is bound up with our entire solar system, drawn along with it in that undivided movement of descent. which is materiality itself, so all organized beings, from the humblest to

the highest, from the first origins of life to the time in which we are, and in all places as in all times, do but evidence a single impulsion, the inverse of the movement of matter, and in itself indivisible. All the living hold together, and all yield to the same tremendous push. The animal takes its stand on the plant, man bestrides animality, and the whole of humanity, in space and in time, is one immense army galloping beside and before and behind each of us in an overwhelming charge able to beat down every resistance and clear the most formidable obstacles, perhaps even death.

IV: THE CINEMATOGRAPHICAL MECHANISM OF THOUGHT AND THE MECHANISTIC ILLUSION

MATTER OR MIND, reality has appeared to us as a perpetual becoming. It makes itself or it unmakes itself, but it is never something made. Such is the intuition that we have of mind when we draw aside the veil which is interposed between our consciousness and ourselves. This, also, is what our intellect and senses themselves would show us of matter, if they could obtain a direct and disinterested idea of it. But, preoccupied before everything with the necessities of action, the intellect, like the senses, is limited to taking, at intervals, views that are instantaneous and by that very fact immobile of the becoming of matter. Consciousness, being in its turn formed on the intellect, sees clearly of the inner life what is already made, and only feels confusedly the making. Thus, we pluck out of duration those moments that interest us, and that we have gathered along its course. These alone we retain. And we are right in so doing, while action only is in question. But when, in speculating on the nature of the real, we go on regarding it as our practical interest requires us to regard it. we become unable to perceive the true evolution, the radical becoming. Of becoming we perceive only states, of duration only instants, and even when we speak of duration and of becoming, it is of another thing that we are thinking. Such is the most striking of the two illusions we wish to examine. It consists in supposing that we can think the unstable by means of the stable, the moving by means of the immobile.

The other illusion is near akin to the first. It has the same origin, being also due to the fact that we import into speculation a procedure made for practice. All action aims at getting something that we feel the want of, or at creating something that does not yet exist. In this very special sense, it fills a void, and goes from the empty to the full, from an absence to a presence, from the unreal to the real. Now the unreality which is here in question is purely relative to the direction in which our attention is engaged, for we are immersed in realities and cannot

pass out of them; only, if the present reality is not the one we are seeking, we speak of the absence of this sought-for reality wherever we find the presence of another. We thus express what we have as a function of what we want. This is quite legitimate in the sphere of action. But, whether we will or no, we keep to this way of speaking, and also of thinking, when we speculate on the nature of things independently of the interest they have for us. Thus arises the second of the two illusions. We propose to examine this first. It is due, like the other, to the static habits that our intellect contracts when it prepares our action on things. Just as we pass through the immobile to go to the moving, so we make use of the void in order to think the full.

For a mind which should follow purely and simply the thread of experience, there would be no void, no nought, even relative or partial, no possible negation. Such a mind would see facts succeed facts, states succeed states, things succeed things. What it would note at each moment would be things existing, states appearing, events happening. It would live in the actual, and, if it were capable of judging, it would never affirm anything except the existence of the present.

Endow this mind with memory, and especially with the desire to dwell on the past; give it the faculty of dissociating and of distinguishing: it will no longer only note the present state of the passing reality; it will represent the passing as a change, and therefore as a contrast between what has been and what is. And as there is no essential difference between a past that we remember and a past that we imagine, it will quickly rise to the idea of the "possible" in general.

It will thus be shunted on to the siding of negation. And especially it will be at the point of representing a disappearance. But it will not yet have reached it. To represent that a thing has disappeared, it is not enough to perceive a contrast between the past and the present; it is necessary besides to turn our back on the present, to dwell on the past, and to think the contrast of the past with the present in terms of the past only, without letting the present appear in it.

The idea of annihilation is therefore not a pure idea; it implies that we regret the past or that we conceive it as regrettable, that we have some reason to linger over it. The idea arises when the phenomenon of substitution is cut in two by a mind which considers only the first half, because that alone interests it. Suppress all interest, all feeling, and there is nothing left but the reality that flows, together with the knowledge ever renewed that it impresses on us of its present state.

From annihilation to negation, which is a more general operation, there is now only a step. All that is necessary is to represent the contrast of what is, not only with what has been, but also with all that might have been. And we must express this contrast as a function of what might

have been, and not of what is; we must affirm the existence of the actual while looking only at the possible. The formula we thus obtain no longer expresses merely a disappointment of the individual; it is made to correct or guard against an error, which is rather supposed to be the error of another. In this sense, negation has a pedagogical and social character.

Now, once negation is formulated, it presents an aspect symmetrical with that of affirmation; if affirmation affirms an objective reality, it seems that negation must affirm a non-reality equally objective, and, so to say, equally real. In which we are both right and wrong: wrong, because negation cannot be objectified, in so far as it is negative; right, however, in that the negation of a thing implies the latent affirmation of its replacement by something else, which we systematically leave on one side. But the negative form of negation benefits by the affirmation at the bottom of it. Bestriding the positive solid reality to which it is attached, this phantom objectifies itself. Thus is formed the idea of the void or of a partial nought, a thing being supposed to be replaced, not by another thing, but by a void which it leaves, that is, by the negation of itself. Now, as this operation works on anything whatever, we suppose it performed on each thing in turn, and finally on all things in block. We thus obtain the idea of absolute Nothing. If now we analyze this idea of Nothing, we find that it is, at bottom, the idea of Everything, together with a movement of the mind that keeps jumping from one thing to another, refuses to stand still, and concentrates all its attention on this refusal by never determining its actual position except by relation to that which it has just left. It is therefore an idea eminently comprehensive and full, as full and comprehensive as the idea of All, to which it is very closely akin.

How then can the idea of Nought be opposed to that of All? Is it not plain that this is to oppose the full to the full, and that the question, "Why does something exist?" is consequently without meaning, a pseudoproblem raised about a pseudo-idea? Yet we must say once more why this phantom of a problem haunts the mind with such obstinacy. In vain do we show that in the idea of an "annihilation of the real" there is only the image of all realities expelling one another endlessly, in a circle; in vain do we add that the idea of non-existence is only that of the expulsion of an imponderable existence, or a "merely possible" existence, by a more substantial existence which would then be the true reality; in vain do we find in the sui generis form of negation an element which is not intellectual -negation being the judgment of a judgment, an admonition given to someone else or to oneself, so that it is absurd to attribute to negation the power of creating ideas of a new kind, viz., ideas without content; -in spite of all, the conviction persists that before things, or at least under things, there is "Nothing." If we seek the reason of this fact, we

shall find it precisely in the feeling, in the social and, so to speak, practical element, that gives its specific form to negation. The greatest philosophic difficulties arise, as we have said, from the fact that the forms of human action venture outside of their proper sphere. We are made in order to act as much as, and more than, in order to think-or rather, when we follow the bent of our nature, it is in order to act that we think. It is therefore no wonder that the habits of action give their tone to those of thought, and that our mind always perceives things in the same order in which we are accustomed to picture them when we propose to act on them. Now, it is unquestionable, as we remarked above, that every human action has its starting-point in a dissatisfaction, and thereby in a feeling of absence. We should not act if we did not set before ourselves an end, and we seek a thing only because we feel the lack of it. Our action proceeds thus from "nothing" to "something," and its very essence is to embroider "something" on the canvas of "nothing." The truth is that the "nothing" concerned here is the absence not so much of a thing as of a utility. If I bring a visitor into a room that I have not yet furnished, I say to him that "there is nothing in it." Yet I know the room is full of air; but, as we do not sit on air, the room truly contains nothing that at this moment, for the visitor and for myself, counts for anything. In a general way, human work consists in creating utility; and, as long as the work is not done, there is "nothing"-nothing that we want. Our life is thus spent in filling voids, which our intellect conceives under the influence, by no means intellectual, of desire and of regret, under the pressure of vital necessities; and if we mean by void an absence of utility and not of things, we may say, in this quite relative sense, that we are constantly going from the void to the full: such is the direction which our action takes. Our speculation cannot help doing the same; and, naturally, it passes from the relative sense to the absolute sense, since it is exercised on things themselves and not on the utility they have for us. Thus is implanted in us the idea that reality fills a void, and that Nothing, conceived as an absence of everything, pre-exists before all things in right, if not in fact. It is this illusion that we have tried to remove by showing that the idea of Nothing, if we try to see in it that of an annihilation of all things, is self-destructive and reduced to a mere word; and that if, on the contrary, it is truly an idea, then we find in it as much matter as in the idea of All.

Now, if we try to characterize more precisely our natural attitude towards Becoming, this is what we find. Becoming is infinitely varied. That which goes from yellow to green is not like that which goes from green to blue: they are different qualitative movements. That which goes from flower to fruit is not like that which goes from larva to nymph and from nymph to perfect insect: they are different evolutionary movements.

The action of eating or of drinking is not like the action of fighting: they are different extensive movements. And these three kinds of movement themselves—qualitative, evolutionary, extensive—differ profoundly. The trick of our perception, like that of our intelligence, like that of our language, consists in extracting from these profoundly different becomings the single representation of becoming in general, undefined becoming, a mere abstraction which by itself says nothing and of which, indeed, it is very rarely that we think. To this idea, always the same, and always obscure or unconscious, we then join, in each particular case, one or several clear images that represent states and which serve to distinguish all becomings from each other. It is this composition of a specified and definite state with change general and undefined that we substitute for the specific change. An infinite multiplicity of becomings variously colored, so to speak, passes before our eyes: we manage so that we see only differences of color, that is to say, differences of state, beneath which there is supposed to flow, hidden from our view, a becoming always and everywhere the same, invariably colorless.

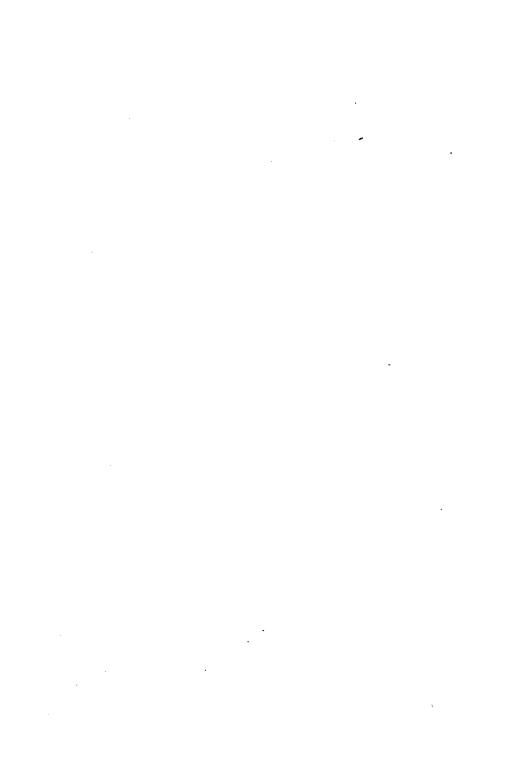
Suppose we wish to portray on a screen a living picture, such as the marching past of a regiment. There is one way in which it might first occur to us to do it. That would be to cut out jointed figures representing the soldiers, to give to each of them the movement of marching, a movement varying from individual to individual although common to the human species, and to throw the whole on the screen. We should need to spend on this little game an enormous amount of work, and even then we should obtain but a very poor result: how could it, at its best, reproduce the suppleness and variety of life? Now, there is another way of proceeding, more easy and at the same time more effective. It is to take a series of snapshots of the passing regiment and to throw these instantaneous views on the screen, so that they replace each other very rapidly. This is what the cinematograph does. With photographs, each of which represents the regiment in a fixed attitude, it reconstitutes the mobility of the regiment marching. It is true that if we had to do with photographs alone, however much we might look at them, we should never see them animated: with immobility set beside immobility, even endlessly, we could never make movement. In order that the pictures may be animated. there must be movement somewhere. The movement does indeed exist here; it is in the apparatus. It is because the film of the cinematograph unrolls, bringing in turn the different photographs of the scene to continue each other, that each actor of the scene recovers his mobility: he strings all his successive attitudes on the invisible movement of the film. The process then consists in extracting from all the movements peculiar to all the figures an impersonal movement abstract and simple, movement in general, so to speak: we put this into the apparatus, and we reconstitute the individuality of each particular movement by combining this nameless movement with the personal attitudes. Such is the contrivance of the cinematograph. And such is also that of our knowledge. Instead of attaching ourselves to the inner becoming of things, we place ourselves outside them in order to recompose their becoming artificially. We take snapshots, as it were, of the passing reality, and, as these are characteristic of the reality, we have only to string them on a becoming, abstract, uniform, and invisible, situated at the back of the apparatus of knowledge, in order to imitate what there is that is characteristic in this becoming itself. Perception, intellection, language so proceed in general. Whether we would think becoming, or express it, or even perceive it, we hardly do anything else than set going a kind of cinematograph inside us. We may therefore sum up what we have been saying in the conclusion that the mechanism of our ordinary knowledge is of a cinematographical kind.

Of the altogether practical character of this operation there is no possible doubt. Each of our acts aims at a certain insertion of our will into the reality. There is, between our body and other bodies, an arrangement like that of the pieces of glass that compose a kaleidoscopic picture. Our activity goes from an arrangement to a re-arrangement, each time no doubt giving the kaleidoscope a new shake, but not interesting itself in the shake, and seeing only the new picture. Our knowledge of the operation of nature must be exactly symmetrical, therefore, with the interest we take in our own operation. In this sense we may say, if we are not abusing this kind of illustration, that the cinematographical character of our knowledge of things is due to the kaleidoscopic character of our adaptation to them.

The cinematographical method is therefore the only practical method, since it consists in making the general character of knowledge form itself on that of action, while expecting that the detail of each act should depend in its turn on that of knowledge. In order that action may always be enlightened, intelligence must always be present in it; but intelligence, in order thus to accompany the progress of activity and ensure its direction, must begin by adopting its rhythm. Action is discontinuous, like every pulsation of life; discontinuous, therefore, is knowledge. The mechanism of the faculty of knowing has been constructed on this plan. Essentially practical, can it be of use, such as it is, for speculation? Let us try with it to follow reality in its windings, and see what will happen.

I take of the continuity of a particular becoming a series of views, which I connect together by "becoming in general." But of course I cannot stop there. What is not determinable is not representable: of "becoming in general" I have only a verbal knowledge. As the letter x designates a certain unknown quantity, whatever it may be, so my "becoming in general," always the same, symbolizes here a certain transition

of which I have taken some snapshots; of the transition itself it teaches me nothing. Let me then concentrate myself wholly on the transition, and, between any two snapshots, endeavor to realize what is going on. As I apply the same method, I obtain the same result; a third view merely slips in between the two others. I may begin again as often as I will, I may set views alongside of views for ever, I shall obtain nothing else. The application of the cinematographical method therefore leads to a perpetual recommencement, during which the mind, never able to satisfy itself and never finding where to rest, persuades itself, no doubt, that it imitates by its instability the very movement of the real. But though, by straining itself to the point of giddiness, it may end by giving itself the illusion of mobility, its operation has not advanced it a step, since it remains as far as ever from its goal. In order to advance with the moving reality, you must replace yourself within it. Install yourself within change, and you will grasp at once both change itself and the successive states in which it might at any instant be immobilized. But with these successive states, perceived from without as real and no longer as potential immobilities, you will never reconstitute movement. Call them qualities, forms, positions, or intentions, as the case may be, multiply the number of them as you will, let the interval between two consecutive states be infinitely small: before the intervening movement you will always experience the disappointment of the child who tries by clapping his hands together to crush the smoke. The movement slips through the interval, because every attempt to reconstitute change out of states implies the absurd proposition, that movement is made of immobilities.



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