

## THE HUMANITIES

The quality of the materials used in the manufacture of this book is governed by continued postwar shortages.


 ס̇ $\eta \boldsymbol{L}$










Our inquiry will be adequately pursued, if it is as clear as the subject matter allows it to be. Precision is not to be sought equally in all discussions any more than in all crafts. We must be content in a study dealing with such subjects and based on such premises to point out the truth approximately and in outline, and in dealing with things which are only for the most part true to reach conclusions of the same kind. In this spirit also should everything that we will have occasion to say be received. For it is a mark of an educated man to look for exactness in each class of things only so far as the nature of the subject permits. It is quite manifestly equally foolish to accept probable arguments from a mathematician and to demand of a rhetorician scientific proofs.
-Aristotle, Nicomachean Ethics

# $\zeta$ <br> THE HUMANITIES 

## Applied Aesthetics

LOUISE DUDLEY<br>AND<br>AUSTIN FARICY<br>Stephens College

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Seventh Impression
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## Preface

The traditional ways of presenting the humanities-literature, music, painting, sculpture, architecture, and the dance-are well established and are familiar to everyone. But that they have, or should have, different particular objectives is not so generally realized. All of them are trying to attain "appreciation," but each is striving for an appreciation of a different aspect of the field. Courses in practical painting are trying to instill an appreciation of the craft of the painter at the same time that they are trying to make painters of the students. Histories of art are concerned with an appreciation of the periods, influences, growths of technics and expressional possibilities and perhaps the lives of the principal artists. Surveys focus attention on the great examples of an art, and often, in a nontechnical way, the development of the art. Histories of culture, as they are usually called, show the parallels, the influences, the reflections between works of art and the development of science, sociology, religion, politics and philosophy. In these traditional approaches to the study of humanities, the work of art itself is nowhere treated for its own sake, and little if any attention is given to the relationship existing between the arts.

On the other hand, everyone wants to know how to study and enjoy a specific work of art for itself, and he would like to know how the same principles apply in more than one art. Accordingly, some twelve years ago an experiment was set up at Stephens College to integrate the study of the arts and at the same time focus attention on an understanding and appreciation of the individual masterpiece. Throughout the years the basic content has remained essentially the same, but the organization of the material has varied. At first the work was divided into three sections, one being devoted to the visual arts, one to music, and one to literature. This arrangement did not stress sufficiently the unifying principles of the separate arts. Later, the arts were united under a rather rigid philosophical scheme with the concepts of time and space as the basis of organization. This arrangement proved too
abstract. Still later, the plan was changed again, this time to the one used in the present volume, where the arts are united and the different aspects are studied as they are usually brought to one's attention in the consideration of any specific work.

In content, this study of humanities differs from the traditional approaches in three major ways: First, it approaches the arts through their common principles, subject, medium, function, elements, organization, and style. Second, it tries to supply the vocabulary and equipment by which any individual can make his own criticism, his own analysis and realize his own appreciation. He has then the opportunity to learn the language of art, what art is made of, what are the methods by which the artist expresses himself, and what such knowledge means in an individual's understanding and appreciation of a work of art. Third, and most important, this approach uses the work of art as the beginning and end of its study. It starts with the surface and penetrates inward as far as the abilities of the teacher and the students are capable. Its sole business is the examination and appreciation of the works of art it encounters, and to this end the entire effort of the book is bent.

Two experimental editions of this text have been published for the use of students, the first in 1929 by Miss Dudley alone, and the second in 1937 by the coauthors of the present volume. For the present text, Mr. Faricy has written Chapters IX, X, XV, and XVI, and the music section of Chapter XVIII, and Miss Dudley the remaining chapters. The work has, however, been more truly a cooperative effort than this division of responsibility would indicate. Each of us has revised and corrected the work of the other, and there is hardly a chapter which does not owe something to both authors.

In the text, the notes, and the bibliography we have recorded, as far as possible, our indebtedness to specific authors. We regret that we have not been able to do so in every case. In an enterprise which has extended over a period of years, we have in some cases forgotten whether an idea or an illustration is original or borrowed. In other cases, we know the idea is not original but we are not able now to indicate the exact source.

In recording obligations, it is a great pleasure to name first President James M. Wood of Stephens College, who gave the original impetus for the study and who has stood by it through its various failures and experiments. We wish to record also our indebtedness to Dr. W. W. Charters, of Ohio State University, who, as Educational

## PREFACE

Adviser of Stcphens College, has given us perspective on the course as a whole as well as counsel on many individual points; to Dean B. Lamar Johnson, of Stephens College, who has done us the very great favor of reading the entire text and making page-by-page criticisms and comments; to Mr. Sheldon Cheney and Mrs. Martha Cheney, Miss Alice Felton and her associates of the Photograph Division, Library, Metropolitan Museum of Art; to Professor A. Phillip McMahon, of New York University; to Mr. Gordon Gilkey, Mr. Harry Hilberry, Mr. Stephen Miller, and Mr. Paul Parsons, of Stephens College, who have assisted with the drawings and photographs; to Dr. Marjorie K. Carpenter for her translation of a poem by Sappho and for valuable work on the index; and to Mrs. Estelle Hilberry, Mrs. Florence Hogan and Miss Bernice McCutcheon who have had the exacting duties of collating references as well as the task of typing and reading proof.

Our greatest obligations, however, are to those who have taught the course. In the years of its existence the class has grown from a single section of fifteen or twenty students to twenty-five sections enrolling over six hundred. As a result we have had many associates in the work, and every one of them has given something of information and challenge. We gladly acknowledge our gratitude to Virginia Babb, Helen Bailey, Betty Brown, Virginia Brown, Robert Carson, Harry Cayley, Albert Christ-Janer, Frances Emberson, Marcus Goldman, Helen Hafner, Adelina Hawkinson, Harry Hilberry, Nellic Lee Holt, Helmut Hungerland, Lawrence Mortensen, Laura Searcy, Robert Stallman, Jean Starr, Alfred Sterling, Zay Rusk Sullens, Robert Sutton, Paul Weaver, and Minnie Wells. We owe an especial debt to Mary Ellen Cowling, Grace Frick, Basil Gauntlett, Edward Megroth, and John Sewall.

Louise Dudley, Austin Faricy.

[^0] August, 1940.

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## THE HUMANITIES

## I

## Introduction

## 1. The Term Humanities

The word humanities dates from the beginning of the Renaissance. During the Middle Ages, when almost all of learning and culture was in the custody of the church, the highest study was concerned with the subjects of divine learning: theology and religion. When the Middle Ages gave way to the Renaissance, interest in antiquity and in the world of everyday was awakened, and emphasis shifted to the subjects of human learning: arts, languages, and sciences. To such studies the name humanities was given. Later the meaning of the term was narrowed; the physical sciences increased in importance and broke away, as did the social sciences in their turn; the name humanities then came to be applied primarily, if not exclusively, to Latin and Greek, since it was those studies that had given the greatest stimulus to humane learning in the Renaissance. Very recently the broader sense of the word has come back into use but with a certain reversal of its original meaning; it now indicates all the subjects of learning except the sciences. Originally, "humane" studies were opposed to "divine" studies; now the humanities are opposed to the sciences, and the classification of humanities includes religion as well as the arts.

For the purposes of this book we shall take the province of the humanities to include principally five arts: literature, music, architecture, painting, and sculpture. We shall refer to the other arts often to make clear their kinship to these five and to demonstrate that the same laws and principles govern all of them, but we shall not attempt to treat them so fully nor so consistently as we do the arts named. We shall not attempt to treat of religion except as it is expressed in art, and then we shall consider it as art and not as religion.

## 2. Humanities as Experience

The basis for the distinction between the humanities and the sciences is fundamentally a difference in the way of knowing or, in the

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language of a more formal tradition, in the categories of knowledge. These categories have been called by different names; it has been said, for instance, that the sciences have to do with truth and the humanities, with beauty; or that the sciences belong to the class of logical knowledge, whereas the humanities belong to the class of intuitive knowledge. The names do not matter greatly; what does matter is that we recognize a difference in the way of knowing. We know, for instance, that the sunset is beautiful and that two plus two equals four. We know, also, that King Lear is a powerful play and that salt is composed of sodium and chlorine. But we do not know all these things in the same way. Our knowledge of the sunset or the play is entirely different from our knowledge of mathematical relations or chemical formulas. In fact, it is so different as hardly to deserve the name knowledge; it is usually called appreciation; a better word is experience. When we have enjoyed the sunset or King Lear, we have not so much added to our sum of knowledge as to our store of experience.

There is, of course, factual or logical knowledge about the humanities, but such knowledge is generally held to be unimportant unless it is accompanied by experience or appreciation. Here is a poem so short that it may be quoted in its entirety:

> When I consider how my light is spent Ere half my days in this dark world and wide, And that one Talent which is death to hide Lodged with me useless, though my soul more bent To serve therewith my Maker, and present My true account, lest He returning chide, "Doth God exact day-labour, light denied?" I fondly ask. But Patience, to prevent That murmur, soon replies, "God doth not need Either man's work or his own gifts. Who best Bear his mild yoke, they serve him best. His state Is kingly: thousands at his bidding speed, And post o'er land and ocean without rest; They also serve who only stand and wait." $\quad$-Jons Mriton, On His Blindness.

There are, of course, facts about the form of the poem. Because of its meter and length it is classified as a sonnet, a type that was brought to England in the middle sixteenth century. The rhyme follows the Italian scheme as opposed to the English order that was preferred by Spenser and Shakespeare. There is also knowledge about the life of the author. Milton was born in London in 1608; he began to write poetry


Fro. 1.-Michelangelo (1475-1564). Cumaean Sibyl, detail of Sistine Chapel ceiling (1508-1512).
Fresco. About life size. Rome, Sistine Chapel. (Alinari.)
when he was very young. Upon leaving Christ's College, Cambridge, he settled for a time at Horton, where he wrote L'Allegro, Il Penseroso, Comus, and Lycidas. He then went abroad to travel but after a year was called home by the civil war. He was active in the struggle for liberty,

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becoming Latin Secretary to the Council of State. The strain of this work told on his eyes, which had always been weak, and, in 1652, he became totally blind. His last poems, Paradise Lost, Paradise Regained, and Samson Agonistes, were dictated after he lost his sight. There are facts, too, about the poem itself. Clearly it was written after Milton lost his eyesight; his "light is spent." In the poem he refers to the parable of the talents in the twenty-fifth chapter of Matthew, comparing himself to the man with one talent who was blamed by his master because he hid his talent in the earth.

One may know all these facts and more about Milton's sonnet, but the facts are not the experience of the poem. They help one to appreciate the sonnet, but the knowledge of the facts is not in itself appreciation. And unless one does enter into the experience of the poem, unless he feels the desolation that comes from seeing his most cherished ambition made impossible, unless he knows the peace that follows the renunciation of that ambition and the exaltation of realizing that his failure is part of a greater whole, his knowledge of the facts is as nothing.

The end and aim of all the humanities is experience, appreciation.

## 3. Types of Experience

Experiences differ almost as widely as the people having them; they may, however, be grouped into three general types. First, of course, is the original experience of the artist. This type needs no discussion. "I did think I did see all Heaven before me, and the great God himself," said Handel of the "Hallelujah Chorus." Even if Milton had not been writing in the first person he must have experienced the emotion he put in the sonnet on his blindness. Before Michelangelo could draw the face of the Cumaean sibyl he must have understood that worn and experienced face. Keats wrote to a friend about his pleasure in the walk that was the occasion for his poem To Autumn. ${ }^{1}$

[^1]And full-grown lambs loud bleat from hilly bourn;
Hedge-crickets sing; and now with treble soft
The red-breast whistles from a garden-croft;
And gathering swallows twitter in the skies.

A second type is the experience of the person who enjoys a work of art. The artist creates a picture, a poem, or a piece of music, and the critic, looking at the picture, reading the poem, or listening to the music, re-creates the experience of the artist. As we read Milton's sonnet we, too, feel the exaltation that comes from realizing that "His state is kingly," and we are more calm in our assurance that "They also serve who only stand and wait." When we read Keats's poem we feel the careless abundance of autumn, we see the barred clouds, the stubble field bathed in a rosy light, and perhaps we can hear the twitter of swallows. When we look at the face of the Cumaean sibyl we understand better the wisdom of an old woman, and we understand that one can have sympathy without sentiment, firmness without harshness, that one may come through life worn and harrowed but unconquered, that one may know hard reality without bitterness. And if we do not see the gates of heaven open when we hear the "Hallelujah Chorus," at least we never listen to it seated; tradition demands that the audience rise when this music is being played or sung. Conceivably, the experience of the critic may be exactly the same as that of the artist, but it is hardly possible that it is so. It is like the artist's experience, but it is not identical with it; it is, however, a genuine experience. The artist creates; the critic re-creates.

These two types of experience are direct; a third type is indirect. When a person has enjoyed any work of art, he becomes more sensitive to all expressions of art, and so he becomes more alive to the world in general. The man who has studied Renaissance architecture notices for the first time the pilasters on his own house. The person who has begun to notice design begins to see variety and beauty in grills and fences of the houses around him. George Moore sums up this type of experience in his novel Héloïse and Abélard when he describes the change that has taken place in Héloïse through her reading of Virgil.

The river drew her that day as it did every day; and overlooking it she watched the ducks swimming in it, saying to herself: Virgil does not speak of the beauty of ducks swimming in a river, the softness of their voices and their round, black eyes so intelligent, but I should not have known how beautiful they are when swimming in a river if I had not read Virgil, and might well have lived my life out from birth to death without knowing that ducks swam with their pert tails turned up to the sky. It is strange
that he should have no words about water-lilies, yet he taught me to see their great leathery leaves. ${ }^{1}$
As Héloïse puts it in another place, "He unsealed my eyes, and by night and day the skies and seas will be beautiful to me. . . ."

There are, then, three ways of getting experience in art:

> 1. Direct
> Creation
> 2. Direct. . . . . . . . . . . . . . Re-creation or appreciation
> 3. Indirect.
> Greater appreciation of life in general

This book will be limited in its scope to the second. It will not attempt to foster original creation; it will show some possibilities for original creation, and it may arouse the desire to create. It should, also, make the individual more alive to the world in general, but it is the second, the re-creation or appreciation of art, that is the subject of this volume.

## 4. The Purpose of This Book

The experience of the humanities, like any other expcrience, is a fact, not a theory. Furthermore, being expcrience, it cannot be taught; it cannot be learned. No experience can ever be transferred from one person to another; each person must have his own experience. One person may enjoy the sunset or King Lear, and another, seeing his pleasure, may turn to the sunset or King Lear and get pleasure from them, but his pleasure is his own; he docs not learn it from his friend.

A book that has to do with the experience of the humanitics, therefore, cannot teach appreciation, since appreciation cannot be taught. It can, however, have other functions. It may ensure acquaintance with works of art that have merit. It may remove some of the obstacles that prevent appreciation. Most importantly, however, a book on the humanities may help us to enjoy art by helping us to be conscious of it. Often we fail to appreciate the things of art because we do not see with our eyes or hear with our ears. This does not mean that we are blind and deaf but that we do not pay attention. In the infinite number of things with which we are surrounded all the time we have learned to disregard those that are of no immediate importance to us. Even in a quiet spot there are many separate sounds to be heard at any one second, but we pick out a few and are not even conscious of the others. The worker in a mill learns not to hear the

[^2]noise all around him, and so he can distinguish slight sounds that are inaudible to another. And something of the same thing is true of each of us; we do not hear the accustomed sounds but notice at once a knock on the door or a strange step on the stair, and, in the same way, we notice only a few of the infinite sights before our eyes. No one could ever be conscious of all the sense impressions to which he is subjected.

In learning what to see and hear and what not to see and hear, we have been influenced by many different factors, such as the need for self-preservation or economic usefulness, but we have neglected those qualities which specifically make for value in the humanities. A car goes down the street, and we notice that Miss Eva has traded her Ford for a Buick, but we do not see the lights reflected on the shining surface of the car, though that is what would be of importance to the painter. We have been compelled to learn that the fire is hot lest we burn ourselves, but there is no corresponding necessity for us to learn the color of the fire. It is to our advantage to hear the bell that calls us to work or tells us to stop working, but we pay no attention when

$$
\begin{aligned}
& \text { Hedge-crickets sing; and . . . } \\
& \text { The red-breast whistles from a garden-croft. . . . }
\end{aligned}
$$

The chief thing, then, that any book on the humanities may do for us is to cause us to pause, to look and listen, to notice what we might have overlooked, and it is the purpose of this book to help us see with our eyes and hear with our ears in the hope that, seeing and hearing, we may understand and enjoy. We shall not attempt to say what art is except as we have defined it in defining the humanities: nor shall we attempt to explain why art moves men, but, accepting the fact that it does move them, we shall point out the characteristics that should in turn make us more alive to it. We shall use as examples only those works which have been accepted as art in the sense that they have given experience to various people.

In method we shall start with those qualities that are easiest to see and understand and proceed to those that are less obvious. Accordingly, we begin with the background for art-subject and func-tion-and go through medium and elements to organization, style, and meaning. We shall as far as possible consider all the arts together to show that all follow the same laws and principles.

PART I
Background

## Subject

## 1. Definition

The subject of a work of art answers the question "What is it about?" If mention is made of a cinema, a novel, an opera, a painting, or a statue, one of the first questions is usually "What is it about? What is the subject?"

A glance at Pieter Breughel's painting called Hunters in the Snow is sufficient to make clear what it is about-a winter scene in a small village, men and women skating, hunters with dogs. A short poem from Shakespeare's Love's Labour's Lost keeps the same general subject with different details:

> When icicles hang by the wall
> And Dick the shepherd blows his nail, And Tom bears logs into the hall,
> And milk comes frozen home in pail, When blood is nipp'd and ways be foul,
> Then nightly sings the staring owl,
> "'Tu-whit; tu-who!"-
> A merry note,
> While greasy Joan doth keel the pot.
> When all aloud the wind doth blow
> And coughing drowns the parson's saw And birds sit brooding in the snow
> And Marian's nose looks red and raw,
> When roasted crabs hiss in the bowl,
> Then nightly sings the staring owl,
> "Tu-whit, tu-who!"-
> A merry note,
> While greasy Joan doth keel the pot.
-V, ii, 922-938.
The music that Richard Strauss calls Till Eulenspiegel's Merry Pranks tells of the various pranks and escapades of the folk hero Till.


Fig. 2.-Pieter Breughel the Elder (ca. 1525-1569). Ihunters in the Snow (ca. 1567). Oil on canvas. Height: 3 feet 10 inches. Vienna, Kunsthistorisches Muscum.

In the first scene, Till rides into the market place on his horse, breaking pots and pans and causing a general confusion. Next, he disguises himself as a priest. A little later he falls in love, but the girl will have none of him, and Till leaves in disgust. He then sets out to confuse and disturb the learned men, asking them questions so fast as to leave them open-mouthed in astonishment. After this escapade, Till goes through a time of searching during which the various elements of his character strive for supremacy. There is in him the naive, simple peasant who would do good and who wishes everyone well, and there is also the rogue who would scorn and trick everyone; after quite a debate the roguish side conquers, and at last he is led into the courtroom, where he is condemned and then taken to the gallows to be hanged.

One might continue in this way to illustrate subjects for all the arts. Thackeray's novel Vanity Fair, for example, is about the adventures of a penniless schoolgirl, Becky Sharp; how she schemed to obtain wealth and social position only to dic in poverty. The cinema Becky Sharp tells the same story. The four operas that make up Wagner's The Ring of the Nibelung tell of the curse that was placed on the gold stolen from the Rhine maidens. Botticelli's painting Birth of Venus shows a young woman poised on the edge of a shell. Michelangelo's David is a statue of a young man. The pillars of the south porch of the Erechtheum are carved to represent women. Even china plates and cups, table silver, wallpaper, the material for a dress or a window curtain-anything and everything may have subject.


Fic. 3.-Sandro Botticelli (1444-1510). Birth of Venus (ca. 1485).
Tempera on canvas. Height: 5 fect $31 / 4$ inches. Florence, Uffizi.


Fig. 4.-Sandro Botticelli. Detail of Birth of Venus.

There has always been difficulty in finding an acceptable word for what we are calling subject. Moreover, different words are used in the different arts; in painting and sculp-


Fig. 5.-Michelangelo (1475-1564). David (1501-1503).
Marble. Height: 18 feet. Florence, Academy. (New York University.) ture subject is called representation; in literature, content; music with subject is called program music. The word imitation (mimesis), since it was employed by Aristotle, has the most widespread use, but a poem about winter can hardly be called an imitation of winter. Even a painting is not strictly an imitation of the object painted. In any of the arts, the word subject can be used, and hence it is adopted for this text.

As used here, subject refers only to an event or object or scene described or represented in a work of art, not to the thing itself. Shakespeare's poem is about winter; but the poem is not itself winter. Breughel's painting has as its subject a snow scene, but a real snow scene has no subject; it is not about anything; it is merely itself. By this definition nothing in nature has subject. A rose has no subject; it does not imitate or represent anything; it is just a rose. A painting of a rose or a poem about a rose has subject; it is representing or imitating the rose. It is about a rose, but the rose itself is not about anything.

## 2. Imitative and Nonimitative Arts

Arts without Subject. There are, of course, many works of art that, like nature itself, have no subject. Music often has subject; often it has none. Sonatas, études, dances-these usually have no subject; they do not imitate ot represent anything. Music without subject is


Fig. 6.-Erechtheum, Porch of the Maidens (420-393 в.c.). Pentelic marble. Height of each caryatid: 7 feet, 9 inches. Athens, Acropolis. (Clarence Kennedy.)

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Fig. 7.-Erechtheum, East Porch.
Pentelic marble. Height of columns: 21 feet, 7 inches. (Clarence Kennedy.)
called pure music or absolute music. The applied arts, such as pottery, cloth, or silverware, may or may not have subject. In general, architecture has no subject unless it is something of a freak, like the restaurant in California built to look like a hat and called the Brown Derby. Usually a house is just a house, and, although it may have decoration that has subject, the house has no subject itself. The pillars on the south porch of the Erechtheum represent young women, but those of the east porch have no subject; they are just pillars. In this respect, of course, the columns of the east porch are typical, and the maidens of the south porch are not. As commonly used, the word sculpture has reference only to works with subject; however, there are many beautiful examples of carvings without subject. Literature and painting likewise are thought of as having subject, though even in these arts it is possible to find examples that do not.

From all these examples we may draw a first conclusion: Subject is not essential to art; art may or may not have subject.

Importance of Subject. A second conclusion has to do with the importance of subject in understanding art. In pictures, statues, poems, novels, or cinemas it is usually essential that the subject be understood. Anyone who looks at Michelangelo's David recognizes that the subject is a man, and anyone who reads Vanity Fair can tell what it is about. No one would sit for half an hour at a cinema or at a play in doubt as to whether the characters were men or birds or trees. But such a state of indefiniteness is an everyday occurrence in music and, to a lesser extent, in the dance. One can hear the music of Till Eulenspiegel's Merry Pranks and enjoy its gaiety without knowing what it is supposed to represent. And the dance remains a beautiful spectacle whether or not one understands what it is about. The listener or the spectator undoubtedly gets more enjoyment if he knows what the music or the dance represents, but that knowledge is not essential.

In the industrial arts the subject is even less important. It does not really matter what is the design of the wallpaper or the spoon. One may live in the room with a certain wallpaper or stir his coffee with the same spoon for years without ever noticing them. Their beauty and usefulness are in no way dependent on recognition of the subject. In summary, then, we may say that knowledge of subject is important in painting, sculpture, and literature, and it is relatively unimportant in music and the applied arts. But even in those cases in which it is unimportant, knowledge of the subject increases appreciation, because it gives one a more complete understanding on which to base judgment. Fine work anywhere repays close study.

Clearness of Subject. Closely akin to this problem of the importance of the subject is the question of the clearness with which an art can portray its subject. The arts in which the subject is importantliterature, cinema, drama, painting, sculpture-can and do portray their subjects clearly; we know what they are about, and we know without confusion. In general, also, the applied arts have no difficulty in making their subjects clear. If we do not know what flowers are on the spoon or the wallpaper, it is because we do not notice them and not because the paper or the silver cannot represent them clearly. The same is true of architecture; houses could be built to represent roses or mountains or men on horseback; there is no reason why the wood or brick or stone should not take those shapes. But such a condition of affairs is almost inconceivable; no one wants houses with subject.

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Music, on the other hand, can hardly make its subjects very clear. If one knows the story of Till Eulenspiegel he can usually follow it in the music; he can tell when Till is mocking the learned men, when he is in love, and so on. But it is safe to say that one who did not know the story could not tell what is happening, and even if he knew he would have difficulty in saying just what Till is doing at any particular moment. The changes in mood are clear, but the exact subject is not.

The music of Till Eulenspiegel's Merry Pranks, however, belongs in general to the class in which the composer merely tries to suggest the sounds and events without reproducing them exactly; for example, Strauss does not try to make the music imitate the breaking of crockery or the galloping of a horse. But there is music in which such exact reproduction of sound is attempted. In Strauss's tone poem Don Quixote there is a passage about Don Quixote's fight with the sheep in which the tones of the instruments reproduce the baaing of sheep. In Rimski-Korsakov's The Flight of the Bumblebee, the violin makes a sound like the buzzing and the humming of the bee. This type of imitation is exact, but it may be questioned whether even such close imitation is clear if one does not already know the subject. One person hearing The Flight of the Bumblebee decided that it represented a blizzard! And it must be granted the sound is as much like a blizzard as a bee. If a pianist played a song about spinning when the program had announced a subject quite different, such as murmurs in the forest, most of the audience would not know the difference. But they would know the difference if they were told that they were to see a picture of a forest and were shown, instead, one of a girl at a spinning wheel! In opera and in vocal music the subject is clear, provided the words are in a language the audience can understand, but it is clear by virtue of the words, not the music.

The dance is almost as limited as music. Pantomime can tell a simple story; ballet, with the help of costume and scenery, can be fairly clear, but the dance, as distinguished from pantomime, cannot. Costuming helps, but one can seldom tell the exact subject of a dance or even of a ballet without some help.

Conclusion. Almost every art can show examples that have subject and examples that do not have subject. In some the subject is clear; in others it is not clear. Those arts which have subject are called imitative arts. Those arts in which the subject is lacking or is of no importance are called nonimitative arts or arts of design. Literature, painting, sculpture, the drama, opera, cinema are imitative arts.

Architecture and the applied arts are nonimitative arts. Music and the dance are sometimes imitative and sometimes nonimitative.

## 3. Levels of Understanding

In understanding the subjects of art there are different degrees or levels. There is always, of course, the obvious explanation, the meaning that appears on the surface. No one needs to be told that the pillars on the south porch of the Erechtheum are young women or that Breughel's Hunters in the Snow is a winter scene; if one knows the words, Shakespeare's poem is equally clear. In these cases, the obvious explanation is all one needs. Often, however, it is not enough. There are different levels of knowledge, as it were, and for a complete understanding one must have some background information about the subject. There are at least three different types of subject that call for this kind of information: (1) the well-known story or reference, (2) the symbol, and (3) the attribute.

The Well-known Story or Reference. As an example of the well-known story we may take the figure of Santa Claus. Anyone can see a jovial old man, dressed in red, with a kindly face and white hair and whiskers; but one who knows only these characteristics has missed the point. He needs to identify the figure as Santa Claus and to know the stories about him.

Similarly, anyone can tell, with no cause for confusion, that Michelangelo's David is a statue of a young man; a very beautiful young man with a serious, puzzled expression on his face. He is standing with his left arm raised and his right arm by his side. At a glance anyone can identify the subject to this extent, and he can get a great deal of pleasure from the statue with no more knowledge. However, the sculptor has named the young man David, and we understand the statue better if we know the story Michelangelo had in mind. It is told in I Samuel and may be summarized briefly as follows:

There was war between the children of Israel and the Philistines. Goliath, a champion of the Philistines, challenged anyone from the Israelites to single combat, saying, "Choose you a man for you, and let him come down to me. If he be able to fight with me and to kill me, then will we be your servants: but if I prevail against him and kill him, then shall ye be our servants and serve us."

For forty days, morning and evening, Goliath made this offer, but no one of the Israelites dared accept it. Then a shepherd boy named David, who had been sent to the camp to take some parched corn and loaves and cheese to his brothers, heard the challenge and volunteered for the fight with no armor and carrying no weapon but his sling and five smooth stones that he had picked up from the brook. With one of these
he smote the champion on the forehead so that he fell down. Then he took from Goliath the sword and cut off his head.

The only detail that identifies the statue is the sling that is in place on David's left shoulder, the handle in his left hand. However, David is so nearly an ideal youth that probably not a great deal would be lost if the statue were simply called Young Man or if we did not know who David was.

In Vanity Fair, also, the story stands alone, as it were, and is independent of the allusion to Bunyan's Pilgrim's Progress:

Then I saw in my dream that when they were got out of the wilderness they presently saw a town before them, and the name of that town is Vanity. And at the town there is a fair kept, called Vanity Fair. It is kept all the year long. It beareth the name of Vanity Fair because the town where it is kept is lighter than vanity, and also because all that is there sold, or that cometh thither is vanity. As is the saying of the wise, "All that cometh is vanity."

And yet in this case and in the case of David, the understanding is greater and the appreciation is therefore better if we know who David is and what Thackeray had in mind when he called his book Vanity Fair. Wagner's The Ring of the Nibelung is more difficult. The operas tell the story, and one can read it or hear it, but the person who knew nothing of their background would definitely be at a disadvantage. To get the greatest pleasure from these operas we need to know what Wagner expected us to know, that they are based on old stories of gods and heroes.

The examples given so far can be enjoyed without any information about the subject; Botticelli's Birth of Venus is very nearly nonsense if one accepts it at its face value alone. The young woman is very beautiful, but why would she be standing naked on the edge of a shell? Why does not the shell topple over? And what are the people doing on either side of her? The story that Botticelli expected his audiences to know was that Venus, the goddess of love and beauty, was born from the foam of the sea. In the picture, she is being wafted to the shore by the winds, while one of the hours, Hora, is waiting on the bank to receive her.

Symbol. A different type of knowledge is necessary if we turn to some carvings on the façade of the cathedral at Amiens. There is a double row of twelve reliefs, or twenty-four in all. The last three show a goat, a man pouring water from a jug, and two fish. Under the goat is a man with two animals at his feet, a third hanging from a tree;


Fig. 8.-Signs of the Zodiac, with corresponding occupations. Detail of basement of west façade (first half of thirteenth century).
Stone. Height of each quatrcfoil: $21 / 2$ feet. Amiens, Cathedral. (AG photo.)
under the man is a two-headed figure seated at a table, with a servant on each side; under the two fish is a man, his shoes off, warming his feet at the fire. To one who knows these figures, it is clear that they represent signs of the zodiac. The first is the goat Capricorn, which represents, roughly, the month of December. The second is the water bearer Aquarius, or January. And the third is the fishes Pisces, or February. The lower relief shows a person employed in the typical occupation of that month. December is putting up meat for the winter; January, following the Latin Janus, has a head looking each way. February is trying to keep warm. When all the reliefs are put together they form a sculptured calendar.

In the carved space over the door (tympanum) of the church of St. Trophime at Arles is a scene that demands the same sort of explanation. In the center is a man; around him are four creatures: a winged man, a winged lion, a winged ox, and an eagle. We might surmise that the figure in the center is Christ, but no amount of guessing would tell that the four other figures represent the four evangelists, according to


Fig. 9.-Majestas Domini and Apostles (middle of twelfth century). Tympanum (from plaster cast in Trocadero).
Stone. Width of tympanum: 13 feet. Arles, St. Trophime. (Ncurdein.)
the symbolic interpretation of Revelation; the winged man, Matthew; the winged lion, Mark; the winged ox, Luke; the eagle, John. ${ }^{1}$

In these two cases from Amiens and Arles we have examples of the symbol. A symbol is a sign that, by common agreement, stands for something else. The fish stand for the month of February, and the winged lion, for the evangelist St. Mark. If we turn back to the Birth of Venus again, we see the difference. Botticelli had in mind a wellknown story, and his picture is merely an illustration of the story. But there is no similar story about the fish whereby we identify them as February. The relief below the fish we might identify as showing an occupation appropriate to February, but, for the fish themselves, one has to know that they stand for February.

The symbol is a kind of shorthand and as such is used a great deal in everyday life. The conductor on a railroad train wears a star on his sleeve to indicate that he has been in the service a certain number of years. A "theme song" played on the radio identifies the program that is to follow; two crossed sticks and black and white zigzag lines indicate a railroad crossing. The rank of an officer in the army or navy is

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Fig. 10.-Albrecht Dürer (1471-1528). St. Peter and St. John the Evangelist (1526). Oil on wood. Height: 6 feet $8 \frac{1}{4}$ inches. Munich, Alte Pinakothek. (Raymond and Raymond.)


Fig. 11.-Albrecht Dürer (1471-1528). St. Paul and St. Mark (1526).
Oil on wood. Height: 6 feet $81 / 4$ inches. Munich, Alte Pinakothek. (Raymond and Raymond.)
symbolized by the insignia on his collar. A coat of arms is a symbol for a certain family.

Sometimes there is no connection at all between the symbol and the thing symbolized. There is no relation between the oak leaf and the rank of major in the army. Usually, however, there is some connection, even though it may be remote. The symbol for the physician, which is a winged staff twined with serpents, is the caduceus, which was carried by Mercury as messenger of the gods and which had magical powers over sleeping, waking, and dreaming. In the case of the four animals of the Apocalypse and the evangelists, the connection is rather vague, but Mark is supposed to have some of the qualities of the lion; John, of

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the eagle, etc. There is also a connection between the months of the year and the signs of the zodiac. The zodiac represents approximately the path of the sun through the various constellations, each constellation being called from some real or fancied resemblance to the subject named.

Attributes. The attributes of a person are those things with which he is associated and by means of which he can be identified. For example, the god Jupiter wielded the thunderbolt, and pictures or statues represent him with the thunderbolt in his hand. The thunderbolt is his attribute, and, if we see a painting or a statue of a man with a thunderbolt in his hand, we know it is Jupiter. The attribute is about halfway between the well-known story and the symbol. Often the attribute grows into the symbol; if we used the thunderbolt without the figure of Jupiter, it would be a symbol for him. Ordinarily the symbol and the attribute remain distinct.

The Greek and Roman gods and goddesses are frequently identified by their attributes. We recognize Mercury by his caduceus; Neptune by his trident; and Bacchus by the grapes he holds or the grape leaves in his hair. In the Middle Ages the saints also were regularly identified by their attributes. To name only a few, St. Paul is frequently represented as an old man with a sword. St. Peter carrics keys in reference to Christ's saying that He gave Peter the keys to the church. Gabriel carries a lily and often is shown with a scroll on which are the words Ave Maria Gratia Plena, the words with which Gabriel addressed the Virgin at the Annunciation. St. Andrew is known by a cross in the shape of an X, called, for that reason, St. Andrew's cross, since he is supposed to have suffered martyrdom on such a cross.

## 4. Choice of Subject

Are there certain subjects that are not allowed in art? What are fit subjects for art? Almost instinctively one answers these questions by saying that the noble, the lovely, the beautiful, the distinguished, the unusual are the proper subjects for art. Subjects such as we found in David, in the Birth of Venus, and the young women of the Erechtheum seem appropriate subjects for art, and usually one has something of this kind in mind when he calls a subject "artistic." By the same instinct, subjects that are ugly, undignified, and commonplace do not seem proper subjects for art.

But when one turns from theory to practice, this idea is not borne out. There is nothing "artistic" about the struggles of Becky Sharp to

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Fig. 12.-Domenico Ghirlandaio (1449-1494). Old Man and Boy (undated). Oil on wood. Height: 2 feet $3 / 8$ inches. Paris, Louvre. (Raymond and Raymond.)
gain a foothold in society. The adventures of Till Eulenspiegel are often vulgar, and the hero Till is neither brave nor dignified nor heroic. Even in Shakespeare's poem on winter, we cannot say that the subject is lovely; there is nothing beautiful or artistic in the shepherd blowing his nails to keep warm, in the people coughing in church, or in Marian's nose, "red and raw." One of Ghirlandaio's best pictures is that of an old man with a diseased nose, so repellent that most of us would turn away from him in disgust if we met him in life.

These are not pleasant and agreeable subjects, nor are they beautiful in themselves; yet we find them in art. Moreover, all these examples are old enough to be definitely established as art. We cannot say, "Maybe they are not really art," for they have been proved. Most emphatically, art is not limited to subjects that in themselves are beautiful, agreeable, lovely. The beautiful, the agreeable, the lovely
are subjects in art, but they are not the only ones. Any subject may be a subject of art.

It is easy to see that this is true, easy to say categorically that the work of art is not good or bad, as its subject is pleasing or displeasing, but it is not so easy to tell why, nor are we ready to understand now all the arguments that might be made on this point. One point, however, is clear; the value of the work of art is not in the subject itself but in the use made of the subject, in what the artist has to say about or through his subject. We like in art what we do not like in nature, and the reason is that we see not alone the subject but the subject as interpreted for us by the artist.

## 5. Art and Nature

In that which the artist brings to his subject is also the answer to the question of the lifelikeness of art. If we are asked the question "Should art be like life?" again we answer almost instinctively that art should be like nature, that the more natural it is the better art it is. We praise a work when we say it is natural or lifelike, and we disapprove when we say it is unnatural or not like life. We look at a portrait and say, "He seems almost ready to speak," or we read a play and think that the characters are doing and saying just what those characters would do and say. And it is the highest praise we can give either portrait or play.

Nevertheless, it is not literally truc that the more nearly a work of art is like life the better it is; there is something more to be said about the lifelikeness of the subject. First, it is only in the imitative arts that the matter of lifelikeness comes up. In the nonimitative arts no one pays any attention to literal truth. The lilies in a dress pattern may be green or blue or black or red; no one cares whether or not they are true to life.

Second, we do not want art to be a facsimile of nature. We do not want to be deceived into thinking something is life when it is art or that something is art when it is life. At the theater we do not want the characters to be so real that we run to help the maiden in distress or shoot a revolver at the villain. The paper roses that look so natural that we put them in water; the wax policeman of whom we ask the time; the painted door we try to open-these are good stunts, but we do not think of them as art.

Even when there is no question of deception we still want art different from life. A dictaphone can take down a conversation so that
we know the exact words used by people, but we are bored by the mere thought of a play with a dialogue of that kind. The plaster mask is obviously more like a person than the head carved by the sculptor, for the mask is again an exact duplicate; but we like the statue better and say it is greater art. In the same way we prefer a painting to a photograph, though the photograph, being produced by a mechanical process, must be an exact reproduction of the appearance of the original.

No art is ever really like life. A portrait in two dimensions is not really like a woman who has thickness as well as length and breadth. A stone statue is very different from a living, breathing person. Any attempt of man to represent nature is, necessarily, incomplete and partial. If art were like nature, it would not be art but nature. The story is told that a woman, looking at a canvas painted by Matisse, exclaimed, "I never saw a woman look like that." Whereupon Matisse replied, "Madame, that is not a woman; it is a painting."

No matter how true art may be in certain details, it is in essence always partial, always unnatural. In any subject that he has chosen the artist stresses details that seem to him important; others he omits or changes; so that in looking at his work we see the subject, not as it really is in life but as it is interpreted for us by the artist. And if we find his interpretation true we say the work is like life.

Examples may be found in any art with subject. Compare, for instance, the photograph of Whistler's mother with the famous portrait painted by her son. They are much alike. Anyone who knew one would recognize the other. The photograph must be a more literal representation, but we all prefer the portrait and we feel that it is more nearly true. Or we may take the lines that Shakespeare puts in the mouth of Shylock when he is protesting against the way the Christians treated him.
. . . Hath not a Jew eyes? Hath not a Jew hands, organs, dimensions, senses, affections, passions; fed with the same food, hurt with the same weapons . . . warmed and cooled by the same winter and summer, as a Christian is? If you prick us, do we not bleed? If you tickle us, do we not laugh? If you poison us, do we not die? And if you wrong us, shall we not revenge?
-The Merchant of Venice, III, i, 60-69.
Probably no one would ever say just those words, but in them Shakespeare has summed up the feelings of the Jew so exactly that they are more nearly true than any exact words that might have been spoken.

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Fig. 13.-Photograph of Whistler's mother. (Hari is and Ewing.)


Fig. 14.-James A. McNeill Whistler (1834-1903). Portrait of Whistler's Mother (1872). Oil on canvas. Height: 4 feet 8 inches. Paris, Louvre.

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Fig. 15.-El Greco (1541-1614). Resurrection (ca. 1597-1604). Oil on canvas. Size: $1081 / 4$ by 50 inches. Madrid, Prado.

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Hence the saying has arisen that art is more lifelike than life itself and that a good portrait of a man is more like him than he is himself.


Fig. 16.-Constantin Brancusi (1876). Bird in Space (1919).
Bronze. Height: 54 inches. New York, Museum of Modern Art. (Museum of Modern Art.)

## 6. Distortion, Abstraction

In many instances we do not notice that the artist has not followed nature, and again there are other instances in which the departure is obvious. In a play we do not notice that dialogue is unnatural, though we know that people in real life do not talk so well or so much to the point. Nor in a fashion drawing do we remark that the body is elongated beyond normal proportions. On the other hand, we do notice that dialogue in blank verse is not natural, and we do notice the elongated figures of el Greco. The difference is largely in what we are accustomed to. We are used to the pointed dialogue of plays, and today we are not used to blank verse. We are used to the elongated figures in fashion magazines, and we are not used to the elongated figures in el Greco. For an obvious departure from the physical form of an object such as one finds in el Greco, the word distortion is used.
Abstraction differs from distortion in degree rather than in kind. Distortion changes the natural shape or figure to make it show more clearly some one characteristic. Abstraction separates that characteristic from the object with which it is associated and tries to present it alone. For example, we meet a number of honest men, and from their behavior we form an idea of honesty that we call an abstraction. This idea of honesty does not correspond in detail to the honesty of any one of the persons from whose actions it is derived, for that one idea is abstracted from all their other characteristics. In the same way,

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Brancusi, seeing many birds in flight, has an idea of the grace of a bird, and he puts it into a statue, though it has no more resemblance to a bird than the idea of honesty has to an honest man. All allegory deals with abstraction, since abstract qualities take the part of human beings. Thus, in the morality play Everyman, Everyman is summoned by Death and told that he must prepare to die at once. Everyman then calls on his friends Fellowship, Kindred, Goods, but they desert him, and at the end only Good Deeds stays by him to help him through the encounter with death.

## 7. The Judgment of Art in Relation to Subject

We have defined subject as the content of a work of art in so far as that content represents or imitates something outside itself. If it does not thus represent or imitate something it does not have subject. Art may or may not have subject. Painting, literature, and sculpture usually have subject. Architecture does not usually have subject. Music may or may not have subject. We have learned also that if art does have subject our appreciation is increased when we understand the subject and that there is no limitation in the choice of subject for art; any subject may be a subject for art. Furthermore, we have seen that art is not necessarily like life in its presentation of subject. Art is always artificial, and even when we say the subject of a work of art is natural, or lifelike, we know that we are seeing it as it has been ordered and interpreted for us by the artist.

There remains the question of the relation of the subject to the value of a work of art. How does the subject help to determine the final judgment as to whether a work be counted good or bad, great or mediocre? Can we say that a work of art is good if it has a certain subject and poor if it has another? The answer to these questions is clear. A good subject does not produce a good work of art nor a poor subject a poor one; a noble subject does not mean a noble work of art nor an ignoble subject a poor work. In general, the artist who has a noble idea to express finds it well to take a noble subject, but the nobility of the subject does not ensure nobility of art.

For value in a work of art there must be something more than subject. If subject only is important, we have exhausted the work when we have learned about the subject. This is true in general of newspaper articles, detective stories, weather bulletins, maps, and diagrams of all kinds. They are called illustration, and, if art at all, are a low type. Art has something in it that makes us want to keep it

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even though we know the subject. We sing the song even though we know it by heart; we memorize the poem in spite of the fact that we know its contents perfectly; we look with pleasure at the painting every time we pass it. We learn the subject, but we cherish the work because it contains something more than subject. The value of art does not lie in the subject but in what the artist does with his subject. The greatness of art comes not from the subject but from the artist.

## References

For references on this chapter see the General Bibliography on Aesthetics and Art Criticism.

## Questions

1. Study the illustrations of visual arts in this text for examples of art with and without subject.
2. Do the same for the illustrations in a magazine. Study illustrations in advertisements as well as in the text.
3. Make a similar study of the illustrations of literature and music in this text, in a magazine, in the program for a concert.
4. Experiment with program music. Play records without announcing the titles, and learn how many will be able to identify the subject.
5. Follow the story of Till Eulenspiegel while you are listening to the music. Can you identify accurately each incident of the story?
6. Study Goethe's Erlking, with the music of Schubert. Note the exact imitation in the music.
7. Study Schubert's song Gretchen at the Spinning Wheel. Gretchen is singing a sad song that begins "Meine Ruh' ist hin, mein Herz ist schwer. . . . " "My peace is gone, my heart is heavy. . . . " as she mentally passes in review all the hours she has spent with her lover. Throughout, the song is accompanied by the ceaseless turning of the spinning wheel until she recalls the time of his kiss; then she stops work, and the spinning sound is broken off abruptly. Later it is resumed slowly but finally gets back to its usual swift speed.
8. Make a list of ten subjects found in the nonimitative arts. Note the exactness and clearness of their imitation.
9. Note the symbols used in the radio programs you listen to, a street railway or railroad system, the army and navy.
10. Compare the music and painting of the past hundred years with earlier music and painting for the importance of
a. Nonimitative subjects.
b. Distortion.
c. Abstraction.
d. Use of ugly subjects.
11. Compare, for the distortions, a figure from a fashion magazine with a figure from one of el Greco's paintings.

## Sources of Art Subjects

In the last chapter it was stated that whereas some subjects of art are clear, demanding no knowledge other than what is made plain in the works themselves, other subjects depend for a full understanding on information that the critic is supposed to have. The number of these subjects is limitless. Any artist may use any subjects from any sources, and it is impossible ever to know all of them. Even the scholar, who has devoted his life to the study, never expects to know all the subjects of art. There are, however, a few great sources of art subjects that are used over and over, and these may be learned without too great difficulty.

## 1. Christianity

Looking back over the entire history of art, we can say with little fear of contradiction that the greatest source of art in any country is religion. When we study a civilization of another age or people, we turn first to religion. There are several reasons for doing this, the most important being that all people of all times are concerned with religion. Even when its tenets are no longer accepted, religion remains dominant in the art of a people, partly because it has become a form and partly because it is associated with the highest and best a people knows.

And, of all the religions, Christianity has exerted a greater influence on the art of the Western world than any other single source. When we say Christianity, we mean not only the Bible but all Christian history, legend, and ritual. They may be classified under four headings:

1. The Bible.
2. The Apocrypha.
3. Legends and lives of the saints.
4. The ritual and dogma of the church.

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The Bible. The Bible, as is commonly recognized, is not a single book but a library, with books of various kinds in it. The thirty-nine books of the Old Testament fall into three classes:

1. History. Genesis through Esther. The historical books give the story of the Jews from the creation to the Babylonian exile.
2. Poetry. Job through the Song of Songs. Job is a poetic drama; the Psalms is a collection of songs for the church. Proverbs is a collection of wise sayings and epigrams. Song of Songs and Ecclesiastes are, respectively, a group of marriage songs and a statement of gently cynical philosophy.
3. The Prophets. Isaiah through Malachi. Prophecy in the Old Testament is not to be confused with The Apocalypse or apocalyptic writings, vision literature. The prophets were not soothsayers but practical men who judged and interpreted the affairs of their own times. They were patriots, reformers, preachers, and teachers.

The books of the New Testament, like those of the Old, fall into three classes:

1. History. The four Gospels: Matthew, Mark, Luke, and John. The Acts of the Apostles.
2. Letters. The Epistles written by Paul and others to the Christian churches that were just starting in the various parts of the world.
3. Apocalypse. The Revelation of St. John.

Any consideration of the Bible in relation to art must take into account the fact that the Bible itself is great art. Some of its books are as fine literature as has ever been written. For the English-speaking people the Bible has the additional advantage of being available in the King James version, probably the greatest translation ever made. So the Bible not only is a source of art but is itself art.

As a source for art, it is one of the most popular of all times. The most frequently used subjects are taken from the life of Jesus. And in the life of Jesus the accounts of his birth and death are used more frequently than other stories in the Gospels. In the Old Testament the stories of the creation are probably more important than any others, though reference in art to the heroes of the Old Testament, Abraham, Jacob, Moses, Samson, David, Elijah, and the others, is frequent.

Narratives can be used as subjects for art more easily than songs or lyrics, and for that reason the historical books have exerted a greater influence on art than the poetic or prophetic books, though these have had their influence, especially in literature and music. The most famous oratorio, the Messiah, takes its text largely from the Prophets, though Haydn's great oratorio is, as the title indicates, on the subject of the creation.

The ceiling of the Sistine Chapel by Michelangelo has as its subject the creation. Since it is generally accounted one of the supreme expressions of Biblical story and since it offers a rather complex picture, we shall stop for a detailed analysis of its content. The central part of the ceiling is divided into nine rectangles:

1. Separation of Light and Darkness.
2. Creation of Sun and Moon.
3. Creation of Land and Water.
4. Creation of Man.
5. Creation of Eve.
6. Temptation and Expulsion.
7. Sacrifice of Noah.
8. The Deluge.
9. The Drunkenness of Noah.

At each corner of the odd sections, which are smaller than the even sections, is a figure of a nude man. These figures have no significance, being only decorative. Around the central panels is a row of figures representing the Prophets of the Old Testament and the sibyls of classic mythology. Beginning with the


Fig. 17.-Georges Rouault (1871- ). Head of Christ (Christ Flagelle) (1905).
Oil on paper. Size: 45 by 31 inches. From the Collection of Walter P. Chrysler, Jr. one at the left of the first panel, they are identified as follows:

1. Jeremiah.
2. Persian sibyl.
3. Ezekiel.
4. Erythraean sibyl.
5. Joel.
6. Zachariah (at the end opposite The Drunkenness of Noah).
7. Delphic sibyl.
8. Isaiah.
9. Cumaean sibyl.
10. Daniel.
11. Libyan sibyl.
12. Jonah (at the end opposite the Separation of Light and Darkness).

In the triangles that separate the Prophets and sibyls are the ancestors of Christ, and in the corners are other scenes from the Old

THE HUMANITIES



Fig. 19.-Michelangelo. Creation of Adam. Detail of Sistine Chapel ceiling. Length of Adam: 10 fect. (Alinari.)

Testament and the Old Testament Apocrypha. These last would be noteworthy if they were not placed by the side of much greater paintings. The first six of the central panels, the scries of Prophets and sibyls, and the decorative figures rank with the best in any list of the great paintings of the world. In the Creation of Man, Michelangelo shows life entering the dead, relaxed, inert body of Adam as God touches him with his finger.

Apocrypha. The Apocrypha are those books of the Bible which were not accepted in the canons of the Old and the New Testaments. The Apocrypha of the Old Testament consist of the books found in the Greck Old Testament (the Septuagint) and the Latin version preparcd by Jerome (the Vulgate). They are not in the Jewish canon or in the Protestant Bible. In them we find the same types as in the Old Testament:

## 1. History. Maccabees I.

2. Wisdom. Ecclesiasticus. The Wisdom of Solomon.
3. Prophecy. Baruch. II Esdras.

Here, as in the canonical books, the greatest interest lies in the narratives, such as the stories of Tobit, Judith, and Susanna.

The Apocryphal books of the Old Testament share the advantage of the canonical books in that they can all be found in a definite source, and they are included in the King James translation. The Apocrypha of the New Testament have neither advantage. There is no definite source; the various stories exist in many different versions, and only recently have they been collected and put together. Moreover, there is not a translation to be ranked with the King James version of the Old and New Testaments.

The stories of the New Testament Apocrypha that have had the greatest influence on art are those that have to do with the birth and death of the Virgin. Though there are many different accounts of these stories, the main events are found in all. They may be summarized as follows:

## Birth and Espousal of the Virgin Mary

Joachim and Anna were prosperous and devout, but their childlessness was a source of great affliction to them. In answer to their fasting and prayer, an angel appeared to each of them, foretelling the birth of Mary, declaring her greatness and bidding them dedicate her in the temple to the service of God. In time Mary was born, and when she was three years old her parents presented her in the temple, where she lived in the greatest piety until she was twelve years old. When the time came for her to leave the temple, the Lord commanded the priest Zacharias to have the single men each bring a rod to the temple. Upon the rod of Joseph a dove alighted (a later tradition made the rod blossom) and she was betrothed to him.

## Death and Assumption of the Virgin Mary

Mary, who was now of venerable years and longed for death, was accustomed to go each day and to pray at the Holy Sepulchre. One Friday, Gabriel appeared and told her that she was to die. Mary asked to have the twelve apostles assembled, and in her honor they were all miraculously transported to attend at her death. Great miracles and wonders also occurred. Then Christ, attended by the heavenly host, descended from heaven to receive her soul. Mary begged for grace to all those who should ask in her name, blessed the assembled company, and died yielding her soul into the hands of Christ. The apostles buried her body in a new tomb in Gethsemane, where for three days there were the voices of angels and a heavenly fragrance. Then the body was transported to heaven amid radiance and glory.

Legends and Lives of the Saints. The legends and lives of the saints present a difficult problem because there are so many of them. Many collections of these stories have been made, one of the most popular being the one made in the Middle Ages by Jacobus de Voragine, called the Golden Legend; but no account of the lives of the


Fig. 20.-Giotto (1266-1336). Presentation of the Virgin in the Temple (ca. 1305).
Fresco. Height of figures: about $31 / 2$ feet. Padua, Arena Chapel. (Alinari.)
saints can ever be complete, because saints are still being canonized, and new miracles are still being recorded. Only a few of the more important types can be mentioned here. There are, for example, the saints of special places, as St. George of England and St. Patrick of Ireland.

St. George was a soldier, young and handsome. On his way to the Holy Land he slew a dragon that was terrifying the inhabitants of Selene and saved the princess who had been doomed to be devoured by it. On arriving in the Holy Land he was martyred for the faith. He is usually represented in full armor, conquering the dragon.

St. Patrick is usually represented in bishop's robes, sometimes with a shamrock because he used it to teach the doctrine of the Trinity, the three persons in one God. Often he is shown with snakes under his foot in reference to the legend that he drove the snakes out of Ireland.

And there are the saints of special crafts or professions, as St . Barbara and St. Cecilia:

St. Barbara was patron saint of buildings and fortifications and guardian against thunder and lightning. She secretly became a Christian, whereupon she was persecuted by her father, who, after many tortures, beheaded her. She is usually represented with a tower, her especial attribute, because of the legend that she revealed her faith to her father when she bade the workmen put three windows in her tower in honor of the three persons of the Holy Trinity.

St. Cecilia, the patron saint of music and musicians, was a noble Roman girl who took a vow of chastity and, when betrothed, persuaded her husband Valerian to respect her vow. She converted him to Christianity, and both suffered martyrdom. She is usually represented with an organ or other musical instruments.

There are saints connected with some special work, as was St. Francis of Assisi, the founder of the Franciscan Order.

St. Francis was one of the very greatest of medieval fathers and one who brought joy and simplicity into the church at a time when it was in danger of collapsing into empty formalism. In his youth he was extravagant and pleasure-loving, but after a severe illness he renounced all worldy possessions and turned to God. He is represented in monastic habit with a girdle of hempen cord, usually showing the stigmata in reference to the legend that he was miraculously transfixed with the wounds of Christ.

There are other saints who were universally known because of the charm or quaintness of their lives, such as St. Christopher, St. Sebastian, and St. Veronica.

St. Christopher was a ferryman of extreme size and strength who one night undertook to carry a little child across the swollen river and very nearly sank beneath his weight. On his exclaiming that he felt as though the world had been on his shoulders, the child explained that he had carried the world and its maker, thus revealing himself as the Christ child. He is usually represented as of Herculean physique, with a great staff, bearing a child on his shoulder. He was the patron saint against accidents of traveling.

St. Sebastian was young, noble, and handsome. He was a captain in the Praetorian Guards and secretly a Christian. Upon his revealing himself as such, the Emperor Diocletian, who was fond of him, tried to argue him out of the faith but, failing, had him shot with arrows and then clubbed to death. It is as a martyr that he is represented, nude, bound, and transfixed with arrows.

St. Veronica, according to an old tradition, was a woman who happened to take pity on Christ as he was on his way to Calvary, offering him a napkin or veil on which to wipe his face. The imprint of his countenance showed miraculously on the cloth. This was called the vera icon, or "true image," and in time the name of the cloth became transferred to the woman, who is known as St. Veronica.

Legends of the church other than those connected with the saints are not common; the story of Lucifer, however, is too important to be omitted, since it furnished the basis for Milton's Paradise Lost.

Originally there were no hell and no carth, only God and the angels in heaven. The greatest of the angels, the one second to God, was Lucifer. Bcing so high, he conspired to be highest and, gathering around him a host of angels whom he had seduced to his side, rebelled against God. A furious battle raged for days, and at last they were thrown out of


Fig. 21.-St. Christopher (1423).
Woodcut. Size: about $11 \frac{1 / 2}{}$ by 8 inches. Manchester, England, Rylands Library. (New York University.) heaven to a place created for them and called hell. The name of the leader was changed from Lucifer, "light-bearing one," to Satan, "the enemy."

To fill the places left vacant in heaven, God created a new world between heaven and hell and called it earth; on it he placed Adam and Eve as progenitors of the new race to be. In a desire to avenge himself, however, Satan escaped from hell and tempted Eve with the apple.

Ritual and Dogma. Ritual is religious ceremonial, the established form or forms of conducting worship. Dogma is doctrine formally stated and proclaimed. Ritual prescribes how a service is to be conducted, what is to be sung, spoken, what actions are to accompany it; dogma states the principles or beliefs on which the service is based. Dogma is not often of importance in art, though it is used at times; for example, Raphael's painting The Dispute of the Sacrament celebrates the dogma that the wine and bread of the sacrament are the actual blood


Frg. 22.-Raphael (1483-1520). The Dispute of the Sacrament (1509-1511). Fresco. Figures about life size. Rome, Vatican, Stanza della Segnatura. (Alinari.)
and body of Christ. The picture is divided into two parts, the lower representing earth and the upper, heaven. In the center of the scene on earth is the monstrance, the vessel in which the bread and wine of the sacrament are kept and which, therefore, symbolizes the subject of the dispute. To the right and left are the leaders of the church and others. Just above the monstrance are the figures of the Trinity; Christ is in the center, with Mary on one side and John the Baptist, identified by his shirt of hair and his staff, on the other. Above Christ is God the father, and below is the Holy Spirit in the symbol of a dove.

Ritual, on the other hand, has had great influence on art. The responses, the selection and arrangement of the Biblical passages, and, more than anything else, the prayers are beautiful, even to the person who does not find in them religious inspiration. Most important of all is the Mass, which is the ritual for the celebration of Holy Communion. Early in the history of the church there arose the custom of setting the words of the Mass to music, and some of the greatest music has been composed for those words. The Mass is regularly in five parts, the Kyrie, Gloria, Credo, Sanctus, and Agnus Dei.

The Kyrie is very short, being only three petitions:

## SOURCES OF ART SUBJECT's

$$
\begin{array}{ll}
\text { Kyrie eleison. } & \text { Lord, have mercy upon us. } \\
\text { Christe eleison. } & \text { Christ, have mercy upon us. } \\
\text { Kyrie eleison. } & \text { Lord, have mercy upon us. }
\end{array}
$$

The Gloria, beginning with the words Gloria in excelsis, is a song of praise. Though the Mass is sung in Latin, we shall give only the English translation:

Glory be to God on high, and in earth peace, good will toward men. We praise thee, we bless thee, we glorify thee, we thank thee for thy great glory, Lord God, heavenly King, Father Almighty.

O Lord, the only begotten Son, Jesus Christ Highest Lord God, Lamb of God, Son of the Father that takest away the sins of the world, have mercy upon us, receive our prayer. Thou that sittest at the right hand of God the Father, have mercy upon us.

For thou only art holy, thou only art the Lord, thou only, Christ, art most high with the Holy Ghost in the glory of God the Father. Amen.

## The Credo is the Creed:

I believe in one God the Father Almighty, Maker of heaven and earth, and of all things visible and invisible:

And in one Lord Jesus Christ, the only-begotten Son of God, Begotten of his Father before all worlds, God of God, Light of Light, Very God of very God, Begotten, not made, Being of one substance with the Father, By whom all things were made: Who for us men, and for our salvation came down from heaven, And was incarnate by the Holy Ghost of the Virgin Mary, And was made man, And was crucified also for us under Pontius Pilate. He suffered and was buried, And the third day he rose again according to the Scriptures, And ascended into heaven, And sitteth on the right hand of the Father. And he shall come again with glory to judge both the quick and the dead: Whose kingdom shall have no end.

And I believe in the Holy Ghost, The Lord and giver of life, Who proceedeth from the Father and the Son, Who with the Father and the Son together is worshipped and glorified, Who spake by the Prophets. And I believe one Catholick and Apostolick Church. I acknowledge one Baptism for the remission of sins. And I look for the Resurrection of the dead, And the life of the world to come. Amen.

The Sanctus and Agnus Dei, like the Kyrie, are short; the Sanctus is a song of praise, and the Agnus Dei is a prayer.

Sanctus, sanctus, sanctus.
Dominus Deus Sabaoth.
Pleni sunt coeli et terra gloria tua.
Hosanna in excelsis.
Benedictus qui venit in nomine Domini.
Hosanna in excelsis.
Agnus Dei, qui tollis peccata mundi, miserere nobis.
Dona nobis pacem.

Holy, holy, holy.
Lord God of hosts.
Heaven and earth are full of thy glory.
Hosanna in the highest.
Blessed is he, who cometh in the name of the Lord.
Hosanna in the highest.
O Lamb of God, that takest away the sins of the world, Have mercy upon us.
Grant us peace.

## 2. Greek Mythology and Legend

The only source for subjects in art that might vie with Christianity in importance is Greek mythology and legend. The stream of its influence on present-day civilization may be traced to two sources. First, there are the works of Greece herself during the great period of Greek civilization, the eight centurics from the sixth century before Christ to the second century after. Those arts are so well known that they count as a definite part of our inheritance. Second, there are the arts of Europe during the Renaissance, the period of revived interest in things Greek that came between the twelfth and the fifteenth centuries. During this period, poets, painters, and sculptors drew very largely from Greek legend and tales for their subjects.

For learning the important subjects of Greek mythology there is no one source comparable to that of the Bible for Christianity. Accordingly we must turn to a number of different sources, and the accounts are not always the same. The most important authors for this purpose are the epic poets, Hesiod and Homer, and the tragedians, Aeschylus, Sophocles, and Euripides.

As ordinarily classified the Greek gods are divided into three groups:

1. The great gods, the rulers of the classical pantheon: Jupiter, Juno, Apollo, Diana, etc.
2. The lesser gods, the gods who were immortal but had positions of lesser importance: Bacchus, Pan, Cupid, etc.
3. The older gods: Oceanus, Hyperion, Cronus who were supplanted when Jupiter overcame Cronus.

Each of the gods had certain powers, and about each there clustercd many stories of his adventures with other gods and with men. With each were associated, also, certain attributes that had reference to that god's particular powers and that served to identify him. As we have scen, Jupiter, the king of the gods, is represented with the thunderbolt. Diana, the goddess of the moon and of the hunt, is sometimes shown with a crescent moon in her hair or at her feet. Usually she bears a bow and is seen in hunting costume with dogs or birds.

In addition to the stories of the gods there are many tales of the heroes who were mortal men in close touch with the gods and in whose exploits the gods themselves assisted. Each of these heroes became the nucleus for a series of stories to which any author might


Fig. 23.-Titian (1480?-1576). Bacchus and Ariadne (ca. 1520).
Oil on canvas. Size: 69 by 75 inches. London, National Gallery.
add additional tales as the fancy struck him. Among the heroes are Perseus, who killed the Gorgon Medusa and saved the life of Andromeda; Hercules, the man of great strength, who performed the feats known as the "seven labors"; Jason, who won the Golden Fleece through the sorcery of Medea; Icarus, who flew too near the sun and melted the wax that held on his wings; Oedipus, who was doomed to kill his father and marry his mother; and Theseus, who killed the Minotaur with the aid of Ariadne and then, tiring of her, deserted her on the island of Naxos, where she was met and loved by Bacchus.

The greatest of all Greek stories, however, center about the war of Troy. In order to show its various ramifications, a brief summary is given here.

The trouble began at the wedding feast of Peleus and Thetis. To it had been invited all the gods and goddesses except Eris, goddess of discord. In revenge, she threw into the room where the gods were assembled a golden apple on which were
engraved the words To the fairest. At once a dispute arose as to who should have the apple. Juno, Minerva, and Venus were the chief contestants. Jupiter did not want to decide among them; so he left the decision to Paris, a shepherd on the hills of Mount Ida. To him came the three goddesses offering gifts; Juno offered power and wealth; Minerva, wisdom; Venus, the most beautiful woman in the world as his wife. Paris gave the apple to Venus and in return was given Helen as his wife.

There were, however, complications. Paris was a son of Priam, the ruler of Troy, and Helen was already the wife of Menelaus, king of Sparta. Moreover, she had had many suitors before her marriage, and they had banded themselves together to protect her in case of need. When, therefore, Helen was carried off to Troy, Menelaus gathered together the chieftains who had been her suitors, and they sailed for Troy. The Trojan War was the result.

When the Greeks were ready to depart, an untoward thing happened. The leader of the Greek host, Agamemnon, killed a stag that was sacred to Diana, who thereupon produced a calm that prevented the boats from sailing. Her priest announced that her wrath could be appeased only by the sacrifice of a virgin. For the sacrifice, Agamemnon chose his own daughter Iphigenia. At the moment of the sacrifice, however, Diana snatched her away and made her priestess in her temple at Tauris. The boats then set sail, and the war began. The gods took sides variously with the Greeks or the Trojans. Venus was, of course, on the side of the Trojans, and Minerva and Juno, on the side of the Greeks.

After nine years of fighting, there occurred a quarrel between Agamemnon and Achilles, the greatest of his warriors. When certain captives had fallen to the Greeks as spoils of war, Agamemnon received Chryseis, and Achilles received Briseis. Later, Chryseis was restored to her father, and Agamemnon took Briseis from Achilles. Thereupon Achilles became angry and sulked in his tent, refusing to fight. Without Achilles, the Greeks were hard pressed. Then Patroclus, the friend of Achilles, went out to fight, dressed in the armour of Achilles. At first the Trojans were frightened, and the Greeks won. Later, however, Patroclus was killed. Achilles, in remorse for having caused the death of his friend, made his peace with Agamemnon and began fighting again. After a hard struggle he killed Hector, the bravest and greatest of the Trojans. The body of Hector he dishonored by tying it to his chariot and dragging it in the dust around the city.

Troy did not, however, fall, though her hero was killed. The Greeks despaired of winning by force and resorted to stratagem. Having built an enormous wooden horse and filled it with armed men, they announced that it was an offering to Minerva and pretended to sail away. The Trojans debated whether or not to take the horse into the city. The pricst Laocoön argued against it, saying, "I fear the Greeks even when they bring gifts." But shortly afterward, two immense serpents rose from the sea and strangled Laocoön with his two sons. The Trojans read this as an omen against his advice and took the horse into the city. That night the men inside escaped and opened the gates of the city to the remainder of the army, which had sailed back under the cover of night. The Trojans were taken by surprise, and the city was burned.

Helen went back to Sparta with her first husband, Menelaus. Agamemnon took with him Cassandra, a daughter of Priam; to her Apollo had given the gift of prophecy but later, being vexed, had decreed that her prophecies would never be believed. While Agamemnon was away, his wife Clytemnestra had taken a lover,


Fig. 24.-School of Rhodes. Laocoön (ca. 40 в.c).
White marble. Height to right hand of Laocoön: 8 feet. Rome, Vatican Museum. (Alinari.)

Aegisthus. When Agamemnon returned, they murdered him, together with Cassandra. Orestes and Electra then avenged their father's death by murdering Aegisthus and Clytemnestra. For this crime Orestes was pursued by the Furies, the Eumenides. At last he was sent to Tauris, the temple to which Iphigenia had been taken when she was snatched from the sacrifice of her father. There brother and sister were united and made their escape together.

The greatest difficulties, however, were those that pursued Ulysses. He wandered for many years before he got back to his home, Ithaca. He and his companions came to the land of the lotus-eaters, a people who forgot their former lives when they ate of the lotus. Ulysses and his companions escaped from the cave of the one-eyed Cyclops, Polyphemus, by holding on to the bellies of the sheep after Ulysses had blinded the giant. They very nearly fell a prey to Circe the enchantress, who turned all her followers into swine. Other adventures included the descent of Ulysses into Hades, his escape from the sirens, who lured men into the sea by their sweet singing, and the perilous passage between the monster Scylla and the whirlpool Charybdis. His adventures came to an end when he was shipwrecked on the island of the Phaeacians, where he was kindly received, and started on his way home. Even at home, he did not find at once an end to his troubles. His wife Penelope had remained true to him, but
she had been much worried by many suitors who insisted that she choose among them. To quiet them she promised that she would make her decision as soon as she had finished her weaving; then, to put off her decision, she ripped out at night what she had woven during the day. When he returned, Ulysses killed the suitors, and he and Penelope were reunited.

The only one of the Trojan heroes whose adventures after the fall of Troy won fame was Aeneas. He escaped from the burning city, carrying his old father Anchises on his back. He gathered around him various survivors of the city and together they set out to found a new country, Rome. On the way, Aeneas, like Ulysses, had various adventures. He saw the island of the Harpies, passed the country of the Cyclops, and went down into the infernal regions. He visited Dido, the queen of Carthage, and all but forgot his mission to Rome in his pleasure at her court. Reminded of his purpose by Mercury, he set sail once more, whereupon Dido, in grief and shame, stabbed herself and was burned on a funeral pyre she had herself erected.

The war of Troy has been the subject for many poems. The threc great classical epics are on this subject: The Iliad tells of the war itself, beginning with the anger of Achilles and narrating the events through the death of Hector; the Odyssey describes the wanderings of Ulysses. Vergil's Aeneid describes the adventures of Aeneas and the founding of Rome. The great trilogy of Aeschylus, the crown of the poet's work, tells the story of Agamemnon on his return home: the Agamemnon tells of the return of the victorious king and his murder by Clytemnestra; the Choephoroi, or "offerers of libations," gets its title from Electra, daughter of Agamemnon, and her handmaids, who bring offerings to her father's grave; her prayer is answered when Orestes returns and slays Clytemnestra and Aegisthus; the Eumenides concludes the trilogy with the accusation of Orestes by the Furies and his final absolution by Minerva.

Sophocles, in his Electra, and Euripides, in his Electra and his Orestes, also recount the fate of Electra and Orestes. In two other plays, Euripides tells of the other daughter, Iphigenia: Iphigenia at Aulis recounts the initial sacrifice of Iphigenia, and Iphigenia among the Tauri tells of her reunion with Orestes.

## 3. Norse Mythology

The stories of Norse and German mythology, though the native inheritance of English-speaking people, have had very little influence on the art of Western Europe. When the Germanic tribes accepted Christianity as their religion, they forgot their old German and Norse gods. A few names survive in some of the days of the week; Wednesday, for example, is the day of Oden, or Woden, the king of all gods;

Thursday is the day of Thor, the god of thunder; Tuesday and Friday are the days of Tyr (Tiu), the god of battles, the wrestler, and Freya (Freja) the goddess of music, love, spring, and flowers. Almost everything else was lost. Only in comparatively recent years have the Norse stories been revived. In the eighteenth and nineteenth centuries there was a great revival of interest in all Germanic origins, and the early poems and stories were hunted out and translated; subjects from the Eddas, the Sagas, the Nibelungenlied were then used in many ways and by various artists.

The Norse stories, as known in present-day art, bear all the earmarks of a revival; they are not a pari of the national consciousness, as are the Christian and the Greek stories. There is, however, one use of them so great as to make them well known, and, if it retains the position it now holds, all the world will eventually know the Norse gods and heroes, It is that of Richard Wagner in The Ring of the Nibelung. His version, which follows in general the original account, is divided into three plays, besides an introduction; the story is as follows:

The introduction, The Rhinegold, tells of the building of Valhalla. The scene opens under the Rhine, where the Rhine maidens are playing in the water and singing of their precious gold. Alberich, a dwarf of the tribe of the Nibelungs, passes by. At first he makes love to them, but when they refuse to pay any attention to him he grabs the gold and leaves.

The second scene shows the great home of the gods, Valhalla, which has been just built by the giants at the command of Wotan (Oden), the supreme ruler of the gods. In payment, Wotan has promised to give them his wife's sister Freya, the goddess of spring. He has, however, made the promise with not a thought of giving up Freya, believing that when the time comes his shifty friend Loge (Fire) will show him a way out. But Loge has no plan; he has been wandering over the earth and brings Wotan news that the gold has been stolen from the Rhine maidens and that from it Alberich has forged a ring that will give to its possessor mastery of the world.

The gods and the giants are both interested in this ring, and the giants offer to give up Freya in return for this treasure. But, since Wotan cannot give the gold, they carry off Freya. Without her the gods begin to grow pale and old.

Under the guidance of Loge, Wotan then sets out to find the treasure of the Rhinegold. The two go far down into the earth to a place where Mime the dwarf has finished for Alberich a helmet, Tarnhelm, which will render the wearer invisible. Wotan and Loge, talking to Alberich, soon lead him to brag of his power; they pretend to doubt that it is as great as he says. To convince them, Alberich makes himself invisible; then he takes the shape of an enormous monster. "Yes," says the wily Loge, "I understand how you can become huge, but could you become equally small, a toad, for instance?" "Nothing easier," says the boastful Alberich, who thereupon assumes the shape of a toad. Quickly Wotan puts his foot on him and will not release him until he has gained possession of the gold, the helmet, and the ring.

The last scene returns to the home of the gods. The giants receive the treasure in place of Freya, and, as the curtain falls, Wotan and all the other gods enter Valhalla, which is now theirs. But far below, the Rhine maidens can be heard lamenting the loss of their gold.

The first story of the trilogy proper is The Valkyrie. The two giants who built Valhalla have quarreled as soon as they receive the gold, and one has killed the other. To preserve the treasure, the giant who remains has changed himself into a dragon and sleepily guards the treasure day and night. Alberich, however, is constantly scheming to get back the gold. Wotan knows that the gods are not safe so long as there is a possibility that Alberich may get possession of the ring; accordingly, he has himself been plotting some way to get it back, but this time he must have it and hold it without blame. Disguised as the Wanderer, he has gone about on the earth and has become the father of $t$ win children, Sieglinde and Siegmund. They have been separated for a long time; Sieglinde has become the wife of Hunding, and Siegmund has wandered over the earth, an outcast, without a place to lay his head.

When the play opens, we see the home of Hunding and Sieglinde. In the middle of the room is an enormous ash tree with a sword in it; a sword that the Wanderer had stuck there and that no one has been able to pull out, though the stranger has said that it will be pulled out by one who has need of it. For this reason, the sword is called Nothung, or "Needful." Siegmund comes to this house in his wanderings; brother and sister fall in love with each other and make their escape together, carrying with them the sword.

The remainder of the play has to do primarily with the battle that follows between Hunding and Siegmund. Fricka, Wotan's wife, as the guardian of the home, has insisted that Wotan use his influence for Hunding, and he has accordingly ordered Brynhild to work against Siegmund. Brynhild is the chief of the nine Valkyries, warlike maidens who bring to Valhalla the bodies of slain heroes. She, however, knows that in his heart Wotan wishes the triumph of Siegmund, and therefore she carries out the wish of his heart as against the word of his mouth. In spite of her aid, however, Siegmund is killed, and all that Brynhild can do is to take Sieglinde to a safe place.

The final scene shows Wotan's punishment of Brynhild. Even though she is his favorite daughter, she must be punished, because she has fought against him. He decrees that she shall lose her divinity; she will be put to sleep and as a mortal will marry the man who wakens her. Brynhild then begs that the approach to her be made difficult so that she will not be compelled to marry a coward. Therefore, Wotan puts her on top of a steep, rocky crag, and, to make the approach more perilous, surrounds it with fire.

The second play of the series, Siegfried, takes us back to the cave of the Nibelungs. Sieglinde has died in giving birth to Siegmund's son, Siegfried, and Mime has brought up the child in the hope that he will be able to fight the dragon so that he, Mime, may get possession of the treasure. The crucial scene comes when Siegfried is set to forge together the pieces of the sword, Nothung, which has been brought to the cave with the child. Mime has often tried in vain to put together the pieces. In the hands of Siegfried the steel becomes malleable, and a sword is forged, so sharp that it cuts the anvil in two.

Invited by Mime, Siegfried fights and kills the dragon. Some of the blood of the dragon gets in his mouth, and he is able to understand the song of the birds, who tell
him of the ring and the helmet and of the wonderful bride awaiting him behind the fire. He finds and awakens Brynhild, and the play ends with their song of love.

The last play, the Twilight of the Gods (Gotterdämmerung), tells of the new treachery Alberich uses, by means of which he causes the downfall of Siegfried and indirectly brings about the destruction of the gods and the restoration of the treasure to the Rhine maidens. The chief players are the Gibichungs: Gunther, their king; Gutrune, his sister; and their half brother Hagen, the son of Alberich. Siegfried, leaving Brynhild on the cliff with the ring and the helmet, goes forth to see the world and swears eternal friendship with Gunther. The drink in which they seal their vow was mixed with a poison by Hagen, so that Siegfried forgets his past. Without any recollection of what he has done before, Siegfried goes through the fire again, gives Brynhild to Gunther as his bride and, in recompense, receives the hand of Gutrune. Brynhild recognizes the treachery and in her helpless rage, conspires with Hagen against her husband. She tells him that she has used her magic charms to make him invulnerable, but knowing that he will never flee from an enemy, she has not used the magic on his back. Hagen then stabs Siegfried in the back. The body of Siegfried is placed on an enormous funeral pyre. Into it Brynhild rides, singing a last triumphal song. As she dies, the waters of the Rhine flood around the pyre, and the Rhine maidens seize again the treasure, singing their song of love for the Rhinegold, while afar off, Valhalla is consumed in flames.

## 4. History and Legend

History. History and geography as sources of art subjects are second only to religion; in fact, it may be said that in one sense all works of art are historical in that all are conditioned by the historical period and place in which they are composed. The dress, the houses, the manner of life, the thoughts of a period are necessarily reflected in the work of any artist. Such general references, however, may be taken for granted, and we do not call a work historical unless it refers to specific places, persons, or events, such as the ode that was composed by Tennyson on the death of the Duke of Wellington, or the funeral oration that Thucydides put in the mouth of Pericles.

Historical subjects are very numerous. One reason is that artists are intelligent people who are interested in and are sensitive to the events of the world around them. Another, and probably greater, reason is that rulers desire to see themselves and their deeds, the great events of their time, perpetuated. Portraits of rulers and statesmen are painted, and special events are commemorated in poems and in music that their glory may be preserved.

Works of this last class have, in general, a bad reputation because many of them are poor. The artist is commissioned to do a certain work, and he does it because he has the commission and not because he has anything to say. This does not mean. however, that all com-

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missioned subjects are necessarily poor, for many great works have been commissioned as, for instance, the portrait painted by Hans


Fig. 25.-Hans Holbein, the Younger (14971543). Jane Seymour (ca. 1536).

Oil on wood. Height: 2 feet $11 / 2$ inches.
Vienna, Kunsthistorisches Museum. Holbein the Younger of Jane Seymour, wife of Henry VIII of England.

Legend. Historical subjects as such can usually be identified and recognized with little trouble; records are kept, histories are written, and references are usually clear and easy to find. In quite a different class is legend, the elder sister of history. Legend may be defined as history that is not or cannot be authenticated. It may be believed and in its earlier stages usually is given credence, but the facts given are not verifiable. The words myth and legend are often confused; myth usually deals with the actions of the gods, whereas legend primarily concerns human beings. The distinction is also made that legend may be true although it cannot be verified, whereas myth, though it has been received as truc, is known to be false.

The legends that have grown up in connection with religion were discussed along with myths under that heading. Here we will note only legends that have direct connection with history. Arthur and Lear, for example, are legendary kings of Britain. Though Charlemagne is an historical king of France, the exploits of his nephew Roland are legendary. Till Eulenspiegel is the legendary bad boy of medieval Germany.

Legends have a tendency to grow. In the earliest stories, King Arthur is known as a great leader of the Britons against the Saxon invaders. Later he becomes a leader of the Britons in their fight against the Romans, and as time passed the story grew, until Arthur becomes the leader of a great company of knights, the head of the Round Table, the matchless king.

## SOURCES OF ART SUBJECTS

Although legends are written down from time to time, just as often they remain oral tradition. And when an artist uses legend as a subject of art, he may know either the oral or the written account. In either case, there may be difficulty in identifying the source. Some legends are so well known as to need little if any explanation; others need a great deal. The legends of King Arthur, for instance, need no explanation; they are familiar to English-speaking people. But explanation is necessary for such a legend as that used by Wagner in his The Flying Dutchman, the story of a sea captain who, in penalty for cursing heaven, was condemned to sail the sea until he should find a woman who would be true even to death.

## 5. Derived Works of Art

A last category of subjects may be found in those works that take their subjects from other works of art. Debussy's Afternoon of a Faun is based on the poem by Mallarmé, and the ballet is based on both. Rimski-Korsakov's Scheherazade finds its source in the Arabian Nights. Browning's poem Fra Lippo Lippi was inspired by the painting The Coronation of the Virgin by Fra Filippo Lippi. The historical lovers Paolo and Francesca were referred to by Dante and then were made the subject of a play by Stephen Phillips and of a symphonic poem by Tschaikovsky. Dramas are very often based on novels, and operas on plays; it is almost a rule that cinema plots be taken from dramas or novels. Works that derive from other works of art are always individual and therefore can never be classified or grouped together. Therefore, it is sufficient for our purposes merely to note that works of art often are so derived.

## 6. Conclusion

These classifications of the sources of art that demand explanation are by no means exhaustive, but they cover the most important of the sources. It should never be forgotten, however, that no matter how many classifications are made, no matter how many examples are given, they are never enough. The task, as stated at the beginning, is endless. Artists take their subjects when and where they please, and often they lead us a merry chase before we know and understand what they have referred to. But no matter how difficult the reference, a work of art can never be fully understood until its subject is known.

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## References

Lavignac, A.: The Music Dramas of Richard Wagner, tr. by E. Singleton, 1898.
Newman, E.: Stories of the Great Operas, 1928.
Tilney, F. C.: The Lure of the Fine Arts, Chap. V1I, 1931.

## Christianity:

The Cambridge History of English Literature, 1907-1917. Vol. IV, Chap. II, "The Authorized Version and Its Influence."
Charles, R. H., ed.: Apocrypha (Old Testament), 2 vols., 1913.
Douai version of the Bible. Contains the Apocryphal books of Old and New Testaments.
Gardner, J. H.: The Bible as English Literature, 1906.
Goodspeed, E. J.: The Apocrypha, An American Translation, 1938.
Hastings, J., ed.: Dictionary of the Bible, 1909.
--: Encyclopaedia of Religion and Ethics, 1908-1926, 13 vols.
James, M. R., tr.: The Apocryphal New Testament, 1924.
Greek and Roman Mythology:
Bulfinch, T.: Age of Fable.
Capps, E.: From Homer to Theorritus, 1901.
Gayley, C. M.: Classic Myths in English Laterature and in Art, 1893.
Hutchinson, W. M. L.: The Muse's Pageant, Myths and Legends of Ancient Greece, 3 vols.
Jebb, R. C.: Greek Literature, 1890.
Peck, H. T., ed.: Harper's Dictionary of Classical Literature and Antiquities.
Sabin, F. E.: Classical Myths That Live Today, 1927.

## Questions

1. Study all the pictures in this book for their use of subjects from religion, mythology, history, etc.
2. These terms from the Bible and Christianity are in common use:

Annunciation.
Visitation.
Magnificat.
Presentation in the temple.
Benedictus.
Nunc dimittis.
Gloria in excelsis.
Shepherds.
Magi.
Boy Jesus in the temple.
Temptation.
Death of John the Baptist.
Woman at the well.

Pool of Bethesda.
Good Samaritan.
Prodigal son.
Rich man and Lazarus.
Raising of Lazarus.
Entry into Jerusalem.
Transfiguration.
Last Supper.
Pietà.
Resurrection.
Supper at Emmaus.
Ascension.
Pentecost.
3. The following arc titles of works in the visual arts. Know the story of each. If you have time, look up the originals.

Slaying of Cycnus by Hercules.
Athena and Hercules.
Women Celebrating a Festival of Dionysus.
The Argonauts.
Pelops and Hippodamia.
Polynices Offers Eriphyle the Necklace.
Theseus, Athena, and Amphitrite.
Perseus Decapitating the Gorgon.
Myron, Marsyas.
Poseidon, Dinnysus, Demeter.
Orestes and Electra.
Bernini, Apollo and Daphne.
Giovanni da Bologna, Mercury.
Pollaiuolo, Apollo and Daphne.
Pollaiuolo, Hercules and the Hydra.
Pollaiuolo, Hercules and Antaeus.
Primaticcio, Ulysses and Penelope.
Tintoretto, Origin of the Milky Way.
Tintoretto, Mercury and the Three Graces.
Guido Reni, Aurora.
Rubens, Rape of the Daughters of Leucippus.
Rubens, Judgment of Parts.
El Greco, Laocoön.
Velásquez, The Forge of Vulcan.
Barye, Theseus Slaying the Minotaur.
Poussin, Orpheus Asking the Way to Hades.
Boucher, The Judgment of Pai $\because$.
Prud'hon, Psyche.
David, Paris and Helen.
Ingres, Oedipus and the Sphinx.
Bouguereau, Birth of Venus.
Saint-Gaudens, Diana.

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## Bourdelle, Hercules. <br> Manship, Prometheus.

4. Compare the text of Haydn, The Creation, and Handel, The Messiah.
5. Examine carefully any number of a magazine for references to stories referred to in this chapter.
6. Make a list of all the uses you can find of the stories referred to in the chapter.
7. Explain the references to mythology in these words:

| titanic | mercurial |
| :--- | :--- |
| chaotic | hermetic |
| Saturnian | vestal |
| saturnine | cereal |
| saturnalian | Bacchic |
| Promethean | Dionysiac |
| jovial | panic |
| Junoesque | Plutonian |
| martial | Protean |
| vulcanize | Atlantean |
| volcano | erotic |
| venereal | Neptunian |

## IV

## Function

## 1. Definition

The famous goldsmith Benvenuto Cellini made an elaborate little bowl for Francis I. It is of gold on a black ebony base; on it are two figures: a woman representing land and a man representing the sea. We identify the man by the trident that is the attribute of Neptune, the god of the sea. As we look at the bowl and marvel at its exquisite workmanship, we ask, "Why was it made? What was it for?"

Jumping several hundred years to the present time, we take an object of clear glass trimmed with metal bands, consisting of an upper bowl or container that fits into a lower bowl of the same general shape. We admire the beauty of the curved bowls and the way their shiny surfaces reflect the light. But again we ask, "Why was it made? What is it for?"

The answer to the question "What is it for?", gives the function of an article. Cellini made his bowl as a container for salt, and from its function it is called a saltcellar. The glass object was made for cooking, the food being placed in the upper bowl and water in the lower; the boiling water in the lower bowl cooks the food and at the same time protects it from the direct heat of the fire. From its function it is called a double boiler.

As used in this book, the word function will be reserved for such definite, practical, and utilitarian meanings. We shall not say that it is the function of a poem to teach a lesson, the function of a painting to be beautiful, or the function of a play to be entertaining.

## 2. Functional and Nonfungtional Arts

Obviously, function plays a larger part in some arts than in others. The applied arts, for example, are almost entirely functional. In fact, they are called applied arts because they have function. Rugs, blankets, clothes, jewelry, cups and saucers, plates, teapots, sugar bowls, baskets

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Fig. 20.-Benvenuto Cellini (1500-1572). Saltcellar of Francis $I$ (ca. 1545). Gold and enamel. Height: about 8 inches. Vienna, Kunsthistorisches Museum.

- one need only name examples to realize that each is made-for some definite and specific use. Architecture is even more entircly functional than the applied arts, for we do have examples of the applicd arts that are not functional; pitchers that are made to be looked at, not to hold anything, and cloths that cannot be used for anything, even though they are beautiful examples of weaving. In the applied arts there are such exceptions, but in architecture there are practically no exceptions. Buildings are not built just to be beautiful; they are always designed for some purpose. Moreover, in architecture and in the applied arts, function is so important that it has usurped the name of the art in the identification of examples; ordinarily, examples of those arts are known by their function alone. We do not speak merely of a "building" or a "piece of ceramics"; we name the function and say a "coffeepot," a "school," a "church," a "plate," a "saucer."

1. Compared with architecture and the applied arts, no other art is so highly functional, though each can show examples made for some definite use. Painting and literature probably have least to do with utilitarian values. Expository and argumentative writings are functional in so far as they are designed to accomplish some definite end; textbooks and sermons, for example, are functional, or should be. Uncle Tom's Cabin was written for the definite purpose of fighting slavery. Old Ironsides was written in protest against the proposed


Fig. 27.--Flameware Pyrex double boiler. Glass and stainless steel. Height: 8 inches; length: 10 inches. (Harry H. Hilberry.)
destruction of the frigate Conslitution. Advertisements, whether in words or in illustration, are narrowly functional. So, also, are records of fact in photographs, newspapers, court proceedings, etc.
L. Sculpture is slightly more functional. By far the greatest single function of sculpture is a religious one, the image or statue of a god being set up to win his favor or to ward off his displeasure. Almost every Greek or Roman city had many statues of the gods. The great statue of Athena in the Parthenon was there to do her honor and also to ensure the continuation of her favor for her city, Athens. Even in Christian lands, there are many statues and paintings of the saints that may be said to serve somewhat the same purpose. There are many other types of functional sculpture, such as coins, bird baths, baptisteries, fountains, and tombstones.
3. Music, in its origins, was primarily functional, its two sources being the dance and religion. The earliest peoples invoked their gods by beating the drum and singing, and, from that time to this, music has been of primary importance in worship. In the dance, music of some kind was and is essential both to mark the rhythm and to keep the dancers together. Dance music includes not only tunes for social and folk dances but also the ballet. Social and folk dances are highly varied; there are jigs, waltzes, minuets, fox trots, polonaises, mazurkas, rhumbas, etc. In the ballet, the music helps to interpret the story, as in the ballets of Tschaikovsky, Stravinski, and de Falla.

Closely akin to dance music are marches, work songs, and game songs. A march serves the same purpose as a dance in that it marks the time for people walking in a procession, whether it be a military occasion, a wedding, or a funeral. Work songs are used to mark the rhythm of work. Chanteys are songs of the sea sung by sailors when lifting anchor or loading cargo. The popular Russian folk song the Volga Boatman is supposed to accompany the rowing of the sailors in their laborious struggle against the current. Game songs are about halfway between dance and work songs. In The Farmer in the Dell or London Bridge Is Falling Down, the song is sung as the game is played, and the song is an essential part of the game. Lullabies and serenades may also be said to be functional, the first more seriously than the second, since quieting a baby with music is a more literal process than conciliating a ladylove.

Certain compositions get identified with certain specific functions. One march is used for the President of the United States. Another, Handel's "Dead March" from Saul, is used for the funerals of the royal family in England. The Wagner and the Mendelssohn marches are so universally used in America for weddings that the wags have wondered if a wedding is legal that does not employ one of them.

With the development of musical instruments music outgrew its narrow dependence on these two main functions, and we have now much music that has no functional connection whatever, such as symphonies, sonatas, and operas. On the other hand, many musical compositions retain a connection with their functional origin, though they are no longer functional. Not all the polonaises and mazurkas of Chopin, for example, could be used very well as accompaniment for the dance, but they keep the spirit and something of the rhythm of the original dance. Bach's great work, the Mass in $B$ minor, is too long to be used for church services, but it retains the form of the mass designed for church ritual. Lullabies and serenades also are dissociated from their real use and treated merely as musical forms, yet they retain certain connotations-the lullaby, of suave melody and swaying rhythm; the serenade, of night, intimacy, amorousness, and often of plucked instruments.

## 3. Form Follows Function

Whenever art has function the function influences and often determines the form. This is just another way of stating the obvious fact that if an object is made for a certain function it is necessarily made in such
a way that it can perform that function. As the function changes the form is changed. Let us take an object of everyday use such as a spoon. The bowl of a teaspoon is small and smooth so that it will go into the mouth easily and comfortably; it should be of a shape from which the food can be taken easily; the handle must be easy to grasp, neither too long nor too short for convenient use. But if we take other spoons we find variations both in shape and size. There are spoons for babies and spoons for adults, spoons for cooking, spoons for eating, spoons for serving, spoons for coffee if it is served with the meal and spoons for coffee if it is served in the drawing room after dinner, deep spoons and shallow spoons, spoons with holes in them and spoons with no holes in them. Even a small ménage will show a surprising variety of spoons. But the number of spoons is small compared with the number of knives.

Or we might note the way form follows function in pots and pans, bowls and pitchers for household use. Many of them are very beautiful, and two thousand years from now people may be cherishing some of them in museums, just as we cherish vases that were the jars, bowls, and pitchers of the ancient Greeks. Door keys offer another interesting example. Keys are carried by many individuals going in and out of doors, and one person often has to carry more than one key; and so keys are small. But when gates and doors were in charge of special porters who were always in attendance, keys were large and massive; they were, in fact, a visible symbol of the power and importance of the place to be locked.

These examples have all been taken from the industrial arts, but instances may be cited from any art that is functional. A lullaby must not be so loud as to wake the baby. A march or a jig must keep the time exactly so that one may march or dance in time to it. A coin must be small and flat, and any decoration on the coin must also be flat.

Propaganda and advertisements, whether in words or in pictures, must make clear the desirable qualities of the idea or object advocated. They change, too, in accordance with the product and the means of putting it forward. It is, however, to architecture as the most functional of the great arts that we look for the best examples of the adaptation of form to function.

## 4. Adaptation of Form to Function in Architecture

There are five parts in any building: plan, walls, roof, openinys such as doors and windows, and decorations. The form follows closely


Fig. 28.-Carnarvon Castle (begun in 1284). Red stone. Covers three acres. Carnarvon, Wales.
the function in each of these, except in the last, since, by definition, decoration is not functional.

The walls of a building are determined primarily by two considerations, the need for protection and the necessity for keeping out heat and cold. Castles and fortifications were made with very thick, strong walls, as defense against the enemy. Palaces frequently had to be strong enough to ward off possible attack. In the towns of medieval Italy, for instance, prudent families like the Medici and the Strozzi built the walls of their palaces strong and sturdy, with few openings on the ground floor, lest they be assaulted by their enemies. In modern houses walls are frequently made almost entirely of glass. The second factor in determining the construction of a wall is the climate. Thick or insulated walls are used to keep out extremities of heat or cold. When the climate is mild, the primary functions of the walls are to ensure privacy and keep out the sun and rain; hence they may be of very light material. In China and Japan, the walls are merely sliding screens.

The shape of the roof depends primarily on the amount of rain and snow. The flat roof that can be used as an extra sitting room or bedroom on warm nights is found in warm, dry countries, as in Egypt or Greece or in the southwestern parts of North America. In rainy climates the roofs are sloped so that the water will run off easily. The

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Fig. 29.-Michelozzo (1396-1472). Medici-Riccardi Palace (1444-1452). Stone. Length: 300 feet; height: 90 feet. Florence. (Alinari.)
degree of slope is determined partly by the amount of rain. In countries where there is much rain the roofs are more steeply pitched than in countries that have only a little rain. The amount of snow is an important factor, also. Snow is very heavy; a large quantity of snow will break through a roof; hence, in mountains where there is a great deal of snow the roofs are very steeply pitched and are left unbroken so that the snow will slide off. The steeply pitched, broken roofs that are found on the châteaux of France are useful in France, where there is much rain and little snow, but they would not be practical in the Alps. In China there are very heavy rains during the monsoons. Accordingly, the roofs are steeply pitched and project over the house; at the eaves they are turned up to admit light.

The size and number of the windows are likewise determined by climate. In the hot southern countries, where the sun is blinding, the object is to shut out the light; accordingly, in Spain and in Egypt, the windows are small and few in number. In the northern countries,


Fig. 30.-Paul L. Wiener. Contempora house.
New York. (Cheney, Art and the Machine, Whittlesey House.)
where there is much rain and the winters are long and dark, the demand is for more light, and the windows are large and numerous.

Adaptations of the plan of a building to its function are obvious. The plan of an office building differs from that of a residence; the plan of an airplane hangar, from that of an auditorium; the plan of a palace, from that of a cottage. Within the limits of a single type there are many ways in which the form is varied to suit the specific function. Take, for instance, the typical residence in America before the Civil War. In the Southern states, the kitchen was entirely separate from the rest of the house; the weather at best was warm, and one wished to keep the heat of the kitchen out of the house; incidentally, there were plenty of servants to carry the food from the kitchen to the main house. In the New England states, not only was the kitchen a part of the main house but sheds and barns were joined onto it so that in the winter weather the men could do the chores without getting out into the snow. In very recent times a great deal of attention has been paid to plans for domestic architecture. In the words of Le Corbusier, a house is a "machine for living."

The special characteristic of the skyscraper, the setback, owes its origin to function. Very tall buildings on each side of the street allow little light to penetrate to the lower stories. By the zoning law, the height of a building is determined by the size of the land on which it is to be placed. Over this land an imaginary triangle or zone is pre-


Fig. 31.-Floor plans showing relative sizes of Temple of Edfou, Erechtheum, Parthenon, and Cathedral at Amiens.
scribed, and the building may not project beyond that zone. In this way light may penetrate to the street on the diagonal line of the triangle. A building varies in height as one story is set back on another. An example is the Hotel Shelton in New York City.

Conspicuous examples of the adaptation of the plan to the function can be found in buildings for worship, the temple and the church. To Christians a church or a cathedral is primarily a place where large numbers of people can assemble, because corporate worship is an integral part of the Christian faith. The Greeks, on the other hand, had no church service in the same sense; their gatherings for religious purposes were rare and then were held outdoors. For the Greeks the temple was primarily a shrine for the statue of the god, and in consequence their temples were small, accommodating only a few people at a time. The Parthenon, itself a large temple, is only about one-fourth the size of the cathedral at Amiens. It is divided into two rooms: a larger room, in which the statue of Athena was kept, and a smaller one for the treasures. The Egyptian temple had a still different arrangement, owing to the different character of Egyptian worship. With the Egyptians the temple was primarily a sanctuary, which, however, could be visited only by the Pharaoh and the priest, lesser people being allowed to progress in accordance with their ranks and

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stations. Accordingly, the Egyptian temple of Edfou consists of a series of halls: first, a large open court accessible to everyone, then a dim


Fig. 32.-Cup and saucer especially designed to demonstrate all the bad qualities. (Photograph, Smedley Advertising. From 20th Century Ceramics by Gordon Forsyth, Studio Publications, Inc.) hall of columns (hypostyle) for the few, and, last, a small inner sanctuary for the priest and the king.

## 5. Function and Beauty

Some arts are functional, and some are not. What is the relation between function and value as art? Can we say that functional arts are greater or less great than arts that are not functional? The answer to this question is "no." The value of any work of art depends on the beauty of that work, not on its being functional or nonfunctional. Architecture, which is always functional, is not a superior or inferior art to painting, which is usually nonfunctional. In the evaluation of two works of art, the presence or absence of function, just as the presence or absence of subject, is a matter of no consequence. If one were asked to name the world's greatest works of art, he would certainly include the plays of Aeschylus and Shakespeare, the cathedrals at Chartres and Amiens, and the symphonies of Beethoven and Brahms. The plays have subject but no function; the cathedrals have function but no subject; the music has neither subject nor function.

In the evaluation of a functional work, however, the problem is different. In the first place, the function must be known if the work is to be understood, and the object, whether it is a bird bath or a Greek cylix, must be known as a bath for birds or as a drinking cup before it may be judged. It cannot be adequately judged just as shape, without knowledge of the use for which it was intended. We need to know that a glass boiler can be used for cooking and why the Parthenon is small.

But, when the function is understood, is there any relation between function and value as art? Yes, in a general way, there is. There has been a great deal of discussion on this point, and any statement may be contradicted by excellent examples to the contrary, but it will usually be granted that a functional object is not beautiful unless it can perform its function adequately and acceptably. If it is desirable for people to see and hear in church a church should be constructed so that
they can see and hear in it. A chair should be strong enough to sit on, and it should be shaped so that one is comfortable when doing so. A residence should be so planned that the business of housekeeping may be carried on in it with the maximum ease and efficiency. A beautiful vase that is useless is not a beautiful vase; it is like a beautiful bridge that one cannot cross, a beautiful car that will not run. In this respect we must admit that the saltcellar of Cellini is a failure; it is too elaborate, too much ornamented for


Fig. 33.-Well-designed cup. (Photograph, Smedley Advertising. From 20th Century Ceramucs by Gordon Forsyth, Studio Publications, Inc.) its function.

Gordon Forsyth, in his book 20th Century Ceramics, gives a picture of a cup and saucer that were especially designed to incorporate as many functional faults as possible. The shape of the cup is one that is difficult to drink from; the handle is hard to hold and hard to clean; the base is so small as to be easily upset; the edges of both cup and saucer are easily chipped; the well of the saucer does not fit the cup, it is too shallow to hold the cup steady; and the saucer itself is too shallow to be lifted easily. In contrast, we reproduce another plate from Mr. Forsyth's book showing how a well-designed cup fits the hand. The beauty of a functional object lies, partly at least, in its proper performance of function.

Moreover, adequate performance of function usually tends to make for beauty of design. Why this should be true we do not know, but it is true. The shapes in nature that are the most beautiful are also the most efficient, as for instance, the wings of a bird. Modern industrial design offers many examples, as in the double boiler or in tumblers and saucepans; everything is eliminated except what is essential, and the result is beautiful. Other examples are the shape of a canoe and of a canoe paddle. Changes in automobile design have, in general, been in the direction of efficiency, and, with efficiency, of beauty.

Nevertheless, we must call a halt to this kind of speculation and say that, whereas efficiency does make for beauty, efficiency and beauty are not the same. An article that adequately performs its function is not necessarily beautiful. Art is dependent on something beyond function, something in addition to efficiency and proper
performance of function. The shape of a spoon may be the best possible for its particular function, but the spoon is not a work of art for that reason. In the economy of nature the best shape for use tends to be the most beautiful, but it is our pleasure in the shape, not in its usefulness, that makes it art.

## 6. Conclusion

Function is in many ways the complement of subject. In general, those arts which, have subject are not primarily functional, and those which are functional do not stress subject. Painting and literature, the two arts that always have subject, are very little concerned with utilitarian values. Architecture and the industrial arts, which always have function, minimize subject. Music often has subject, often it has function, and often it has neither. Function and subject both belong to the background of art, since they are important for our understanding of certain works of art, but they are not in themselves essential to art.

References
Scott, G.: Architecture of Humanism, 1924.

## Functionalism in Present-day Art:

Cheney, S., and Cheney, M. C.: Art and the Machine, 1936.
Ferriss, H.: The Metropolis of Tomorrow, 1929.
Forsyth, G.: 20th Century Ceramics, 1939.
Frankl, P. T.: New Dimensions, 1928.
--: Space for Living, 1938.
Friend, L., and Hefter, J.: Graphic Design, 1936.
Geddes, N. B.: Horizons, 1932.
Holme, G. G., ed.: Industrial Architecture, 1935.
Le Corbusier, C.: Toward a New Architecture, 1927.
Read, H.: Art and Industry, 1935.
Taut, B.: Modern Architecture, 1929.
Walsh, H. V.: Understanding Architecture, 1934.
Wright, F. L.: Modern Architecture, 1931.

## Questions

1. Check any ten advertisements for their functional quality; i.e., do they accomplish what they attempt to do?
2. Find other examples of painting and literature that have function.
3. Look through the contents of (a) a literary magazine and (b) a trade magazine for the number of articles with definite and obvious function.

## FUNCTION

4. Note the numbers on four musical programs. How many are named from their function, how many from their subject? How many are not named from either subject or function?
5. Make a list of twenty different knives, noting in each case how the function determines the form.
6. Study some article of furniture for its functional value.
7. Do the same for some article of dress.
8. Study the plan of the church in which you worship for its functional value. Make a list of objectives for which the church is built, and see how this church meets them. Do you find that the function of the building has been hampered by the desire for beauty?
9. Answer Question 8 for the house or apartment in which you live. Do not forget to notice
a. The amount of light and sunlight.
b. Accessibility. Can you get from one part of the house to another?
c. Adaptation to the number and character of the people living in it.
10. Study ten articles in the kitchen from the point of view of
a. Function.
b. Beauty.
11. Make a list of ten exampies to prove or disprove the statement that much more attention is being paid to beauty in industrial design than was usual ten years ago. Notice everything from egg beaters to refrigerators, from house plans to table decorations, from automobiles to fountain pens.
12. Make a list of adaptations to climate that you can discern in the architecture of your community.

## PART II

Medium

## Medium-General Considerations

## 1. Definition

One of the first impressions one gets in the study of art is the great diversity of objects that go under that name. A song, a saltcellar, a sonata, a symphony, a piece of silk, a statue, a skyscraper, a sailboat, a story, a tapestry, a tragedy, a teapot, a poem, a painting, a paddle, a palace, an oratorio, a church, a drinking cup, a cathedral, a chest, an etching, an engraving, an epic, a dance, a novel, a lyric-all these and more may be classed as art.

But even as one reads the list he begins to make certain obvious classifications. The song, the symphony, the sonata belong to the art of music; the church, the cathedral, the palace, and the skyscraper are examples of architecture; the poem, the tragedy, the lyric, and the novel are literature. The basis for these classifications is primarily the material of which the work is made. This material may be viewed from two points of view: (1) as medium or (2) as elements.

The word medium comes from the Latin medium signifying "means." As used in art, it denotes the means by which an artist communicates his ideas; it is the stuff out of which he creates that which he calls a work of art. Architecture makes use of wood, stone, brick, concrete; sculpture makes use of marble, bronze, wood; painting makes use of colored pigments on wood or canvas.

Medium is essential to art. Function and subject, as we have seen, are not essential. There is art without subject, and there is art without function; there is art without either subject or function, but there is no art without medium. A work of art could not be known if it did not exist in some medium. And both the art and the artist get their names from the medium. Because Shelley used rhythmic words he is called a poet and his work a poem. If he had spread colored pigments on a flat surface, he would be called a painter and his work a painting.

On the basis of medium the arts are classified as visual and auditory. Painting, sculpture, architecture, tapestry, glassware, etc.,
are visual arts; they are seen. Music and literature are auditory arts; they are heard; even when one reads silently a musical score or a page of poetry, he hears the sound in his mind. The theater, the opera, and the cinema are known as combined arts, being both visual and auditory. The dance, which is largely visual, is classed with the combined arts because it employs both time and space.

The distinction is also made between time arts and space arts. Painting, sculpture, architecture, and the applied arts are space arts. Literature and music are time arts. Dancing and the combined arts are both space and time arts.

## 2. Preservation of Art

Since it can be known only as it is expressed in some medium, art is lost if the medium is lost. We cannot study the architecture of Mesopotamia as we can that of Greece, for the houses were made of sun-dried brick, and almost all of them have been washed away. When they settled in England the Angles and the Saxons must have known many stories about the heroes of their native home; but only one of these stories was written down-Beowulf; the others have vanished.

About some of these lost works of art a great deal is known. The great gold-and-ivory statue of Athena by Phidias, Athena Parthenos, which stood in the Parthenon, has been described and appraised. The ancient writers are unanimous in naming Phidias one of the greatest of Greek sculptors and this as the greatest of his statues. There is a copy of the original statue, called the Varvakeion, from the place where it was found. From these sources we have a great deal of knowledge about the statue, and we can safely reach the conclusion that the Athena Parthenos was a supremely great statue. But the fact remains that we do not know what the original was like.

Similar examples might be taken from the Acropolis at Athens and the Forum at Rome. These two civic centers are now only a series of ruins, though they were once filled with buildings. Of those buildings a great deal is known, and many attempts have been made to reconstruct the appearance of the two places, but when we are finished all we have is a great deal of information about the buildings and their arrangement; we cannot get the effect produced by the original. Other examples might be cited almost indefinitely, but the point is clear; if the medium of a work of art is gone, the art is gone.

It is, therefore, extremely important that the medium be preserved. In this respect we find a sharp difference between the visual and the auditory arts. The visual arts are material realities and as such can be preserved. A painting, a statue, a building, even a bit of embroidery or lace may be kept; and when we want to study the art we can see the original work. It may not be in as good condition as when it was made, but we can see the thing itself. In a picture by Rembrandt or Rubens we see the actual paints as they were put on by the artist; the colors may be darkened by time, but the picture we see is the work of the master himself. The statues of Michelangelo are the figures that Michelangelo carved. In the visual arts, therefore, the problems of preservation are all problems of keeping the medium safe and in good condition: of finding paints that will not fade, of seeing that houses are made of materials that will endure, and that they are not torn down. In the auditory arts we have an entirely different situation. They exist in time, and time, once passed, is gone and gone forever. We cannot hear the original sounds of music or see the original steps of a dance. The only way we can keep the time arts is to reproduce them. We cannot hear the song that was sung a half hour ago; we must sing it over again. We cannot see the dance of last night, but we can repeat it.

The problem of preserving the auditory arts, therefore, is the problem of finding some means of keeping them so that they can be reproduced. Originally they were kept by personal transmission. One man taught another. In most countries the oldest art was handed down in this way for a long time, often for centuries, before it was put in permanent form. Even today some of our literature and music comes to us by word of mouth. The stories we know of Santa Claus, the verses and songs we sing in games, the simple steps to which we dance them are learned from others, not from books. And so we preserve in them references to strange places that betray their origins. Children in Idaho or Mississippi sing of London Bridge and the farmer in the dell, not because the words have any significance for them but because they have learned them in that way from their parents and friends.

The difficulties with this kind of transmission, however, are very great. For one thing, a great deal is lost; the song or the story or the dance may be forgotten. Moreover, it rarely remains the same. When a new bard tells a story or sings a melody, he usually changes it, sometimes unconsciously, sometimes consciously. In the Kentucky moun-
tains today one may hear a song or see a dance that has been preserved since the time of Shakespeare, but it will not be exactly the same; words and music and steps will have been changed.

Another way to preserve an auditory art is to convert it into symbols that can be kept. Hence, from the very earliest times, there have been attempts to find such symbols. The symbols for words came first. They are very old; in fact, we can almost say that they are as old as history, for we know hardly any history except through the symbols of written language. Moreover, these symbols arc accurate and can be accurately interpreted. We know the writings of the Egyptians, the Greeks, and the Hebrews, and we know that we are reading those writings, in the main, correctly.

In contrast, the symbols for writing music were invented much later, and hence we do not know music of as early a date as we do literature. We know that the early peoples had music and musical instruments; the Hebrews talk of the cymbals and the psaltery, and the Egyptians and the Greeks drew pictures and made statues of people with musical instruments. We know also that the Greeks had a very elaborate musical system; they have written its laws and principles; much of our present theory about scales and relations between tones derives directly from the Greeks. But none of these people had a way of preserving adequately the music itself, and it has been lost. The earliest music that can be read with any degree of accuracy is of the Middle Ages. Before that time there were various attempts at musical notation, but either these early examples were not exact or we have not learned how to interpret them accurately. Hence, for us, the history of music begins about the year 1000 .

For the combined arts there are even now no good methods of preservation. In the drama and the opera we have, of course, symbols for words and for music; we can take photographs of stage sets and of actors or singers. But for the combination of various effects that is the drama or the opera we have no adequate means of preservation. For the preservation of all the arts there will undoubtedly be improvements in the future. Within the past fifty years we have had the phonograph, which can preserve sound, and the cinema, which can preserve the appearance of action. The various instruments of this type are so new and have been so much improved since their discovery that we cannot say what the future will hold. Fifty years from now a library may consist almost entirely of a set of phonograph records or sound films, and it may be that we shall put on a record and listen to a book
or a magazine as we now read it. Future generations may look on our failure to preserve the dance with as great wonderment and lack of comprehension as we look on the time before writing was invented or adequate music notation devised.

Whatever may happen in the future, for the present, dancing, opera, and drama are in the main lost, and music and literature are preserved primarily through written symbols. The poet or the musician thinks certain sounds, and he writes down certain letters or notes on a staff to symbolize those sounds. These symbols have the disadvantages of symbols. They are arbitrary, and one must know them to interpret them. Anyone can interpret a picture or a statue, but he must know how to read notes or written words before he can interpret them. Moreover, the symbols themselves are not too good. The printed page gives only the word; one cannot tell how long a word is to be held, in what tone it should be uttered, and how much stress it is to be given, and, unless one knows the language, the symbol does not even tell the sound. Printed music is in this respect much more exact, for it can give both duration and pitch and can indicate accent. Even so, however, it is far from accurate, and, besides, it is so cumbersome that comparatively few can read it and even fewer can write it, whereas the simpler symbols for language can now be read and written almost universally.

For these reasons there is never as close a relation between the artist and his audience in the auditory arts as in the visual arts. We do not hear the music of Beethoven or the poetry of Milton in the sense in which we see the painting of Rembrandt. And often, especially in music, we have a third person coming between the artist and his audience. We hear the music of Beethoven as interpreted by the pianist, or we know the plays of Shakespeare as interpreted by the actor. This situation, however, has its advantages, for the man who interprets the symbols is himself an artist. Reading the play or playing the music is not to him merely a mechanical performance; he gives a new interpretation; he re-creates. Thus, the visual arts are exact and definite but static and complete, whereas the auditory arts are vague, indefinite, subject to various interpretations, but creative.

## 3. The Influence of Medium on Choice of Subject

Each medium has its own possibilities and its own limitations. What can be said in one art cannot be said in another. What can be said in painting cannot be said in music.

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The nature of the medium determines the subjects it can portray. Of the imitative arts sculpture is the most limited. Limited by nature to three dimensions, sculpture is an art of definite form; it has weight and massiveness; therefore, it is limited in its subjects to objects of definite form with weight and solidity. One may paint a picture of clouds and smoke or intangible substances such as distant views, but he cannot make statues of them. Sculpture is limited also to objects of medium size; the sculptor does not make statues of objects that are very large or very small. The sculptor does not choose as his subjects mountains and oak trees on the one hand or flies and snails on the other. Moreover, the sculptor is limited almost entirely to the bodies of animals, especially the bodies of men. The amount of sculpture devoted to anything but the human body is so small as to be almost negligible. Sculpture is not only limited to the human body but to the nude human body, for such is our feeling of the essential impressiveness of sculpture that we are impatient of such meaningless or accidental details as clothes. For all these reasons, sculpture is not a good medium for the intimate scenes of life nor for those that are undignified or extremely personal. Subjects such as flirtations may be used for figurines that are designed purely as ornaments for mantels and drawing-room tables, but they are not appropriate for serious sculpture.

Sculpture in relief allows more subjects than sculpture in the round. In relief sculpture the figures are attached to a background on which may be carved many subjects impossible or inappropriate to sculpture in the round; trees, clouds, birds, fish, anything. But even in relief the subjects of sculpture are usually limited to the bodies of men and animals.

Painting has a much wider field than sculpture; it may concern itself with anything in space. Anything that can be seen can be painted: lakes, trees, clouds, houses, mountains, fields, anything that exists or might exist, either in reality or in the artist's mind.

Painting and sculpture are both limited in time. Each can represent its object only at a single moment of time. The running horse or the smiling girl does not stay the same for ten consecutive seconds; the artist must, however, choose one of those seconds and preserve the character at that second. He may give us a feeling or an illusion of time so that we are conscious of action that is taking place or is about to take place, but the painting or the statue is still; the action does not change.

Painting allows a wider range of subjects than sculpture, and literature allows a wider range than painting. If painting can present anything that can or might be seen, literature can present anything that can be put into words. It is not limited in time; it can describe a situation at any given time and can tell what happened before and after that time. Literature differs from the other arts in another respect. The language of literature being the same as the language of abstract thought, it can express abstract thought as the other arts cannot. The poet may say, "A thing of beauty is a joy forever," a painting or a statue may present a subject so beautiful that the admirer will feel that a thing of beauty is a perpetual joy, but it cannot express the idea. On the other hand, imitation through literature is less exact, with respect to the original, than imitation through either painting or sculpture. The statue of a dog may conceivably be mistaken for the dog, but a poem about a dog can never be. And yet the poem may call to mind an image of the dog that is more nearly true than either the painting or the statue.

The vagueness of music gives it great latitude of subject. Any subject may be suggested in music. Subjects that cannot be put into words or painting can be portrayed in music. Vague ideas, halfformed opinions and emotions, feelings that can never be given tangible form-these all find expression in music, and, as a rule, music lends itself to subjects that are large and vague, general rather than specific. Beethoven writes a symphony and simply calls it Heroic, leaving us to fill in the details to suit our own conceptions. Tschaikovsky writes a trio and calls it To the Memory of a Great Artist and lets our imaginations do the rest.

Thus each art is limited in the subjects it can portray, and it is a general rule that the more subjects an art can portray the less lifelike it is. A statue of an animal is more like the original than the work in any other art, but sculpture can depict fewer subjects. And as the medium gets less like the original the number of subjects it can portray increases until in music any subject is allowed, but the imitation is so little exact that we cannot even be sure what the subject is.

## 4. The Artist's Choice of Medium

Each art is limited by its medium in the subjects it can portray; nevertheless the same subject may be used in a number of different mediums. Let us notice, by way of illustration, different treatments of a single subject, as, for instance, a horse. Shakespeare wrote of the


Fig. 34.-Horse (fifth century b.c.).
Bronze. Height: ca. 14 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)
roan Barbary going "proudly as if he disdain'd the ground." An unknown sculptor of the fifth century b.c. made a little statuette in bronze. Wagner described the great horses on which the Valkyries carried the dead heroes to Valhalla. Each of these artists was interested in the same qualities of the horse: its pride and seeming disdain of the earth. They chose different mediums because they had different training and interests. Moreover, each one saw in the colt something that could be expressed in his medium and not in any other. The poet saw it as an arrangement of words; the sculptor, as a threedimensional solid; the musician, as rhythm and movement.

The artist does not make a conscious, reasoned choice; the selection of medium is a part of the artistic inspiration. The poet is a poet rather than a painter because he thinks in terms of words. As one poet said, "When I see a scene, I find myself hunting for words that will exactly express the impression it has made on me." Moreover, he thinks in terms of a specific medium. When the sculptor sees the colt as a subject of a statue, he sees it as a subject for bronze or for granite,
for a relief, or for a statue in the round. The architect does not plan a house and then decide whether it shall be of brick, wood, or stone; he thinks of his house as wood, stone, or brick. The jeweler does not imagine a design and then say, "Shall I make it in gold or silver?" It is a design for gold or for silver. The dressmaker makes a design for chiffon, tweed, or velvet; it is a design for a certain definite medium. The artist thinks and feels in terms of his medium.

For the exact expression of the idea in medium there is no better illustration than the drama. The dramatist tells his story partly in action, partly in words, and he must decide what part of the story he is to tell in action, what part in words, and what part in action accompanied by words. An example is the scene in which Hamlet makes his formal renunciation of Ophelia. Hamlet, a young man just home from the university, is sorely perplexed by the condition in which he has found matters at home, and he needs help; he is in love with Ophelia, and naturally he turns first to her. But, looking in her face, he realizes that she does not have the qualities necessary to help him; he shakes his head and leaves the room without saying a word. This might seem just the scene to be enacted on the stage, but, instead, Shakespeare uses words only; Ophelia tells her father of Hamlet's coming:

> My lord, as I was sewing in my chamber, Lord Hamlet, with his doublet all unbrac'd, No hat upon his head, his stockings foul'd, Ungart'red, and down-gyved to his ankle, Pale as his shirt, his knees knocking each other, And with a look so piteous in purport As if he had been loosed out of hell To speak of horrors,-he comes before me.

He took me by the wrist and held me hard; Then goes he to the length of all his arm, And, with his other hand thus o'er his brow, He falls to such perusal of my face As he would draw it. Long stay'd he so. At last, a little shaking of mine arm, And thrice his head thus waving up and down, He rais'd a sigh so piteous and profound That it did seem to shatter all his bulk And end his being. That done, he lets me go; And, with his head over his shoulder turn'd, He seem'd to find his way without his eyes, For out o' doors he went without their help. And, to the last, bended their light on me.

On the other hand, when Lady Macbeth walks in her sleep Shakespeare first has the scene described by the gentlewoman:

Since his Majesty went into the field, I have seen her rise from her bed, throw her nightgown upon her, unlock her closet, take forth paper, fold it, write upon't, read it, afterwards seal it, and again return to bed; yet all this while in a most fast sleep.

> -Macbeth, V, i, 4-9.

And then it is enacted on the stage; Lady Macbeth enters, saying in her sleep:

Out, damned spot! out, I say!-One: two: why, then 'tis time to do't. ---Hell is murky!-Fic, my lord, fie! a soldier, and afeard? What need we fear who knows it, when none can call our power to account?-Yet who would have thought the old man to have so much blood in him?
-Macbeth, V, i, 39-45.

## 5. Medium Cannot Be Translated

What is said in one medium cannot be said in another. Shakespeare, Wagner, and the unknown Greck sculptor are all interested in the pride of the horse, but they are saying different things when they express this quality in bronze, music, and blank verse. Verdi makes an opera on the subject of Shakespeare's play Othello, but Shakespeare and Verdi are saying two different things. No medium can ever be exactly translated into another. The painting in oil is not the sam: if it is reproduced in water color; the music for the violin has changed when it is performed by an orchestra. A poem is not the same if it is translated from one language to another. A poem and its translation become two different poems. Here is a short poem by Heine:

> Du bist wie eine Blume
> So hold und schön und rein;
> Ich schau' dich an, und Wehmut Schleicht mir ins Hertz hinein.
> Mir ist, als ob ich die Hände
> Aufs Haupt dir legen sollt',
> Betend, dass Gott dich erhalte So rein und schön und hold.

The three translations that follow give the sense of the original, and each has charm in its own way, but they are really three different poems.

## MEDIUM-GENERAL CONSIDERATIONS

> Thou art even as a flower is,
> So gentle, and pure, and fair;
> I gaze on thee, and sadness Comes over my heart unaware.

I feel as though I should lay, sweet, My hands on thy head, with a prayer That God may keep thee alway, sweet, As gentle, and pure, and fair! -Translated by Theodore Martin. ${ }^{1}$

Sweet as a flower thou seemest, So pure and fair thou art, I gaze on thee, and sadness Steals gently into my heart.

I long to lay on thy forehead My hand, as I feel 'twere meet, Praying that God will preserve thee As pure and fair and sweet. -Translated by John Todhunter. ${ }^{2}$

Thou seemest like a flower, So pure and fair and bright; A melancholy yearning Steals o'er me at thy sight.

I fain would lay in blessing My hands upon thy hair, Imploring God to keep thee, So bright, and pure, and fair.
-Translated by Emma Lazarus. ${ }^{3}$
Rarely a single translation is made so nearly perfect that it is accepted as an adequate rendering of the original. Such a translation is Longfellow's rendering of Goethe's Wanderer's Night Song. Some of Stokowski's arrangements of Bach are so good we feel that Bach might have done them had he had the orchestra with which to work. But all too often the translations either fail to be good English, or they fail to be like the original. Fitzgerald made such a delightful translation of the Rubaiyat of Omar Khayyám that it is an integral part of English poetry; and Sir Gilbert Murray has made Euripides and the

[^4]other Greek dramatists come alive for English readers. But over the work of both these men the learned are inclined to shake their heads, and repeat, in essence, the comment made on Pope's translation of Homer, "A very pretty poem, but not Homer."

Strictly speaking, no work can ever be translated from one medium to another. Every time Pope translates Homer it is Pope and not Homer we meet. Every time Stokowski transcribes Bach what we get is Stokowski and not Bach. Every time we draw or reproduce a painting we get something different from the original.

On this point, however, we must be wary of being too learned. It is better to think the Rubaíyát is a good poem in the Fitzgerald translation than to pass it by completely in another translation. It is better to get the thrill of a Greek play with Gilbert Murray than not have the thrill. It is better to hear Bach arranged by Stokowski than not to hear Bach. One should not refuse to know Bach's music for the harpsichord because one has no harpsichord. It is better to know the famous masterpieces of painting and sculpture in reproductions than not to know them at all. One should strive not to be too learned, on the one hand, or too easily pleased, on the other; he should not refuse to know Bach's music on the piano, but he should hear it on the harpsichord if he has the opportunity. It is well to study the works of Botticelli in reproductions until one has a chance to see the originals. One should read the Gilbert Murray translations but remember that he will really know Euripides only when he reads his plays in Gretk.

## 6. The Artist's Respect for His Medium

To this discussion of medium we add two corollaries. First, the artist loves and respects his medium for itself; he uses it because it has certain qualities, and he tries to bring out those qualities. Muslin has qualities that silk does not; the artist uses muslin to get the effects of muslin and silk to get the effects of silk. There is a beauty of pine and a beauty of cherry, and the beauty of pine is not like the beauty of cherry. There is, of course, the question of imitation materials. Pine may be stained to resemble cherry, and muslin may be dyed to give the effect of silk. More rarely we try to make a piano sound like a harp or a water color to look like an oil painting. The true artist does not try to disguise his medium. Instead, he brings out its peculiar qualities.

The second corollary is very like the first. The artist respects the limitations of his medium and does not try to make it do more than it
can do. He does not attempt in music effects that are proper only in painting, nor does he try to accomplish in action what can be accomplished only in words.

Here, however, is one of the great temptations and hence one of the great causes for failure in the arts; the artist tries to do more than his medium will allow. Several years ago there was a great deal of talk about a painting by Duchamp called Nude Descending a Stair. In a later picture he showed a Young Man in a Train. In them the artist was trying to picture just what the titles indicate, the appearance of forms in motion. He does this by presenting a succession of pictures of the same thing from slightly different points of view. But painting is essentially an art of stillness. It is limited in its essence to a single moment of time, and, therefore, it cannot show movement as can the time arts.

On the other hand, we must admit here, as about everything else connected with art, that all


Fic. 35.-Marcel Duchamp (1887- ). Nude Descending a Stair (1912).
Oil on canvas. Size: $583 / 8$ by $35 \% / 8$ inches. Owned by Mr. and Mrs. Walter C. Arensberg, Hollywood, Calif. (Museum of Modern Art.) standards are empirical. The artist may do anything he can do. In other words, if Duchamp can persuade us that we can see action in a painting and that we like to see action portrayed in that way, then painting becomes a natural medium for the portrayal of action. A perfect example of this point is found in the famous "Gates of Paradise" of the Baptistery at Florence. These gates show a series of ten bronze panels illustrating scenes from the Old Testament. In them Ghiberti represents distant views that are properly the subject of painting, not of sculpture.

In the panel that tells the story of the creation, for example, we see in the lower left-hand corner God bringing Adam to life while the

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Fic. 36.-Lorenzo Ghiberti (1378-1455). East Door, "Gates of Paradise" (1425-14.52). Bronze. Height of door: $161 / 2$ feet. Florence, Baptistery. (Alinari.)
angels rejoice. In the center of the panel is the creation of Eve, with a circle of angels surrounding the figures. On the left, behind the creation of Adam, is the scene of the temptation; Adam and Eve stand under a tree with the serpent coiled around it. On the right is shown the expulsion; Adam and Eve have been driven from the gate of paradise by an angel who is carrying out the command of God far back in the heavens. The various parts of the picture are joined with great skill, and the perspective is handled as skillfully as it could have been in painting. Not only are the angels higher up in the picture, but they seem farther back; the scene of the temptation is definitely behind the creation of Adam. It would be pedantry to say that these panels are not good because they present subjects that are usually counted appropriate only to painting. When Michelangelo saw them, he exclaimed, "They are so beautiful that they might fittingly stand at the gates of paradise."

Such examples are, however, the exception and will probably remain the exception. The artist may do anything he can do. We may have pictures of sound just as we now have pictures of colors, but in gencral the limitations of mediums are inherent in the medium, and the greatest artists are content to stick to them.

## 7. Technique

Technique is the artist's manner of handling his medium; it is his ability to make the material do what he wants it to do. In painting, for instance, technique has to do with an artist's way of putting the paint on the canvas. A speaker's tech-


Fig. 37.-Ghiberti, Creation and Fall. Detail of Fig. 36.
Height of detail: 3 fect 10 inches. nique is his enunciation, his ability to control the tones of his voice; a musician's technique is his ability to play fast or slowly, to strike the right chords at the right time, to make the tone firm or delicate, loud or soft, as he wishes; a sculptor's technique is his way of handling his chisel and hammer and the kind of effect he gets from them. In the same way there is a technique of blowing glass, casting bronze, making etchings, laying brick. And that technique is perfect that enables the artist to do just what he desires with his medium. Browning has Andrea del Sarto state it:

I can do with my pencil what I know,
What I see, what at bottom of my heart
I wish for. . . .
Since technique is primarily a matter of execution, techniques differ in the various mediums of an art; a person's technique in one medium will be quite different from his technique in another. An artist may be a good technician in oil but a poor one in water color. He may have an excellent technique with the bassoon but a poor one with the flute.

Technique is the actual doing of something; it is the handling of material; it does not usually apply to mental labor. We speak of
the technique of Botticelli in painting the picture but not ordinarily of his technique in planning the composition. And when we do use technique for mental labor, as the technique of writing music or the technique of composing verses, we are using a figure of speech. On the basis of technique we make the distinction between an art and a craft. In a craft, control of technique is the end of endeavor. The rudiments of all arts are crafts. Anyone can learn how to press down keys on the piano, or scratch a wax-covered copper plate and put it in acid or take a hammer and chisel and chip at a piece of stone. But we do not yet call such people artists. For the artist technique is nothing but the language of which he is master and in which he intends to say something; and, though we may be aware of the difficulty of execution when we are enjoying any work of art, we rightly feel that the difficulty is secondary to the artistic import. It is quite possible to become a superb technician and yet be a mediocre artist. The complete control of the possibilities his craft allows is all we expect from the craftsman.

At various times, however, technique has been considered of great, if not of primary importance, especially in music. It is as though the best singer were the one who could do the most difficult cadenzas and the most amazing trills; as though it were a virtue that the song is hard to sing, not that it is beautiful music. There is the story told of Kant that when one such singer had been performing, an admirer said, "Was that not difficult?" and Kant replied, "Would to God it had been impossible!" Technique should always be the means, not the end.

Technique impinges on the question of value in art in yet another way, in the query as to whether an artist's work may be hampered by poor technique. We hear much talk of this kind, "A good artist but poor technique!" "He has good ideas for a landscape, but he cannot paint them!" "He is a Milton, but mute and therefore inglorious." To this problem, as to all other problems in art, no immediate or summary solution may be given that will fit all cases. In the re-creative phases of art, technique is of great importance. A man who speaks with a monotonous voice cannot make as forceful an actor as one who has learned to control his voice. A pianist must know how to play the notes; a singer must be able to sing the song. In these situations an artist is truly hampered by poor technique. When, however, it is a matter of creative as against re-creative work, the disparity between technique and artistic ability is much less real. A poet or a musician
can write down any words or melodies he can think; or, if he is illiterate, he can dictate to his friends. The architect is not expected to execute his own designs. Painting and sculpture are more difficult, but even in them the artist who knows exactly what effect he wants to get can usually get it. In general, the artist's creative ability and his technique go hand in hand.

This point is of importance in the criticism of art. In trying to judge any work of art we must always take it for granted that the artist has done what he wanted to do; in other words, that he has not been hampered by lack of technique. Some critics look at the distortions and abstractions of Rouault and Picasso and say, "If only he would learn how to draw," or they hear the discords of Hindemith and say, "If only he had had a few lessons in harmony!" But such criticisms are almost always fallacious. We must assume that the artist who distorts does so not because he cannot make a lifelike figure but because he wants the effect gained through distortion and that the composer who makes discords in his music knows how to make harmonies but wants the effect through the discord.

Another point about the judgment of art in relation to techniqueif what we have said is true, praise of technique should be reduced to a minimum. Technique is the servant of the art and, like the servant in the house, is best when it is least conspicuous. It is an essential service, but any time attention is called from the art to the technique that produces it the technique is, to that extent, bad. Beauty in art is accomplished through technique; it does not lie in technique.

## 8. Judgment of Art in Relation to Medium

It is time now to summarize what has been said about medium, especially in its relation to the value of a work of art. We have seen that medium, unlike subject and function, is essential to art. A work of art may or may not have subject or function, but it must have medium. We cannot know a work except in some medium, and for the work to be preserved the medium must be preserved. Each medium is limited in what it can say, and the artist should in general stick to the limitations of his medium. For each medium there are also specific techniques or methods of dealing with that particular material.

Is there any relation between the medium used and the permanent value of a work of art? First, there is no necessary connection between the type of medium used and the value of a work of art. An oil painting is not necessarily greater art than a china plate. A good piece of glass


Fig. 38.-Luca della Robbia (ca. 1399-1482). Madonna from Via dell' Agnolo (1470). Glazed terra cotta. Height: 5 feet 3 inches. Florence, Bargello. (New York University.)
or porcelain is better than a poor painting; a beautiful oriental rug is greater than a poor statue; a good saltcellar is greater than a poor building. It is true, the arts are commonly divided into major and minor arts, solely on the basis of medium. The five major arts are music, literature, painting, sculpture, and architecture. The minor arts are the applied arts: metal work, weaving, ceramics, glass, furniture, photography, lettering, and bookmaking, etc. This distinction, however, is of no importance in determining the value of any single work of art. The five great arts deserve the name not because there is anything necessarily great about them as such but because more very great works have been made in those mediums than in the other, lesser, arts. Any work of art is great or not great in itself and should be judged as such regardless of its medium.

The mediums of great art differ also according to the country and the age. The mediums of the five great arts are the mediums that have been more universally used than the others, but they are not the only ones. In Greece, for example, vase painting reached a very high standard, and the vases themselves were of great beauty in shape and proportion. Had this art been continued as it was practiced by the Greeks, it might be counted one of the major arts today. Some of the great work of the Italian Renaissance was done in clay by the della Robbias. Clay is not counted a great medium, not because the della


Fig. 39.-Praxiteles. Hermes and Dionysus (ca. 350 b.c.).
Parian marble. Height: 6 feet 11 inches. Olympia, Museum. (Alinari.)
Robbias' work was poor but because no others have used it conspicuously since their time.

Second, there is real value in medium, and the beauty of the medium is a real factor in the beauty of a work of art. Gold and silver and the precious stones are probably the most conspicuous examples; the medium itself is beautiful without regard to the way in which it is used. The same may be said of the marble from which the Parthenon is made; the beauty of the building would be less were it made of a stone less lovely. The rich, shining surface of the marble is also one of the great glories of the Hermes of Praxiteles. A piece of polished wood is beautiful no matter how it is used. So is a rich, beautiful voice or the


Fig. 40.-Praxiteles. Detail of Hermes and Dionysus. (Alinari.)
tone of a rare old violin. These are all lovely in themselves, and they make for beauty in the finished whole.

It is, however, chiefly in the applied arts that we find intrinsic beauty of medium: jewelry, metals, textiles. Beauty of medium is found in architecture, sculpture, and music, but it is of less importance than in the applied arts, and in painting and literature it is negligible, if not nonexistent. There are few, if any, words that are in themselves lovely, no matter how they are used, in spite of the old orator who was grateful for "that blessed word Mesopotamia," and we do not think of oils or pastels or tempera paints as having any value aside from the use to which the artist puts them.

On the other hand, the medium alone is not art; it is merely the material out of which art is made. A piece of polished wood is beautiful and has a certain artistic value, but a polished plank would never rank as a work of art. A beautiful medium may be used in a work that is commonplace or even ugly; a piece of beautiful cloth may be used in
a very ugly dress, or a lovely gem in jewelry that is without distinction or taste. What makes art is the mind of the artist acting on, making something out of, his material. The tone of a violin may be beautiful, but it is the artist using the instrument who makes art. A great artist with a poor instrument can do better than a poor artist with a great instrument.

All that has been said about medium in general holds true for improvement in medium. The better the material the better the instrument with which the artist has to work. The earliest organs had very few keys, ten to twenty at the most; they were run by water or by man power; the keys were so hard to push that it took all a man's strength to sound a tone. But improvement in medium does not necessarily mean improvement in art. With the improved organ, the artist can get effects that were impossible with the earlier instruments, but the value of the music depends entirely on the use the artist makes of his instrument. Bach's works are still the supreme organ literature, although the mechanics of the organ have improved since his time. Here, as in technique, the medium is a contributing value. It is one of the factors in expression, but the real value is in what is expressed, not in the means through which it is expressed.

This point is worth considerable emphasis because of the general tendency to blame mediums for excellence or failure in art, especially for failure-the work could not be good because the medium is poor. And this statement is often true; poor medium may make poor art. But the converse is never true; good medium does not make good art. At best it is only a contributing factor. The final test is what the artist does with his medium, not what medium he has to work with.


#### Abstract

References For references on this chapter see the General Bibliography on Aesthetics and Art Criticism.


## Questions

1. List some of the stories and songs that, so far as you know, have been preserved only by oral transmission.
2. Test the truth of the statements in Sections 3 and 4 by planning a number of works with the same subject in different mediums. What changes in the treatment of the subject does a change in medium necessitate?
3. Study carefully one play for
a. The scenes enacted on the stage in pantomime.
b. The scenes enacted with words.
c. The action narrated by the other characters.

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4. Translate a poem or a paragraph from a foreign language. What has been lost?
5. Compare an orchestral version of a piece by Bach with the organ or harpsichord version.
6. Compare Michelangelo's statue of Moses with the account in the Bible. Note the strength and weakness of each.
7. Get another translation of the Rubáiyát of Omar Khayyám. Compare it with the Fitzgerald translation.
8. Compare three translations of any passage in the New Testament.
9. Compare the story used by Wagner in The Ring of the Nibelung, with the Volsunga Saga and the Nibelungenlied. Compare the music with the poetry as mediums for the story.
10. Listen carefully to the next concert you attend to see if there are any numbers that are designed primarily for display of technique.
11. Compare for mediums the versions of the story of Camille:
a. Novel: Dumas, La Dame aux camélias (translated as Camille).
b. Play: Dumas's dramatization of his novel: Camille.
c. Opera: Verdi, La Traviata.
d. Cinema: Cainille.
12. Compare the opera Carmen, by Bizet, with the short story by Mérimée from which it was taken, or Donizetti's Lucia di Lammermoor with Scott's The Bride of Lammermoor.

## The Mediums of the Visual Arts

## 1. Architecture

The mediums of architecture are wood, stone, brick, concrete, and, in recent times, steel and glass. The material of which a building is made is often determined by the material at hand when the building is erected. Most districts in America were heavily wooded, and the houses were built of wood; in the Southwestern states, where wood was scarce, buildings were of adobe or stucco. In Greece marble was easily available; the Parthenon and many of the other great buildings are of marble. Roman buildings are made of concrete because near Rome were great quantities of an earth, called pozzuolana, that, when mixed with lime, made a very hard and enduring cement.

The nature of the medium, in turn, determines in large measure the type of construction of the building. For buildings in wood, the post and lintel type of construction is used almost entirely. For stone, post and lintel is used if the slabs are large; if the stones are small, the arch is usually employed. The arch is the typical method for stone construction, as post and lintel is for wood. Stcel, which is very light and very strong, can be used in any construction; the type that is characteristic of steel is known as stecl construction. The cantilever is best a type of steel construction, but it can be used in other materials. These three, post and lintel, arch, and steel, are the three basic types of construction. Other mediums-brick, concrete, glass, etc.-fall into one of these types.

Post and Lintel Construction. In this type of construction, two upright pieces, posts, are surmounted by a horizontal piece, lintel, long enough to reach from one to the other. This is the simplest and earliest type of construction, and it is more commonly used than any other. Barns are good examples, since the beams are exposed and can be seen. Post and lintel construction is well adapted to wood, because wooden beams are strong and are able to uphold the weight of the


Fig. 41.-Diagram showing types of construction.
roof; at the same time they are long, and hence a large building may be erected. However, wooden beams are not permanent; they burn, they rot, and they are eaten by insects. Stone lintels, in comparison, are enduring; but they cannot be obtained in as great lengths, and they stand much less weight than wood; therefore, in stone buildings of post and lintel construction, the distance between posts must be small. Since steel may be made in any length and of any desired strength, it has largely replaced stone and wood for permanent construction. The Parthenon is an example of lintel construction.

The Arch. An arch is composed of many wedge-shaped blocks that are arranged with the small side of the wedge toward the opening. When the stones have been put in place by means of scaffolding (or centering) the shape keeps them from falling. On the other hand, their


Fig. 42.-Ictinus and Callicrates. Parthenon (447-432 в.c.).
Pentelic marble. Height of columns: 34 feet. Athens. (Staatliche Bildstelle.)
weight causes them to exert a great pressure on the side at the bottom of the arch, and if an arch gives way it pushes out the wall at that point. This pressure is called the thrust of the arch. When the arch is built in a wall or in a series of arches the other portions of the wall or the other arches withstand this thrust, as in the aqueduct of Segovia. When an arch is built in the roof the wall is not strong enough to withstand the thrust of the arch, and so it is thickened or reinforced, forming a buttress. When a thick wall is undesirable the strain may be withstood by flying buttresses, as in the Gothic cathedrals, where the enormous downward and outward thrust of the roof is carried almost entirely by the flying buttresses. The walls, having almost no function in supporting the roof, are largely made of stainedglass windows.


Fig. 43.-Segovia Aqueduct (first century A.D.).
Granite. Length: 2,700 feet; height: 102 feet. Segovia. (J. Laurent of Madrid.)
If the principle of the arch is used in covering a building we have the dome and the vault. In building a long vault, it was discovered that diagonal arches or ribs could be built that would support the entire weight of the roof. The space between the ribs could then be filled in with lighter material. This system, known as "ribbed vaulting," is the chief characteristic of Romanesque and Gothic architecture. This construction also made a change in the columns; the ribs of the ceiling had to be supported at the base and were, therefore, carried down to the floor. A number of these ribs made a pier or column. The diagram of the construction at Amiens shows the flying buttress, the clustered pier, and ribbed vaulting.

Steel Construction. Slender but strong beams of steel, or girders, are riveted together to make the framework of the structure. This steel framework is then covered with some other material, brick,

Fig. 44.-Robert de Luzarches. Interior, Cathedral of Notre Dame (begun 1220). Stone. Height: 147 feet; width of middle aisle: 43 feet. Amiens. (New York University.)


Fig. 45.-Diagram of Gothic systen of construction, based on the Cathedral at Amiens. (New York University.)

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Fic. 46.-Flying buttresses, south side of choir, Cathedral of Notre Dame (twelfth and thirteenth centuries.) Stone. Chartres. (Harry H. Hilberry.)
stone, glass, concrete, etc., which constitutes the wall of the building. These walls have no structural part in the building; they serve merely as a curtain or a screen. Steel girders are very strong and can be used to make a building of any height; they hold together too; in an earthquake or a fire, they stand as a unit, whereas a brick or stone building collapses in a heap. The difficulty with steel construction is in preparing a foundation strong enough not to sink under the tremendous weight. In cantilever construction, posts are erected that are strong enough to support the weight of the floors that spread out from the central support like shelves.

## 2. Sculpture

The two mediums most commonly used in sculpture are stone and metal. Marble, which was largely used by the Greeks, is still considered one of the finest stones. It is either white or yellowish in hue. The best marble is the Parian, to which a slight creamy tint gives an effect of richness. Sometimes marble has in it blue veins that may either add or detract from the effectiveness of the statue. The great advantage of marble is its fine, even texture; therefore it may be given


Fig. 47.-Hood, Godley, and Fouilhoux. The McGraw-Hill building (completed 1931). Steel frame construction, 33 stories and basement. New York.
a very smooth finish. Even in the picture one can tell the difference between the surface of a marble statue, such as the Hermes of Praxiteles, and that of the softer stones, such as we find in the sculpture of Chartres. In the medieval cathedrals the figures were carved of the material of which the church was made, usually limestone. Limestone is the softest of the stones, but it does not polish well. Granite is coarse but hard and is suited for bold effects.

Of the metals, the one most commonly used is bronze. In small statues the bronze is solid, but in large statues the solid metal is too heavy and expensive, and, besides, it has a tendency to crack when it is cooled. Most bronze statues, therefore, are hollow. The sculptor models his figure in clay or plaster and then casts it in bronze.

The process of casting bronze is a very difficult and intricate one. This is one of the difficulties or disadvantages of the bronze statue;
another is that it is easily destroyed; many a bronze statue has been melted into bullets. On the other hand, it is light, and the figure can


Fig. 48.-Kng of Judah (twelfth century).
Stone. Above life size. Cathedral of Notre Dame. Chartres. (Houvet.) support itself in many positions that would be impossible in stone. A large number of the Greek statues were originally of bronze; copies in stone were made by the Romans, and the stone copies are now all that are left. When the stone statue was made, the stone would not support the figure in the position used in the bronze, and therefore stone supports, poorly disguised, were added. Usually this is the reason when one sees a trunk of a tree in a Greek statue where it is not expected. The Discus Thrower by Myron is known in bronze and in stone copies. In the stone copy, extra support has been added to the legs.

The processes used in making stone and bronze statues are just opposite. Stone statues are made by cutting away the stone until only the figures are left. Metal statues are modeled in clay, and the sculptor builds up the figure he wants. In stone he can make no changesonce cut away, the stone cannot be replaced; in clay he can change and remake as often as he wishes. The effects to be gained in stone and metal are also very different. Stone tends to be hard, strong, and solid, whereas metal can be light and graceful and give expression to fugitive effects.

Besides stone and metal, wood, terra cotta, and ivory are mediums used for sculpture. The advantages of wood are that it is cheap, easily available, and easy to cut. It is necessary, however, for the cutting to be done with regard to the grain of the wood; otherwise it will split. Wood, also, is subject to atmospheric conditions and may warp or crack. Ordinarily the grain can be seen and, like the grain in marble, it may or may not detract from the statue. Often the wood is painted or covered in some other way. When not painted, the color is a soft brown.


Fic. 49.-Myron. Discus Thrower (restored) (450 в.с.)
Bronze. Height to right shoulder: 5 feet. Rome, National Museum.
Ivory is rarely used for statucs at present, though it was the medium for much important work of earlier times. The small ivory statue of the Snake Goddess, only six and one-half inches high, which is one of the treasures of the Boston Museum of Fine Arts, belongs to the Aegean civilization. The great statue of Athena in the Parthenon was of gold and ivory. Through the Middle Ages ivory was much used for small pieces in which very delicate carving was used, for example, the back of a book or a cross, a small chest for valuables, chessmen, etc. Usually carvings in ivory are of small size, the reasons being the great expense of ivory and the difficulty of securing it in large pieces. The color of ivory is, of course, a rich, creamy yellow. Like wood, ivory cracks.

Ivory and wood sculptures, like stone sculptures, are made by cutting away. Terra cotta statues are built up like the models for bronze; the word terra cotta means "baked earth." Terra cotta sculpture is made by firing clay as in pottery. It is usually painted and covered with a heavy glaze. Terra cotta as a medium for sculpture has
been used at all times, by the Greeks, the Chinese, and the Egyptians. In the Renaissance terra cotta was the favorite material of the della Robbias; their figures are usually reliefs


Fig. 50.-Panel of Hesire 2950 в.c.)
Panel of wood carved in relief. Height: about 4 feet. Cairo, Museum. (New York University.) in white against a blue background. Like all pottery, terra cotta is easily broken and chipped.

## 3. Painting

Pigments. Painting may be defined as the application of colored pigments to a smooth surface, which is usually canvas, wood, or plaster.

Pigments used in making colors come from many different sources, clay, coal tar, vegetable matter, etc. Some are manufactured; some are found in nature almost as they are used. Some have been newly discovered; some have been known for a long time. Most of the pigments used today are obtained from natural sources and have been known for a very long time. The reds and browns now obtained from clay are the same reds and browns used by the cavemen when they painted on the walls in prehistoric times. Vegetable matter is the source for many pigments; the indigo plant produces blue and madder red. Ultramarine, which is the blue blue, the most expensive of all blues, is made by grinding the stone lapis lazuli. Purple, one of the most famous colors, is extracted from the shellfish, the murex. Blacks are usually made by burning some substance such as wood, ivory, or oil.

Vehicles. Though the sources of color have been largely the same throughout the generations, the way the color has been applied to the surface has changed. Since the colors as procured either from nature or from artificial sources are dry, they must be mixed with something to be spread on a surface. This substance, usually a fluid, is called the vehicle, and the medium of painting is usually identified by the vehicle
used. In oil paintings the colors are mixed with oil; in other words, oil is the vehicle. In water color, water is the vehicle.

Oil. The vehicle most commonly used now is oil. With oil the artist can produce very deep and rich colors. The special advantage of oil is that it stays moist for a long time, and so the artist can change today or tomorrow what he painted yesterday.

There are two methods of painting in oil, the direct and the indirect. In the direct method the paints are opaque and are applied to the surface just as they are desired in the finished picture. They may be applied in any way that suits the artist, so thinly that the canvas shows through or so thickly as to produce a rough surface. The rough surface of van Gogh is in direct contrast to the smoother canvas of Gauguin. In the indirect method the design is worked out in great detail on the canvas


Fig. 51. Snake Goddess (ca. 1500 в.c.). Gold and ivory. Height: $6 \frac{1}{2}$ inches. Boston Museum of Fine Arts. or other surface, and over it are put many thin layers of color; the original design shows through these, and the effect produced is one of great luminosity. The direct method, however, is a more flexible medium of expression; the artist can use his medium very freely and express in it any fleeting change in his thought. And, if it has not the richness of the transparent colors, it can obtain great vitality through the use of colors in high intensity. What may be called a third method of using oil has recently been popular; it is called pointillism, because small dots or points of opaque paint are placed close together, so that the eye, looking at them, mixes them. Even in the reproduction one can see the little dots of paint in Seurat's Sunday on the Island of Grande Jatte.


Fig. 52.—Vincent van Gogh (1853-1890). Self-portrait in a Straw Hat (1888-1889). Oil on canvas, on wood. Size: $13 \frac{1}{4}$ by $101 / 2$ inches. Detroit Institute of Arts. (Detroit Institute of Arts.)

The disadvantages of oil all have to do with the preservation of the picture. The oil in the paint takes a long time to dry; sometimes it is a year before the oil is fully dried, and as it dries it has a tendency to rise to the surface and form a film over the picture, thus making the colors dull. Moreover, the oil becomes yellow and, in time, the paint cracks.

Water Color. Like oil, water color may be either transparent or opaque. Opaque water color is called gouache. It is used chiefly for effects that can be gained in a hurry, such as the effects of posters. The paint that is usually called water color is the transparent water color. The pigments, as the name implies, are mixed with water and are applied to a white paper that shines through and makes a very brilliant color. It is difficult to produce in water color warm, rich tones. Changes in the painting may be made, but usually a change tends to make the colors less brilliant. Water color is the best medium for spontaneous, evanescent expression.


Fig. 53.-Paul Gauguin (1848-1903). Seated Woman (1891). Oil on canvas. Size: 36 by 27 inches. Worcester, Mass., Art Museum. (Worcester Art Muscum.)

Fresco. This is a term frequently used for any wall painting, but the name is strictly applicable only to pictures that are painted directly on plaster. There are various ways of doing fresco. In the method used in the Renaissance, which is called true fresco or buon fresco, paint is mixed with water and applied to wet plaster. The wall to be covered is prepared with the first coatings of plaster, and the final coat is left to be put on as the decorations are made. An artist painting a fresco needs to determine how much of the surface he can cover in a day; the plaster is then put on the wall, and the artist paints on the wet plaster. The color dries into the plaster, and the picture thus becomes a part of the wall.

Fresco is a very exact medium, because it must be done quickly; there is no rubbing out and no changing once the design is begun. It is therefore a medium of broad, bold, direct work, usually with great


Fig. 54.-Georges Pierre Seurat (1859-1891). Sunday on the Island of Grande Jatte (1886). Oil on canvas. Size: 81 by $1203 / 8$ inches. Helen Birch Bartlett Collection, Art Institute of Chicago. (Art Institute of Chicago.)
simplification of form and freedom in treatment of the subject. Moreover, by the chemical action of the plaster on the paint, colors are grayed, and hence there is uniformity of tone with no glaring contrasts. The disadvantages of fresco are two. First, it is almost impossible to move; frescoes have been moved, but the difficulties are great. Second, the painting, being permanently fixed to the wall, is subject to any of the disasters that may happen to the wall. If the plaster cracks or has a hole punched in it, the picture is hurt to that extent. The ceiling of the Sistine Chapel and the Giotto panels from Assisi and Padua are in fresco. If one looks at the reproductions carefully he can see where the paint has flaked off and how the plaster is cracked; he can see also the broad character of the brush strokes.

Tempera. Tempera painting was a favorite method throughout the Middle Ages and the early Renaissance. Tempera painting is usually done on a wooden panel that has been made very smooth with a coating of plaster called gesso. The colors are mixed with gum, honey, or egg, either the white or the yolk but usually the yolk. The design is put on the gesso, and many coats of clear, luminous color are added. The paint dries almost immediately; therefore, there is in


Fig. 55.-William Zorach (1887- ). The Cove (1927).
Watercolor. Size: $147 / 8$ by $21 / 8$ inches. Art Institute of Chicago. (Art Institute of Chicago.)
tempera painting no blending or fusing of colors; the colors are laid on side by side or are superimposed. Hence, the painting is composed of a large number of successive small strokes, and the effect is largely linear. It is hard to obtain rich, deep tones or dark shadows. Because the paint dries so quickly, the artist must be precise and exact in his work; alterations are impossible; a design once begun cannot be changed. The advantage of tempera is its great luminosity of tone, the colors being clear and beautiful. The characteristic colors are gray, blue, and pink. On the other hand, the precision needed tends to produce a certain hardness of outline, and, in general, it has little vitality; it is not usually strong and forceful. Botticelli's Birth of Venus is in tempera on canvas.

Pastel. Pastel is a kind of colored chalk. Its colors are brilliant, and it is a very flexible medium, one in which very rich and varied effects may be produced. As a medium, however, it has never won a high place because no one has yet discovered a way to preserve it in its original freshness. Even if it is covered almost at once with a fixing medium or with a protecting surface such as glass, the chalk rubs, and the picture loses some of its brilliance.

Wax. Wax was used by the Egyptians for portrait paintings on mummy cases. There were several different ways of preparing the


Fig. 56.-Pablo Picasso (1881- ). Youth (1905).

Gouache. Size: 40 by $221 / 2$ inches. New York, Edward M. M. Warburg. (Museum of Modern Art.) wax, but in general the color was mixed with the wax and applied hot. This method was also used by the Greeks and the Romans, and it was used to some extent during the Middle Ages. At the present time, painting in wax is rarely seen except as it is found in portraits on mummy cases and in the portraits of Pompeii.

Mosaic. Mosaic is usually classed with painting, though the medium is not pigments. A picture in mosaic is made by putting together small pieces of colored glass or stone, called tesserae. These tesserac are usually square in shape, though they may be triangular. They are sct in cement to hold them in place, the underside of the tesscrae being roughened to make them hold in the cement. The use of stone makes necessary simplification of design. Moreover, in the cement the stones can never be set very smoothly, and hence the surface is always rough, and the light is reflected from it in many ways, creating a lively, vibrant effect. The greatest mosaics were made in the Middle Ages before painting became usual in churches, the most famous being those in the church of San Vitale at Ravenna and in Santa Sophia at Constantinople.

Stained Glass. The stained-glass window, like the mosaic, is not really a form of painting but is considered here for reasons of convenience. Like the mosaic, the stained-glass window is a kind of patchwork. It is made by putting together many small pieces of colored glass, which are held together by bands of lead. In a large opening the lead is not strong enough to withstand the wind, and so it is


Fig. 57.-Theodora and Her Attendants (ca. 525 A.d.)
Mosaic. Figures slightly above life size. Ravenna, San Vitale. (Alinari.)


Fic. 58.-"Portrait of Theodora," detail of Theodora and Her Attendants.

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reinforced by heavy iron bars that make very heavy black lines in the picture. The windows at Chartres are among the greatest of a great


Fic. 59.-Portrait of a Boy (second century A.D.).

Encaustic applied with wax on wood. Size: about 10 by 16 inches. New York, Metropolitan Museum. (Metropolitan Museum of Art.) period. Our illustration shows one section of the window of St. Eustace. The stained-glass window and the mosaic made use of the same principle as pointillism, mixture by the eye, but they are several hundred years older.

## 4. Drawing and Prints

Drawings. Drawings and prints belong to the same general category as painting, though they have no color. Drawings are known chiefly by the medium used, as pencil, pen, silver point. Pencil is one of the most common because of its general utility, especially for the making of rapid notes. Silver point, a drawing with a gold or silver wire on a specially prepared paper, is very pale in tone and has little vitality but is very delicate. Charcoal gives rich shadows, great brilliancy of light and strength of tones, but the lines are vague and lack force. Drawing with a brush is characteristic of the Chinese and Japanese who, it will be remembered, write with a brush instead of a pen. The brush gives very quick results and allows great freedom in handling.

Kinds of Print. A print is something printed; that is, it is the impression left on paper or some other surface by an inked plate. There are two chief kinds of plate: relief and intaglio. A relief plate is usually made of wood, an intaglio, of metal, and most of the differences between the two types of print can be traced to the differences in


Fic. 60.-Saint Eustace Hunting (twelfth century), window, Bay 13. Stained glass. Height of diamond about 3 feet. Cathedral of Notre Dame, Chartres. (Houvet.)
these materials. A block of wood is easy to cut; a metal plate, however, offers a hard surface that cannot easily be cut or sliced away. In the relief (wood) plates, therefore, the design is left standing in relief, and the remainder of the surface is cut away. In the intaglio (metal) plate the design is scratched or cut or eaten into the smooth surface of the metal, the lines of the design being thus incised, instead of standing free, as in the relief plate.

The differences in the plate make for differences in printing. A relief plate prints exactly as a typewriter or a printing machine; the design is inked and is transferred directly to the paper. An intaglio plate cannot be managed so easily. The incised lines are filled with ink, the ink being wiped from the rest of the plate. The paper is then pressed against the plate, and the lines of ink are transferred to the paper. For the printing of a relief plate no special pressure is needed. For an intaglio print a special press is required since the paper must


Fig. 61.-Jean Auguste Dominique Ingres (1780-1867). Lady and Boy (1808). Pencil drawing. Size: $93 / 8$ by $71 / 4$ inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)
be forced into the tiny grooves on the metal plate to suck out the ink. The impression formed from an intaglio plate is thus itself a relief; the design stands out on the paper as in the engraved letters on a calling card. For this reason great care must be taken of the surface of an intaglio print.

The intaglio and the relief plates are thus just opposite in every way. On the wood plate the artist cuts away the part he wants to appear white; in the intaglio plate the artist cuts into the metal the lines he wants to appear black in the finished print. A wood block with a single line cut in it would print black with a white line; a metal plate with a single line in it would print white with a black line. To illustrate these differences, the plate of a Meryon etching has been

## THE MEDIUMS OF THE VISUAL ARTS



Fig. 62.-Albrecht Dürer (1471-1528). Self-portrait (1484).
Silver point. Size: about $103 / 4$ by $73 / 4$ inches. Vienna, Albertina. (New York University.)


Fro. 63.-Kyठ̊sai (1831-1889). Animals, Children, and Men. Brush drawing. Height: 10\%/8 inches. New York, Metropolitan Museum of Art.
printed both as an intaglio and as a relief plate. Note that the blacks and whites are reversed in the two prints.


Fig. 64a.-Charles Meryon (1821-1868). Le Stryge (1853).
Etching. Size: about 7 by 5 inches. Boston Muscum of Fine Arts. (Boston Museum of Fine Arts.)

Woodcut. All plates made from wood are alike in all essentials. However, woodcut, wood engraving, and color printing may be distinguished because of certain minor differences. The woodcut is made from a plate of softwoodbeech, apple, pear, or syca-more-sawed parallel with the grain of the wood. The wood engraving is made of a plate of hardwood, usually boxwood, sawed against the grain. The hardness of the plate makes it harder to cut, and therefore the lines tend to be firmer than in the woodcut. The print from a soft block often shows the grain of the wood; that from a hard block cannot. In recent years prints have been cut from linoleum as well as from wood.
The early woodcut of St. Christopher was shown on page 43.
Woodcuts have been very largely used as illustrations for books because the block of wood may be inserted and printed as ordinary type. In fact, it was almost the only form of illustration generally used until the invention of mechanical processes for the duplication of pictures. Wood-block printing, or color printing from wood blocks, has been used by many peoples. It reached its highest development in Japan during the eighteenth and early nineteenth centuries, and for that reason the Japanese print typifies the colored woodcut. A separate block is cut for each color to be printed.

Engraving and Etching. Prints from intaglio plates are distinguished according to the way the design is incised. In engraving the lines are cut by hand; in etching they are eaten or etched into the plate by an acid.

In engraving the design is cut directly in the metal by means of a sharp instrument called a burin. This instrument is held in the palm
of the hand and pushed away from the engraver. It is never handled as a pen or pencil. The process is very slow and difficult. As the engraver pushes the burin, he must cut the line straight or curved, deep or shallow, just as he wishes it. He may make no mistakes. He needs great strength of wrist and precision of touch. Engraving is usually made on copper, though other metals may be used. In the middle of the nineteenth century many engravings were made on steel, and the term steel engraving has often been used as synonymous with engraving.

For an etching, a metal plate, usually of copper, is covered with a coating of thin, waxlike material called a ground. This ground must be soft enough to allow the etcher to


Fig. 64b.-Meryon. Le Stryge, printed in relief. draw in it easily, leaving fine clear lines on the plate. The etcher does not attempt to cut or scratch the plate itself; he merely scratches through the wax, uncovering the metal. When the design is completed the plate is immersed in a bath of acid. Where the plate is protected by the ground the acid makes no impression, but where the plate has been exposed by the lines drawn in the wax, the acid eats into or etches the metal.

Because of the difference in the way they are produced the lines of an etching and the lines of an engraving are very different. In the engraving, the manner in which the burin is held makes for formality and severity; the lines, therefore, are cold and austere. In the etching, on the other hand, the needle may be used as easily and freely as a pencil; in consequence, the lines of an etching are free and easy. However, the acid tends to eat away the sides of the metal, and the line of an etching never has the fineness, the clearness, or the dignity of a line of engraving. Enlargement of the lines of an etching and a line engraving brings out these differences clearly, even in a photograph. The etching shows a multiplicity of lines crossing at all angles, many of them curved; the engraving shows more straight lines,
the curved lines quite severe, and the crossing of lines occurs at regular angles. The engraved line in precise, formal; the etched line, irregular, free, spontaneous.

Lithograph. Lithography is one of the most recent of the ways of making prints. Line engraving and woodcutting are very old; the earliest dated woodcut, that of St. Christopher, dates from 1423. It is generally agreed that copper-plate engraving, though of later date than the woodcut, is of about the same period. Etching is somewhat later; its origin is not known; the earliest known impression from a bitten plate is dated 1513, and it was commonly used in the early part of the seventeenth century. In comparison with these dates, lithography is very recent, having been invented by Aloys Senefelder, just before 1800 .

Lithography is not, strictly speaking, a form of printing, since the design is not incised in intaglio, nor does it stand up in relief, but is on the surface of the plate; chemical printing, it was first called. Lithography is based on the principle that oil and water do not mix. Drawings are made on stone with a greasy chalk; the stone is then wet and an ink roller passed over it. The ink adheres only to that part that has been drawn upon, and when the paper is pressed against the stone, the design is transferred to it. The exact lines on the stone are transferred to the paper.

In every way lithography is the easiest and most flexible process for producing a print. The artist can work freely and easily with his material, without the help or hindrance of any intermediary. Every line that may be made on the stone or transfer paper is transferred to the print just as the artist drew it. In a lithograph the work of the artist is seen almost as directly as in a drawing; in fact, a lithograph may be considered a kind of drawing. The name of Daumier is always associated with the lithograph as a medium for art. In the lithographs that appeared in the periodical Charivari he satirized Paris for forty years; his powerful lithograph Rue Transnonain is not, however, a satire but a record of fact; it shows an insurrection after it had been quelled by the police.

Dry Point, Mezzotint, and Aquatint. The prints namedengraving, etching, woodcut, and lithograph-are the four most important types. There are also several others; of these we shall name only three, dry point, mezzotint, and aquatint. Dry point stands halfway between engraving and etching. It is like engraving in that the lines are cut directly in the metal. It is like etching in that the


Fig. 65.-Rembrandt Harmensz van Rijn (1606-1669). Three Trees (1643).
Etching. Size: about $83 / 8$ by 11 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)


Fig. 66.-Honoré Daumier (1808-1879). Rue Transnonain (1834).
Lithograph. Size: about $11 / 1 / 2$ by $171 / 2$ inches. New York, Metropolitan Museum of Art.
needle is held as a pencil and is used very freely. It merely scratches the metal. As it scratches the metal it leaves a little ridge at one side like the ridge left by a pin run


Fig. 67.-Lucas Van Leyden (1494-1533). Christ and Woman of Samaria.
Woodcut. Size: 3 by 48/8 inches. (M. Knoedler \& Company, Inc., New York.) through a cake of soap. This ridge, called the burr, takes the ink and makes a very rich, velvety line. A similar ridge is thrown up in engraving, but it is cleared away before any prints are taken.

Mezzotint is made on a copper plate, but it is like woodcut in that the design is left standing and the white parts are cut away. The plate is artificially roughened by an instrument known as a "rocker" or "cradle." The engraver then scrapes away more or less of the roughness in the parts he wants light. The parts not scraped, or only partially scraped, make a rich, velvety black like the burr of the dry point. Mezzotint is frequently combined with some other form of engraving, such as etching or dry point. Turner, in his famous book of prints called the Liber Studiorum, used etching for the lines of a composition and added light and shade in mezzotint.

In aquatint powdered resin is sprinkled on the plate and heated so that it adheres to the plate. When the plate is immersed in the acid, the parts not protected by the resin are bitten, and a very fine shadowy gray is produced.

Photography. In recent years photography has developed until it deserves a place among the arts. The change has come about partly through mechanical development; the camera is a more efficient machine than it was a few years back. More particularly it deserves this place because photographers have begun organizing their subjects better for artistic effects.

## 5. Appled Arts

The applied arts are so many and so varied that we can notice only some of the general classifications and a few of the more important forms of each kind.

Weaving. Weaving is the process of forming fabrics by interlacing threads of some substance. Weaving may be done by hand or on a loom. In baskets, the threads are of wicker; in textiles they are of cotton, wool, or linen.

The decoration, whether in a basket or in cloth, may be formed by the weaving itself, i.e., by the way the threads are arranged, or it may be woven in colors. Again, it may be printed on the surface, or it may be added with a separate thread, as in embroidery. In Indian baskets and in tapestry, as well as in many silks, the pattern is formed by the introduction of colored threads. The famous Bayeux tapestry, which tells the history of the


Fic. 68.-Martin Schongauer (1440-1491). The Annunciation (undated).
Engraving. Size: $61 / 2$ by $43 / 4$ inches. Boston Museum of Fine Arts. (Boston Museum of Fine Arts.) Battle of Hastings in 1066, is not a tapestry but a piece of embroidery.

Lace. Lace, which is very closely akin to weaving, is sometimes woven, but ordinarily it is made from a single thread.

Metalwork. The metals that are used in the applied arts range from the precious metals, gold and silver, to the base metals such as iron. Gold is little used except in jewelry, though the famous Vaphio cups are of beaten gold. Silver is used for jewelry and also for tableware. The use of base metals for so-called costume jewelry has meant a greater spirit of adventure in the making of jewelry. Risks may be taken with chromium or brass that would be too dear with gold or silver. Hence, there have been many new patterns and designs in


Fig. 69.-Albrecht Dürer (1471-1528). St. Jerome in His Cell (1514).
Engraving. Size: about $93 / 4$ by $71 / 2$ inches. New York, Metropolitan Museum of Art.
jewelry. Copper and brass are used for cooking utensils and for larger pieces of tableware such as teakettles, coffeepots, and trays. Iron is used for fences and for ornamental grills of all kinds.

The pattern of metalwork depends in part on the way it is made. In general, metal is hammered or molded. When the metal is molded, large numbers of the same article may be made. Molded metal is, therefore, relatively cheap, and the method is widely used. Hammered metal is made by hand; in hammered silver or copper the surface is frequently a trifle rough, showing the marks of the hammer.

A third way of treating metal is to cut the pattern from the sheet metal, making a silhouette.


Fig. 70.-Joseph Mallord William Turner (1775-1851). Berry Pomeroy Castle, from Liber Studiorum (1807-1819).
Mezzotint and etching. Size: $711 / 16$ by $103 / 4$ inches. New York, Metropolitan Museum of Art.

Ceramics. The term ceramics is used to cover all objects made by firing clay. It includes, therefore, pottery, china, and porcelain. There are three ways of making pottery. The American Indians usually make their pots by hand, rolling a small bit of clay between the palms until it becomes a long strip and building up the pot by these strips. A second method of making pots is with a potter's wheel, by which the potter's hand guides the clay as it is turned on the wheel. The third way is to mold the pot; the clay is made liquid and is poured into molds that absorb the water. This is the method used for commercial production. The clay is usually covered with a heavy glaze that gives it color and makes it waterproof.

The decorations on pottery may be incised or raised or painted on the surface. The last is the type commonly found in decorated china. In all ages some of the best art work has been in ceramics. The pots of the American Indians are justly known. Some of the best drawing done by the Greeks was that done on the various types of vase. Persian, Rhodian, and majolica dishes are also famous.

Glass. Glass is very much like pottery in some respects, the chief difference being that it can be handled only when it is red-hot. Sometimes it is poured or molded, and sometimes it is blown.

The decorations are sometimes molded in the glass, and sometimes they are engraved or etched on the surface of the glass. Sometimes the glass is cut. The iridescent colors characteristic of Pompeian glass were formed by the acids in the earth, which acted on the glass during the time it was buried.

Furniture. The materials most commonly used for furniture are wood and upholstery on a wooden base. Some modern furniture is of metal, with upholstery. The very earliest furniture is of stone. The Egyptians, the Greeks, and the Romans often used stone.

Lettering, Printing, and Bookmaking. Wood and stone are the earliest materials used for the preservation of words. Letters are more easily carved in wood than in stone, but the shape of the letter is determined by the grain of the wood. The Egyptians used for their writings papyrus, made from the papyrus reeds. People in the Middle Ages used parchment made from the skins of goats, sheep, or calves. Vellum, which is still the finest of materials, is made from the skin of newborn calves. The word paper comes from the word papyrus, but paper is made of the pulp of linen, cotton, straw, or wood fibers. Because it is cheap and easy to write or print on, paper has largely superseded all other materials for writing.

The form of letter depends upon the material upon which it is to be placed and upon the method of making the letter. If the letter is carved the process is difficult, and each letter is distinct. If the letters are made with a brush, pen, or pencil they are formed easily and tend to flow together. Printed type has the advantage of being uniform. The beauty of the letters themselves depends on the language and the type. Arabic, Greek, and Chinese letters all have their distinctive forms. In English letters there are many different types; the common varieties can be seen in a dictionary. The script or cursive, which is used for writing by hand, is in general not so beautiful as the types used for printing.

The binding of a book may be of wood, leather, cardboard, or paper; and it may be decorated with jewels, engraved, or tooled, or it may have a printed design on it. The book itself is frequently decorated. The medieval manuscripts show many illuminations or small paintings- that are introduced into the text. Very often the capital letter that was the beginning of a chapter or a poem was made the


Fig. 71.-First page of the Psalms from the Tickhill Psalter (ca. 1310).
Illuminated manuscript. Size: $127 / 8$ by $85 / 8$ inches. New York, Spencer Collection of the New York Public Library. (Spencer Collection.)
subject of an elaborate design. Sometimes, also, border designs were used.

The page from the Tickhill Psalter shows the First Psalm with a large initial B. The other letters of Beatus, the first word of the psalm, are placed under each other at the right of the B. Beneath the $B$ one can read the words of the psalm, Qui non abiit in consilio impiorum ("Blessed is the man that walketh not in the counsel of the wicked"). The illustrations depict scenes from the life of David, the supposed author of the Psalms. On this page is shown the calling of David (I Sam., XVI, 1). The paintings in the B show the angel appearing to Samuel, telling him to anoint one of the sons of Jesse, and Samuel at the house of Jesse. At the bottom of the page the angel is pointing out the child David, to the consternation of the older brothers. In the marginal decorations are the coats of arms of the king and queen and nobles.

## References

The "How to Do It" series issued by Studio Publications, Inc., contains volumes devoted to the mediums of the following: Etching, woodcuts, water colors, line drawing, modeling and sculpture, portrait painting, pottery, photography, embroidery, animal drawing, lithography, figure drawing, amateur movies, weaving, oil painting, wood carving, stage craft, poster making, lettering, and soap carving.

Almost every history of art gives a clear and concise discussion of mediums.

## General References:

Friend, L., and Hefter, J.: Graphic Design, 1936.
"Graphic Arts." A selection of articles from the new 14th ed. of the Encyclopaedia Britannica.
McMahon, A. P.: The Art of Enjoying Art, 1938.
Robb, D. M., and Garrison, J. J.: Art in the Western World, Chaps. I, XVI, XXIV, 1935.

Tilney, F. C.: The Lure of the Fine Arts, Chap. VIII, 1931.

## Architecture:

Hamlin, T. F.: The Enjoyment of Architecture, 1921.
Kimball, F., and Edgell, G. H.: A History of Architecture, Chap. I, 1918.
Parkhurst, H. H.: Cathedral, 1936.
Rathbun, S. H.: A Background to Architecture, Chap. I, 1926.
Statham, H. H.: A Short Critical History of Architecture, 2d rev. ed. by G. M. Aylwin, 1927.

Walsh, H. V.: Understanding Architecture, 1934.

## Sculpture:

Casson, S.: Some Modern Sculptors, 1928.
-: The Technique of Early Greek Sculpture, 1933.
-_: XXth Century Sculptors, 1930.
Gardner, E.: A Handbook of Greek Sculpture, Introduction, 1915.
Rindge, A. M.: Sculpture, 1929.
Painting:
Holmes, Sir C. J.: A Grammar of the Arts, 1932.
---: Notes on the Science of Picture-making, 1923.
Laurie, A. P.: The Painter's Methods and Materials, 1930.
Pope, A.: The Painter's Modes of Expression, 1931.
Speed, H.: The Science and Practice of Oil Painting, 1924.
Drawing:
Blake, V.: The Art and Craft of Drawing, 1927.
-----.: Drawing for Children and Others, 1927.
Speed, H.: Practice and Science of Drawing, 1913.
Prints:
British Museum: A Guide to the Processes and Schools of Engraving, 1933.
Hind, A. M.: A Hestory of Engraving and Etching, 1923.
Ivins, W. M., Jr.: Prints and Books, 1926.
Pennell, J.: Etchers and Etching, 1926.
Weitenkamp, F.: How to Appreciate Prints, 1921.

## Questions

1. Examine twenty buildings for their method of construction.
2. If possible, visit buildings of each type in process of construction.
3. What are the preferred mediums for architecture in your community?
4. Can you find examples in your community of
a. Dome?
b. Arch?
c. Buttress?
d. Flying buttress?
e. Ribbed vaulting?
$f$. Cantilever construction?
5. Examine all the illustrations of sculpture and painting in this text for the mediums used.
6. Buy dry pigment from an art store, and experiment with different vehicles: water, oil, egg, and wax. Note the effect of the vehicle on the stroke.
7. If possible, visit an exhibit of paintings and one of prints to study the characteristics of the different mediums.

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8. For the study of weaving, lace, metalwork, ceramics, and glass, make a collection of available objects (a) from the stores in the community, (b) from the homes of the students.
9. Make a collection of "grandfather" art; i.e., glass, textiles, etc., used by your grandparents.
10. If there are any foreign families in the community, make an exhibit of articles brought from the Old World.
11. Study furniture for mediums used. Learn to recognize different woods: mahogany, pine, cherry, walnut, etc. What evidence do you find of the use of new mediums?
12. Make a collection of the textbooks used by all the students in a class. Examine for paper, lettering, and binding.
13. Examine carefully examples of glass to see traces of the mold in molded glass and the mark of the iron in blown glass.

# The Mediums of Music, Literature, and the Combined Arts 

I. Music

## 1. Musical Instruments

Mercury was born at peep of day. That afternoon he stole the oxen of his brother Apollo, put twigs on their feet, and led them backward into a cave. When accused by Apollo, the impudent baby, still in his crib, said he could not have stolen them; he was only a day old and did not even know the word for cow! At this he winked at Jupiter and threw the entire court of gods into gales of laughter. With an infant so precocious as this, it is not surprising to know that he made the lyre before he went out to steal cattle. The story is that he found a tortoise, killed the animal, stripped the shell, fitted it with bridge and reeds, and accompanied himself in a song of unprecedented sweetness. When the quarrel about the cattle was made up Mercury gave Apollo the lyre he had made in this way; and Apollo became the god of music.

Another story makes the first lyre an accident. A turtle had been left on the banks of a stream when the waters went down. It had dried away so that nothing but the tendons remained, these being stretched tight, like strings on a musical instrument. One day Mercury stumbled over it, the shell gave out a musical sound, and the lyre was discovered.

Whether or not Mercury was implicated, accident must have had a great part to play in the discovery of musical instruments. The flute may have been suggested by the sound of the wind in a hollow reed, the harp by the noise of the bowstring when the arrow is shot, or the drum by the reverberations of a hollow log when it is hit by a branch of a tree.

But, whatever the origin, all musical instruments have the same fundamental construction. Since sound is produced by an object in

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vibration any musical instrument must have something to vibrate, called a generator or vibrator, and some way of setting the vibrator' in motion. Moreover, a musical instrument must be able to make more than one tone; in other words, there must be provision for variety of pitch. In most instruments the sound produced by the vibrator is not great enough to be heard at any distance, and therefore there must be some kind of sounding board, or resonator, to amplify or increase the sound.

## 2. Kinds of Musical Instrument

Musical instruments may be classified roughly according to the way the vibrator is set in motion, as by bowing, blowing, or beating. Those in which the sound is made by beating are called the instruments of percussion: drum, xylophone, cymbals, etc. Those in which the sound is made by blowing are wind instruments: horn, trumpet, flute, etc. Those in which the sound is made by bowing are stringed instruments: violin, cello, etc. The last name is the least satisfactory because certain of the stringed instruments, the harp, for example; are not bowed. Therefore, they are called stringed instruments, not bowed instruments. This is the usual classification of instruments: percussion, wind, strings. It is supposed that instruments of percussion came first, then wind instruments, and last, strings. A child follows this order in his natural development; at first he likes rattles and other toys that make noise by beating. Later he learns to whistle, and he likes the wind instruments, pipes of all kinds. Still later he begins to play on the strings, violin or cello.

Instruments of Percussion. The instruments of percussion are those in which the vibrator is struck or hit. These can be divided into two classes, those of indefinite pitch and those of definite pitch. Instruments of indefinite pitch include rattles, gongs, triangles, cymbals, tambourines, and castanets. Rattles are often gourds in which are placed pebbles and gravel to make sound when they are shaken. The tambourine is a small drum with metal disks or bangles in the rim. Gongs, cymbals, and triangles are metal pieces that sound when struck. Castanets, which are much used by Spanish dancers, are small spoon-shaped shells of hardwood or ivory; usually a pair is used in each hand. The drum has a piece of tightly stretched skin as its vibrator; this is set in motion when beaten. All drums are of indefinite pitch except the timpani or kettledrums. Other instruments of definite pitch are the xylophone, marimba, orchestral bells, and celesta. In
these instruments small bars of metal or wood are hit with wooden hammers. In the xylophone and the marimba the bars are of wood; in the orchestral bells and the celesta they are of metal.

Wind Instruments. Wind instruments fall into two general categories: wood winds and brasses.

The brasses are so named simply because the instruments are of brass. In the brass family the lips are used as vibrators. A simple illustration of the lips as vibrators is found in whistling. The lips are tightly stretched, the sound is made as they open and close to allow the air to escape. To the group of brasses belong the various members of the horn family: horn, trumpet, French horn, cornet, trombone, and tuba.

The wood winds have their name because they were originally made of wood though at the present time they are frequently made of metal. In the wood-wind family there are two types of vibrator, air and reed. Of the air as vibrator one may have a very simple example by blowing across the top of a bottle or jug. If he uses bottles of different sizes he gets different sounds, and, as the various jug bands on the radio have demonstrated, can play a tune by blowing first on one bottle and then on another. The sound is made because the air is set vibrating, and the stream of air thus becomes the vibrator. Instruments in which air is the vibrator are the flute and the piccolo (small flute).

The principle of the reed as vibrator is demonstrated by the small boy who whistles by blowing on a leaf or blade of grass held tightly across his mouth. The reed, which is a very elastic tongue of wood or metal, is placed in or upon an opening through which the air passes; the air sets the reed to vibrating and produces sound. Reeds may be single or double. In the single-reed instruments, the clarinet and saxophone, a single reed flutters back and forth between the air in the player's mouth and the air in the instrument. In the double-reed instruments, the oboe, English horn (contralto oboe), and bassoon, the air passes between two reeds, causing them to vibrate.

Strings. The third and last great family of musical instruments is the strings. Stringed instruments belong in two classes as the string is plucked or bowed. In the harp and guitar the string is plucked by the hand. In the mandolin it is plucked with a quill or plectrum. In the members of the violin family, the violin, viola, cello, and bass viol, the strings may be picked or plucked with the finger, but they are usually bowed; i.e., a bow strung with hair is drawn across the strings, and the resulting friction produces a steady tone. This fric-
tion and hence the tone are increased when the bow is rubbed with rosin.

Voice, Piano, Organ. The human voice, the piano, and the organ are not generally counted in any one of the three families of instruments just referred to. The piano is both a stringed instrument and an instrument of percussion because the strings are struck with small hammers. The voice is obviously a wind instrument; the vocal chords stretch and vibrate when the breath passes over them. The organ also belongs to the general category of wind instruments since the sound is made by blowing. Most of the pipes of an organ are like the flute and piccolo in using the air as a vibrator, though a single reed is used in some pipes; reed stops, they are called. The organ is the only instrument mentioned in which the vibrator is not set vibrating by human strength; in the usual organ of today the volume of air is under electric control. In the so-called "electric" organ there are no pipes; but the exact number of vibrations is determined and set in motion by electricity.

## 3. Range and Pitch

Pitch is determined by the number of vibrations; the greater the number of vibrations per second the higher the tone. Since large objects vibrate more slowly than small ones, the larger instruments produce the lower tones. The application of this principle may be seen in a comparison of the size of instruments in any family. The violin is smaller than the viola, the viola is smaller than the cello, and the cello is smaller than the double bass. The piccolo is smaller than the flute, and the flute is smaller than the oboe and the clarinet. In the low-toned wind instruments the pipe or tube is so long it must be doubled back on itself, as in the bassoon, or be wound around, as in the various horns. The larger the drum the lower its tone. The size of an instrument thus determines its fundamental tone or range.

Within the general range of an instrument exact pitch is fixed in different ways, according to the nature of the instrument. In the stringed instruments exact pitch is determined by the length, thickness, and tautness of the string. The longer the string the smaller the number of vibrations and the lower the tone. However, it would be difficult in any instrument to accommodate strings long enough to produce very low tones, and therefore other devices are used. A slack string vibrates more slowly than a taut string. A heavy string vibrates more slowly than a light string. And a thick string vibrates more
slowly than a fine string. Therefore, the strings for the high tones are shorter, tighter, lighter, and finer than those for the middle tones, and the strings for the bass tones are longer, slacker, heavier, and thicker. Often the lower strings in a piano are wrapped with wire to increase their weight and diameter without increasing their tension. Usually the strings of a musical instrument are given approximate pitch by their length, weight, and size and definite pitch by tension. The end of each string is wound around a movable peg, and, as the peg is moved, the tension is increased or decreased; the greater the tension the higher the pitch. It is in this way that pianos and all other stringed instruments are tuned.

The piano has a separate string for each tone that may be produced, and, therefore, the player has no responsibility for pitch. The violin, and with it the other members of the family, is in this respect almost the opposite of the piano, since violin pitch depends entirely on the performer. Four strings of the same length are made to produce all the tones of the instrument. When the strings vibrate in their entire length as "open strings" they produce only the original four tones. When the strings are "stopped" by pressure of the violinist's fingers each string is shortened, and its tone is raised.

The harp is like the piano in that it has a different string for each tone; it differs in that the instrument must be tuned by the performer: Moreover, the harp does not have so many strings as the piano. The strings of a harp correspond to the white keys of a piano. If one wants to play other tones, those which correspond to the black keys, he must shorten the strings by means of a pedal. In the regulation of pitch, therefore, the harp stands about midway between a piano and a violin.

The fundamental tone of the wind instruments is determined by the length of the tube, as we have already stated. The Greeks put together a series of pipes of different sizes and blew across them; the pipes of Pan, they are called. This principle is still used in the organ, in which a different pipe is used for each tone. In the other instruments, the tones are all produced from a single tube.

In the wood-wind instruments, flute, piccolo, oboe, clarinet, and bassoon, definite pitch is regulated by a series of holes on the side of the tube. By opening or closing these holes the length of the tube and, consequently, the pitch are changed. The longer the tube, that is, the greater the distance from the mouthpiece to the first open hole, the lower the tone.

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In these instruments pitch is determined, also, by changes in the force of the current of air. This process is called overblowing. A flute, for example, has six holes for the tones of the scale; the entire tube makes the seventh. By closing all the holes and blowing steadily the flutist will make the first tone and, by raising his fingers one after the other, produce all the tones of the scale. Repeating the process but blowing with greater force, he sounds the same scale an octave higher than it was the first time. By still further increasing the force of his breath, he can produce a third scale an octave higher than the second, two octaves higher than the first. Thus, with one set of holes the flute has the range of three octaves; however, the lowest octave is weak and rather faint, and the highest is shrill and piercing. Only the middle octave is rich and vigorous. Similarly, most of the wood winds, although possessing a range of two octaves or over, have only a small compass of good tones. The very high and the very low are harsh and unpleasing.

The brass winds differ from the wood winds in that they have no openings between the mouthpiece and the end of the tube, and the tubes end in a flare called a bell. In the simple horn or trumpet, changes in pitch can be produced only by changes in the pressure of the lips. This allows little variety, and therefore schemes have been devised for lengthening or shortening the tube. These devices are of two kinds. The simpler device is that used in a trombone, whereby one tube, fitted over another, slides back and forth. The length of the tube and therefore the pitch obviously change as the slide is moved back and forth. In instruments like the cornet, French horn, and tuba, additional tubes are inserted in the instrument, and by means of pistons the player can direct the air through these tubes and so lengthen the current of air at will.

In the kettledrums pitch is determined partly by the size of the drum and partly by the tension of the skin forming the head. The pitch of the drums is raised or lowered by increasing or lessening the tension of the head. In the xylophone, orchestral bells, and celesta there is a separate block of wood or metal for each tone; exact pitch is fixed by its length, thickness, weight, and stiffness.

## 4. The Resonator

Certain materials, such as wood, vibrate very easily and will vibrate in unison with anything near by. This phenomenon is familiar
to almost everyone. A cello hanging on the wall will vibrate in answer to certain tones of the human voice. If one holds a violin in his hands in a room where people are talking or where music is being played, he can feel the movement as the violin vibrates with the noise of the room. Candlesticks or vases on top of a piano will jiggle, often disagreeably, when certain tones or chords are struck on the instrument. One musician ${ }^{1}$ tells that he had a small kerosene lamp by the light of which he used to play on the piano; whenever he struck a certain chord from the march in Tannhäuser the lamp would go out because the vibrations of the chord started vibrations in the chimney so strong as to put out the flame.

This principle of sympathetic vibrations is used in musical instruments to amplify and reinforce the vibrations of the generator. The sound one hears is the sound made by the generator or vibrator plus the sound made by the resonating body or resonator. Wood and air are the resonators most commonly used, though metal is also employed. When a string is vibrated in the violin the entire case and all the air within the case vibrate with it. Thus, though the sound of a violin string alone is so small as to be heard only a very short distance, that sound, when reinforced by the vibrations of the case and the air within the case, can be heard through a large hall.

In the piano, the resonator is a piece of thin firwood placed immediately under the strings, called a sounding board. The other stringed instruments follow the type of the violin or that of the piano. The members of the violin family, viola, cello, and double bass are built like the violin; the harp, like the piano, with a sounding board. In all the stringed instruments except the piano the enclosed air also serves as resonator.

In the wind instruments, the air within the instrument is set vibrating by the generator and acts as resonator. In these instruments the walls of the instrument may also act as resonator. For the human voice the air in the head and throat from the vocal cords to the mouth and nasal openings serves as resonator. Of course this is the reason why a cold in the head changes one's voice.

In a drum the sides of the instrument and the air within it are the resonators. Instruments of percussion, with the exception of the drum, are usually without resonators, but xylophones and orchestral bells sometimes have small metal tubes suspended under the wood or metal blocks to act as resonators.

[^5]
## 5. Timbre

The timbre of an instrument is its characteristic quality, the sound of a violin tone as compared with an oboe or a trumpet. Timbre is determined by the number and importance of the overtones, which, in turn are determined by the shape or contour of the sound waves. In a musical instrument timbre is influenced by all the factors that enter into the production of the sound, the more important being the resonator and the generator. In a violin, for instance, the timbre may be changed by the way it is bowed or by any of the various resonating agents: bridge, case, and enclosed air. In a violin great attention is given to the construction of the case: the kind of wood used, the shape of the body, the position of the bridge, etc., for all of these influence the timbre of the instrument. Age and use are supposed to make the wood of the case more elastic and therefore a better resonating agent for the vibrations of the string.

In the wind instruments timbre depends on the generator and on the size and shape of the column of air. In the brasses, for instance, the player can make great differences in timbre by the way he uses his lips. Even more depends on the tube or pipe through which the sound passes. A narrow tube makes a different sound from a large tube, a cylindrical tube from a conical, a tube ending in a bell from a tube without a bell. Very little importance is attached to the material of which the tube is made. Flutes, which were formerly made of wood, are now almost universally made of silver, with no real difference in tone. In an organ, however, some pipes are made of wood and others of metal, with an appreciable difference in timbre.

The organ is unique among instruments in the variety of timbre effects it may produce, having several pipes for each tone. The usual tone families are four: (1) Diapason, or organ foundation tone, (2) flute tone, (3) string tone, and (4) reed tone.

In the human voice timbre is determined primarily by the mouth and other oral passages constituting the resonator. The voice teacher shows the pupil how to shape these passages so as to produce tones of pleasing timbre and so "places" the voice.

## 6. Loudness

Nothing has been said so far of loudness, for it depends obviously on the resonator and on the force applied to the vibrator or generator. The only interesting point about loudness has to do with the control
of intensity and the ability to increase or decrease the intensity at will. In the piano, for instance, a note may be struck so as to make a loud or a soft sound, but, whether a sound is loud or soft, it begins to die away as soon as it is made. In an organ, on the other hand, the tone may be increased or decreased in intensity or remain the same at the will of the player and for an indefinite time. The instruments of percussion and all the stringed instruments in which the strings are plucked or struck are like the piano in this respect. The wind instruments and the strings that are bowed are like the organ. In the wind instruments other than the organ, however, the air comes from the player's lungs, and, therefore, is limited by his breath supply.

Conclusion. It is interesting, however profitable it may be, to speculate on future changes in musical instruments. There is, of course, the possibility of having a development similar to that of the organ in other instruments. In a recent article in the Atlantic Monthly ${ }^{1}$ Leopold Stokowski predicts that there will be more instruments in which the vibrator may be set in motion mechanically and, hence, more accurate tones produced, since it would be possible to determine scientifically the exact number of vibrations.

## II. Literature

## 1. The Medium of Literature

Literature is an exception to the rules about art, since it has not a physical medium of any importance in itself. Its medium is language, but language is the same whether it is spoken or written, and it is as good spoken as written. The voice is not an essential in literature; neither is the printed page nor the phonograph record. The poem is the same no matter how one gets to know it. Moreover, no one of these ways of knowing the poem has any necessary artistic significance. The poem will gain if it is read understandingly in a beautiful voice or if it is printed beautifully on the page, but neither the voice nor the printing is essential to the poem as such; the poem is the same if read in a poor voice or if printed in a newspaper. We cannot say that literature is independent of medium, since it must be known in some of these ways to be known at all, but it is true that no one method is essential, and in this sense literature is independent of physical medium.

[^6]
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## 2. The Families of Languages

The languages of the world have been combined by the editors of Webster's New International Dictionary on the basis of their similarities into eight groups or families:

VI. Ural-Altaic $\left[\begin{array}{l}\text { Finno-Ugric }\left[\begin{array}{l}\text { Magyar } \\ \text { Finnish } \\ \text { Estonian } \\ \text { Turkish } \\ \text { Mongolian }\end{array}\right. \\ \text { VII. Austronesian }\left[\begin{array}{l}\text { Malay } \\ \text { Javanese } \\ \text { Tagalog } \\ \text { Polynesian }\end{array}\right. \\ \text { Maori } \\ \text { Hawaiian }\end{array}\right.$
VIII. Indian (American)

By permission; from Word Study, copyright, 1938, by G \& C. Merriam Company. Table given in abbreviated form.

These languages are combined on the basis of similarities, as we see in the Indo-European family when we compare the English father with the Dutch vader, Gothic fadar, Old Norse fathir, German vater, Greek pater, Sanskrit pitar, and Old Irish athir. ${ }^{1}$

## 3. Chinese

Each of these languages is a different medium, with its own method of expression, its own way of thinking, and that way of thinking is not exactly like that of any other language. In Chinese, for instance, according to the article in the Encyclopaedia Britannica, ${ }^{2}$ the language is made up of characters. A character represents a root idea; it has no gender, number, case, voice, mood, tense, or person; it never is any particular part of speech, nor has it any especial function, but it is interpreted to suit the particular meaning of the context in which it is found. For example, a certain character has the root idea of above as opposed to below. It may be

1. A noun-upper person, ruler.
2. An adjective-upper, topmost, best.
3. An adverb-above.
4. A preposition-upon.
5. A verb-mount, go to.

A group of such characters put together are interpreted according to the context. For example, four characters that, roughly translated, would mean Affair why must ancient would be interpreted in English, Why necessarily stick to the ways of the ancients in such matters? Or, again, the six characters that literally translated, would mean Few what see, many what strange might be interpreted, The less a man has seen, the more he has to wonder at, or Many things are strange to one who has seen but little.

[^7]To the person who thinks in terms of a group of characters that say Affair why must ancient, the sentence we have given as an approximation can never be anything but an approximation.

## 4. Language, a National Medium

With literature the difficulties are greater than in the other arts because words are symbols and therefore are incomprehensible to those who do not know them. A symbol is by nature arbitrary. It has a certain meaning because that meaning has been agreed on and for no other reason. In the story of Ali Baba and the Forty Thieves, there is no intrinsic reason why the door should open if one said, Open sesame rather than Open barley or Open wheat, but sesame was the word that had been agreed upon for that purpose, and the door would open for no other word. There is no reason why the symbol " 4 " should stand for four rather than for three or six. And so it is with most words. With a small group of words, such as bow-wow, moo-moo, baa, the sound is supposed to convey the meaning, but the number of such words is negligible, and they do not really convey any meaning. With the vast majority of words the sound has no natural and inevitable relation to the meaning. We are accustomed to associating the sound of the word dog with a certain animal, but there is no essential connection between the two. The French word for dog is chien, the German, hund, the Latin, canis, and there is nothing in any one of the sounds to indicate that particular animal were it not so understood by the people who speak that language.

The medium of literature thus is national, and it can be understood and appreciated only by people who know the language. Literature is the only art whose medium is not international. A painting in fresco loses its characteristic quality if it is reproduced in oil; there is an essential change; but if one knows it in fresco he recognizes it in oil; he can see that it is the same picture. In the same way, a symphony written for an orchestra loses something that is essential when it is played on the piano, and yet one recognizes it as the same. But if a poem is translated into another language, one has no idea what it is about unless he knows the other language. To the person who knows both languages there is perhaps no greater difference between a poem in French and its translation into English than there is between the symphony played by the orchestra and by a pianist, but unless he knows both languages one version is mere gibberish.

## 5. Limitation to English

In a text of this kind it is not safe to assume that the readers will know more than one language. Therefore, in our study of literature, we are limited to the one medium, English, and other languages are used only as they are translated into English. In doing so we are obviously restricted; and in our study of literature we are at a disadvantage in comparison with the other arts. In the other arts we can study the work of all countries with equal ease. We can hear the music of Russia, see the sculpture of Greece, and enjoy the architecture of France and the pictures of Italy as clearly and as easily as we can those of England. In literature we are confined to writings in English or to translations from other languages into English.

Fortunately the English language is a very flexible medium and a very wide variety of effects can be obtained in it. Fortunately, also, it is a language with a very great literature. But the fact remains that, knowing only English, we are missing other and different types of effect to be obtained in other languages.

## III. The Combined Arts

The combined arts present certain very definite problems when considered among their sister arts because they have no literature. A production in one of these arts is lost as soon as it has been produced, and there is no way of reproducing it for study. Moreover, the separate arts that make up each of the combined arts fall into one of the classes already studied. The music of a dance or an opera is not different from other music, and the picture seen on the stage of the theater, the opera, or the dance is to be judged as any other picture. For these reasons we shall not attempt to treat the combined arts in any detail but shall merely mention the arts involved in each.

The Dance. In the dance the movements of one or more persons, who are the dancers, are combined with costumes, lighting, scenery or background, and music. The movement of the body is that which makes the dance, and it is, therefore, the one essential element. The real medium of the dance is the body. Dance movements fall into two classes: (1) Movement within the body, as movement of the head, arms, torso in a single space, and (2) movement from one space to another; walking, running, jumping, etc. There may also be the movement of a solo dancer or the movement of a group of dancers.

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The Theater. The term theater, as used in this text, refers to the drama in action. The play is drama; it becomes theater when it is acted. The medium of the drama is language, words spoken or written. The theater adds the speaking voice, action, costume, lighting, and scenery. The theater, therefore, differs from the drama in the mediums employed and in the emphasis given them. In the drama the speaking voice is of no importance; in the theater it is of great importance. In action the theater may make use of all the movements of the dancer as well as the movements of the ordinary person, walking, running, standing, etc. Costume brings further possibilities for variety and expression.

The theater is properly the art of the actor, but the actor can act only in some setting and in some light. In many of the great periods of the theater the setting has been of very little importance. In the Greek theater, for instance, the setting was the same for all plays, a street before a building. In the Elizabethan theater it was also very simple-a set of curtains with a few pieces of furniture to indicate the type of room, as a bed for a bedroom. The Greeks and the Elizabethans, moreover, had no control over lighting; both performed their plays in the daytime with natural lighting. Now the producer has full control over the lights and the setting of his play, and he can change them to suit his performance. In his hands the setting and the lighting have become mediums for the artist just as truly as action or costume.

Opera. Theoretically, the opera is like the theater, i.e., it employs the same mediums, except that the parts are sung, not spoken. As a matter of fact, the theatrical elements in the opera do not always receive as much importance as they do in the theater.

Cinema. The cinema is an exception to the statement about combined arts, since it is preserved and can be reproduced at will. The cinema, originally only a way of duplicating and preserving the pantomime and the setting of the theater, has developed into a separate art with its own possibilities. Moving pictures are produced by showing successive pictures at great speed. There are two kinds of moving picture; the talking films and the silent ones. In recent years, the silent films have almost entirely given way to the talking pictures. The pictures are usually photographs, though they may be drawings or paintings. Both talking and silent films make liberal use of music. Ordinarily the music is merely an accessory, but in certain special cases the music is an essential part of the play.

The Radio and the Phonograph. The radio and the phonograph are ways of reproducing or extending sound just as the moving picture was originally a way of reproducing sight. They have not yet been developed so that thev can be called arts. They are still only means of reproducing art.

## References

Literature:
Baugh, A. C.: History of the English Language, 1935.
Encyclopaedia Britannica, "Language."
Goldberg, I., The Wonder of Words, 1939.
Jespersen, O., Language, 1921،
Music:
Gehrkens, K. W.: The Fundamentals of Music, 1924.
Kelley, E. S.: Musical Instruments, 1925.
Lavignac, A.: Music and Musicians, 1903.
Mason, D. G.: The Orchestral Instruments and What They Do, 1909.
Pole, W.: The Philosophy of Music, 1924.
Redfield, J.: Music: A Science and an Art, 1928.
Scholes, P. A.: Listener's Guide to Music, 1919.

## Questions

## 1. Music

1. The best way to learn instruments is to play in an orchestra. The next best way is to pay attention to the individual instruments at a concert; go early enough to hear the men tune up. If possible, attend rehearsals.
2. There is a Columbia record illustrating instruments of the orchestra that is excellent for rapid comparisons; the instruments play the same melodies and begin and end on the same pitch.
3. For specific compositions available on records for the study of instruments, see the list on page 262 ff .
4. Next to experience with the actual instruments, the best way to study instruments is to follow the music with the score. The first page of the score for César Franck's Symphony in D minor, for example, shows that the theme is introduced by the low strings and that the wood winds come in, for color, in the third measure.

Miniature scores can be purchased at reasonable prices.

## 2. Literature

1. In what medium do you remember poetry; do you see the printed page, or do you hear a voice saying the words, or do you remember the words independent of either? Do you remember the words?

Symphony
I
César Franck


## THE MEDIUMS OF MUSIC, LITERATURE

2. How do you remember a novel or a short story: as sound, as words on a printed page, as images?
3. Trace the Indo-European forms of other common words: brother, mother, etc.
4. If you know people who speak a foreign language, especially if it is not one of the Indo-European family, compare the methods of expression in that language with English.

## 3. The Combined Arts

From their nature the combined arts can not be known in the library. They can be known only in actual performances. The student should witness as many performances of each as is practicable and notice (a) the part that each of the separate arts plays in the whole, (b) the art that is dominant.

It is worth while also for the student to plan the whole when only a part is given, e.g., if he has the music to an opera or the words of a play, let him plan costume, staging, and action; if he has the steps of a dance, let him find music, staging, and costume; if he has the music for a dance, let him plan steps, staging, and costume.

PART III
Elements

## VIII

## The Elements of the Visual Arts

## 1. Mediums and Elements

Medium and elements are the materials the artist uses in making a work of art. The distinction between them is easy to see but hard to define. Both answer the question "What is it made of?" but from different points of view. If, for instance, we say the picture is made of oil or water color we are talking of the medium, but if we say it is made of red and green and blue we are talking of the elements. If we say the music is played on the horn, the oboe, or the piano we are talking of the medium; if we say it is fast or slow, that it has a good tune or a catchy rhythm we are talking of the clements. If we say the building is made of brick and stone we are talking of the medium; if we say it is made of right angles and vertical lines, we are talking of the elements.

The clements can be known only in some medium, but they are independent of medium. If we see a straight line we must see it in ink or chalk or pencil or some other concrete medium, but the concept of a line is the same no matter what the medium happens to be, and we say it is a line whether it be chalk or pencil or ink. For convenience, therefore, we talk of line entircly dissociated from any medium. Similarly, if we hear the song America, we must hear it sung by some person or played on some instrument, but we think of it as a tune without regard to the instrument on which it is played. When we study elements, we consider tune and line with no attention to the means by which we know them. The medium is the physical means through which we can come in contact with a work of art; the elements are its qualities or properties. Mediums are concrete; elements are abstract.

Ordinarily a work of art is limited to one medium or to a small number of mediums. A statue is entirely in bronze or granite or marble, not in a combination of them. The same picture will not use

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oil, fresco, tempera, water color, and wax. In music a combination of instruments may be used, as in an orchestra, but then the orchestra becomes like a single instrument in presenting that music. Even in dress, where various mediums are combined, there are relatively few materials used in a single garment.

When, however, we turn to the other aspect of the material of art, the elements, we find just the opposite situation; many different elements are found in a single work. A single picture may easily show all the elements of painting-color, line, distance, etc. Moreover, these same elements are repeated in other works in different mediums. The same red and green that we like in the picture in oil will be duplicated in fresco, water color, and tempera. Not only do we find the same elements in different mediums of a single art, but we find the same elements in different arts. Rhythm in music and rhythm in literature are the same. The colors of the picture will be duplicated in dress goods, neckties, house furnishings, decorations on china, or automobile paint. One art differs from other arts and from other examples of the same art, in medium; it is like them in its elements.

With each topic studied so far we have discussed its relation to the permanent value of a work of art. With elements this is hardly necessary, for elements are obviously close to the heart of the matter; they are of very great importance. A piece of music may attain lasting fame just because of the melody or a painting because of its color. But elements are not all; the greatest art will have also organization, style, and content.

## 2. Elements of the Visual Arts

The elements are the same for all the visual arts; all vertical lines have the same characteristics, whether they be found in houses, statues, paintings, or coffeepots; the reds and greens of painting are found also in china, clothes, wallpaper, draperies, and carpets, and they have the same characteristics. Therefore, all the visual arts are grouped together for the study of their elements. These elements are

1. Line and shape.
2. Value and mass.
3. Color.
4. Texture.
5. Volume.
6. Perspective.

## 3. Line and Shape

Line, with shape, is probably the earliest and simplest element in the visual arts. When a child attempts to draw anything he has seen he does it first in lines and shapes. Lines may be used to make shapes, as squares or rectangles, or they may exist independently just as lines. We speak of the shape of the coffee pot and the lines of the telegraph wires.

Lines are straight or curved. The fundamental shapes of straight lines are the square, the rectangle, and the triangle; those made of curved lines are the circle and the ellipse. Curved and straight lines form the lunette or half ellipse.

Straight lines are horizontal, vertical, or diagonal. The horizontal line is primarily the line of rest and quiet, relaxation and contemplation; a long horizontal line gives a sense of infinity that is not easily obtained in any other way. The horizontal line is the line made by a man when lying down, the line of the horizon, the line of the sea when quiet, and of the plains. Horizontal lines are found in landscapes; the quieter the landscape the more prominent the horizontals. Millet liked to paint


Fig. 72.-The Charioteer (ca. 475 в.c.). Bronze with enamel and silver inlay. Height: 5 feet, 11 inches. Delphi, Museum. (Alinari.) peasants in the fields, and the long line of the horizon gives a sense of quiet and peace to the scene.

The vertical line is the line of a tree or a man standing. It is the line of chimneys and towers. The vertical is a line of rest, but it is not the rest of relaxation as is the horizontal. The vertical is poised,
balanced, forceful, and dynamic. The vertical is ready for action though it is not acting. The early Greek bronze found at Delphi,


Fig. 73.-Detail of The Charioter. known as the Charioteer of Delphi, is an excellent example of a vertical line. In it there is no deviation from the vertical except the arms, which are outstretched to hold the reins. The figure is splendidly poised, a perfect example of a body under absolute control, no resting or loafing, every muscle relaxed but ready to respond as the chariot sways with the movements of the horses. Compare with this figure the caryatids of the Erechtheum, where so slight a deviation from the vertical as the bending of one knee takes away from the force. Probably because of its force, the vertical line stands for moral probity, for exaltation and inspiration. When we speak of the man who is "upright" we mean the man of moral worth. This power of the vertical has often been recognized in memorials of great men, such as the Column of Trajan in Rome or the Washington Monument in Washington.

The right angle, the square, and the rectangle, as combinations of horizontal and vertical lines, possess the strength of both lines; they have solidity, calm, and force. A single tree against the horizon, a telegraph pole by a road have this power. A man of determination is supposed to have a square jaw; when he frowns his brows and his frown make a right angle. Of the shapes composed of straight lines the square is the most powerful; it is also the least interesting, since there is nothing to attract the attention to one side rather than the other. As a result, it is almost avoided in art. The rectangle is a much more interesting shape. If it is standing on its short side it shares something of the strength of the vertical line; if it is on its long side it partakes of the peace of the horizontal.

The diagonal is the line of action. A man running makes a diagonal line with his body and leg; a beating rain, trees in a hard wind, almost
everything in action assumes a diagonal line. The amount of action is shown in the angle of the diagonal. The diagonal that approaches the vertical shares the force and self-sufficiency of that line. The diagonal that approaches the horizontal shares the complete abandonment of the horizontal; it may be falling into the horizontal or struggling against it, but it is no longer under its own power; the pull of the horizontal is greater than that of the vertical. At an angle of forty-five degrees the diagonal represents the maximum of action, being halfway between the independence of the vertical and the powerlessness of the horizontal. These different angles are illustrated in several late Greek statues. The Boy with a Goose is almost vertical. The Borghese Warrior represents the maximum of action at a diagonal of almost forty-five degrees. The Dying Gaul is past the stage of independent action and is approaching the rest of the horizontal.

The triangle is one of the most interesting shapes, for the action of the diagonal is joined with the stability of the horizontal. Even more than the square, the pyramid is a symbol of strength. But diagonals meeting at sharp angles form jagged lines that are harsh and unpleasant; they connote lightning, battle, war, and sudden death.

Curved lines may be single or double, slow or quick. A quick curve is an arc of a small circle, the type of curve found in a fat baby. A slow curve is an arc of a large circle, the type of curve of a long oval face. A single curve is but a single arc; a double curve turns back on itself. A curve doubled back and forth makes a wavy line. The double slow curve is the famous "line of grace" or "line of beauty" of Hogarth.

The curved line has a soft effect. Curved lines are almost always lines of action and life and energy; but they are never harsh or stern. Most things to which we attach the adjective pleasing have curved lines: rounded hills, a tree bent with fruit, the curve of a cheek. The quick curve is more exuberant than the slow curve; when used in great abundance it becomes coarse and gross. The difference is clear if we compare the three Graces in Botticelli's Spring with the three goddesses in Rubens' Judgment of Paris. The long, slow curves of Botticelli have less life than the quick curves of Rubens, but they are quieter, more delicate, more restrained.

Of the curved shapes the circle is the most quiet and restful. The ellipse, like the rectangle, gives a sense of verticality or horizontality as it rests on the short or long side. The lunette is in general an

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unsatisfactory shape; it should combine the advantages of both the straight and curved lines, but it does not.

Curved lines, being active, tend to become restless, and they may get out of control and lose their power. Even a dress pattern or a rug may be too full of curves; rococo architecture under Louis XV shows this tendency. Curves need the steadying influence of adjacent straight lines. In Botticelli's Spring, for example, the soft, gentle curves of the women's bodies are set against a continuous row of verticals in


Fig. 74.-Boethus (second century в.c.). Boy and Goose.
Marble after bronze original. Size: about 33 inches. Rome, Capitoline Museum.


Fig. 75.-Agasias (ca. 100 в.c.). Borghese Warrior.
Marble. Height: about 5 feet. Paris, Louvre.
the background of trees. An artist will often go out of his way to introduce a hard, straight line near his curves.

Other interesting examples are to be found in all the arts. In advertisements, the shape of the letter and the quality of the line are frequently used to indicate the character of the thing advertised. The lettering that advertises electric products may be sharp and angular, whereas that which advertises farm machinery may also try to suggest its product, in solid, heavy, square strokes that sit flatly on the paper.


Fig. 76.-Dying Gaul (ca. 220 b.c.).
Asia Minor marble. Height: 3 feet, $\$ / 8$ inches. Rome, Capitoline Museum. (Alinari.)
Lines in dancing and gesture and carriage in the theater show the same characteristics. The uncompromising old maid carries herself stiffly, and the typical posture for a sycophant like Uriah Heep is that of bending with the hands constantly making small spirals as they are rubbed together. Youth and beauty move in long, graceful curves, and uprightness is square and erect.

## 4. Value and Mass

Value is the name given to relative degrees of light and dark. In ordinary speech, only the terms light and dark are used, but they are too vague to express exact differences. Therefore, a scale of values has been devised to show relative degrees of light and dark:

White.
High light.
Light.
Low light.
Medium,


Fig. 77.-Sandro Botticelli (1444-1510). Primavera (Allegory of Spring) (1478). Tempera on wood. Height: 6 feet 8 inches. Florence, Uffizi Gallery.


Fic. 78.-Peter Paul Rubens (1577-1640). Judgment of Paris (ca. 1636). Oil on wood. Height: 4 feet 9 inches. London, National Gallery.


Fig. 79.-Panathenaic Procession (fifth century. b.c.), detail of Parthenon frieze.
Pentelic marble. Height: 40 inches. London, British Museum. (Mansell.)


Fic. 80.-Lapith and Centour (ca. 447-443 s.c.), Metope from the south side of the Parthenon. Pentelic marble. Height: 3 feet 4 inches. London, British Muscum. (Metropolitan Museum of Art.)

## High dark.

Dark.
Low dark.
Black.
The scale by no means represents all possible values. It has been estimated that there are about 700 distinguishable shades of gray between white and black. ${ }^{1}$ It would, however, be folly to attempt to name all these shades, and the scale given will serve to identify most of the values needed.

Mass stands in somewhat the same relation to value as shape does to line in that it is derived from it but is not synonymous with it. A single value or a group of closely related values seen in considerable amount constitute what is known as a mass, as a black dress against a white background. A piece of white lace placed over a black cushion, however, gives sharp contrast in value but no sense of mass. Very often shape and mass are the same, since everything within a certain shape will frequently constitute a single mass.

Values in art have two sources. The first and obvious source is the value in the object itself, as, for instance, the color of a piece of cloth. This is called its local color. The second source is the creation of values through shadows or reflection of light. These are more subtle because they change with every change in the light. If, for instance, a cloth is held in a dark closet and gradually brought into the light, the hue that seemed black in the darkness appears in all values from black to light as the cloth is brought out into the light. The folds of curtains show many different values in the way they reflect light. Tooled leather, weaving, and chased gold and silver depend for their effects on the differences in value produced by shadows, since the uneven surface reflects the light differently. The photographs of the tennis ball show clearly the rough cloth of the covering when there are shadows; where there are no shadows, the nature of the cloth cannot be determined.

The same is true of architectural design and ornament in general. A molding, whether inside or outside a building, can be seen because of the way the different surfaces reflect the light. Patterns in shingles or in the arrangement of boards or brick of a building, can hardly be seen except for the shadows they cast. A cornice of a building casts a shadow on the wall below and makes a definite change in the design. The depth of windows and doors also determines shadows. A building

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Fig. 81.-Daniel Chester French (1850-1931). Abraham Lincoln (1920), head before (right) and after (left) change in lighting.
White marble. Size: about three times life size. Washington, D. C., Lincoln Memorial. (Courtesy of Mrs. Margaret French Cresson.)
should always be planned so that the shadows will perfect the design. A good architect frequently makes a model of the building he is designing in order that he may learn exactly the effects of the shadows.

A relief can, of course, be seen only in the shadows cast. In a high relief the shadows are deep and the lines bold and distinct; in a low relief the shadows are not so pronounced, and the lines are more delicate. A low relief should therefore be in a dimly lighted place where the light shadows make clear the outlines of all the figures. A high relief should be in bright light because the higher the relief the deeper the shadows. In high relief, moreover, the design must be very simple; if there are too many figures the shadow of one figure tends to efface its neighbor. On the Parthenon both these points were observed. The frieze, which is in low relief, was placed on the wall of the building where it was protected from direct sunlight by the outer columns. The metopes, which are in high relief and with very simple composition, are placed above the columns, where they receive the direct sunlight. Even the arms and the legs of the centaurs and warriors are separated so that the shadow of one does not fall on and so obscure the other.

If the artist has not studied the effects of shadows carefully he may find the finished work quite different from the one he planned. When


Fig. 82.-Rembrandt Harmensz van Rijn (1606-1669). The Night Watch (1642). Oil on canvas. Height: 11 feet 9 inches. Amsterdam, Rijks Museum.
(Metropolitan Museum of Art.)
French's Abraham Lincoln was first put in place in the Lincoln Memorial the lighting had not been studied, and the statue seemed a mere caricature. The lighting was changed, and now we can see the effect that French desired to obtain.

The effects to be gained through value are almost infinite. In studying values we may notice three points. First is the contrast of values. On a sunny day the contrast of values is great; on a cloudy day it is relatively slight. Whenever more than one value is used there is necessarily a contrast of value. Is this contrast great or slight? Is the general impression of high values, of low values, or of a contrast between the two?

Second is the transition between values. Sometimes the values merge one into the other by almost imperceptible degrees, and again they are sharply distinguished one from the other. Are the lines separating values clear-cut, or are they fuzzy?

Third is the character of the masses used. Is a mass a single flat area, or is it subtly varied? This question is really a matter of slight variations in value within a single tone, but of variations so slight as to be almost imperceptible. It is the difference between a wooden box painted sky-blue and the actual blue of the sky. Ruskin complained that the artists before Turner painted hard, flat skies, and it is one of the excellencies he finds in Turner that you look into and not at his skies. The shadows of Rembrandt have this same quality. In the Old Woman Cutting Her Nails, the Man with the Helmet or the Night Watch, there is only a little light in the picture, and the remainder of the scene is buried in darkness. This darkness is not hard blackness, against which one might strike his head, but a soft, penetrable shadow; one feels that he can see into the shadows. The effect is much the same as that which is produced by a small light in a large room; only a small space is clearly lighted, and the light fights against the shadows in the remainder of the space.

In emotional connotation light values are, in general, bright, gay, and happy; sometimes they are unsubstantial. Dark values are solid and substantial, sometimes gloomy and melancholy. Sharp contrasts are dramatic, and values that merge hazily one into the other, especially in the darker tones, tend to be mysterious, even mystical. Turner and Watteau deal primarily in light values; Millet and Rembrandt in dark. In the earlier painters, values were kept quite distinct, and lines were important. Since Rembrandt the tendency has been for lines to be lost and values to merge one into the other.

## 5. Color ${ }^{1}$

Color is that quality which makes us distinguish one hue as basically different from another, blue, green, red, etc.

Colors, like values, shade one into another; red changes by small degrees from red to red-orange and then to orange and orange from yellow-orange to yellow. The number of distinct colors has been

[^9]estimated as about $160,{ }^{1}$ but these are too many to be accurately memorized and remembered. Therefore, we limit ourselves to six


Fig. 83. families or classifications: yellow, green, blue, violet, red, orange. When one needs more than the six colors, an intermediate is used-yellowgreen, blue-green, red-violet, blue-violet, etc. For convenience the colors are placed in a circle.

This arrangement has the advantage of placing each hue opposite its approximate complementary. Two hues are complementary when they make gray if combined. The exact complementary is that which is seen in the negative afterimage; if onc stares intently at any color for a certain time and then looks off at a wall or a sheet of paper, he will see on it another color that is the exact complementary of the color he was looking at. This is the negative afterimage. If he looks at a blue color the color he will see on the wall is orange; if he looks at a red color he will see a blue-green.

Colors, of course, differ in value. Any color may be seen in any value from a low dark that can hardly be distinguished from black to a high light that is almost white. There are light blues, dark blues, medium blues, etc. In some colors, however, a good deal of confusion is produced by the fact that different names have been given certain values, and for that reason they are not recognized as being essentially the same. A light red, for instance, is called pink, and dark yellows and oranges are called brown.

Colors differ in intensity or grayness as well as in hue and value. Two colors may both be blue, one just as dark as the other, but one may be a gray-blue, whereas the other may have no gray in it. Powder blue is a grayed blue; old rose is a grayed red. Most of the pastel shades are grayed. When a hue is found in its full strength or purity it is said to be in full intensity. The same hue with some gray in it is said to be partly neutralized. A blue one-half neutral (one-half gray) is just halfway between a blue with no gray in it and a pure gray; three-fourths neutral is halfway between one-half neutral and gray.

[^10]A color thus may be defined in terms of its hue (blue or red), its value (dark or light), and its intensity (grayed or full intensity). And any color to be known should be identified in all three points: a bright dark blue, a grayed or dull light blue, or, stated technically, a blue of dark value in full intensity, a blue, high light in value, three-fourths neutral.

Colors are either "warm" or "cool." The greens and blues on the right of the palette, from yellow to violet, are cool hues; the reds and oranges on the left of the palette, from violet to yellow, are warm hues. The cool hues probably seem cool from their association with cool subjects in nature: green grass, green trees, blue sky, and blue or green water. The warm hues are associated with warm subjects: yellow sun, red coals, and orange fire. The cool colors are for the most part restful and quiet. The warm colors are more active and more exciting, but we tire of them more quickly. The warm colors always seem closer than the cool colors; therefore they are called advancing colors, and the cool colors are called retreating colors. If red, green, and blue circles are placed one by the other the red seems closest to the spectator and the blue, farthest away. For this reason warm colors are usually put in the light parts of a picture, which are nearest the spectator, and the cool colors are reserved for the shadows.

But though each color has certain very definite properties it is almost never seen just as it is. We have described how values are changed by the amount of light. Colors are changed also by the presence of other colors. A color reflects and changes with all the colors round it. It looks dark beside a lighter color and light beside a darker color. It seems brighter when placed by its complementary. A blue put beside a violet makes the violet seem red, and a red placed beside a violet makes the violet seem blue. Delacroix was merely stating emphatically the influence of colors over each other when he said that he could paint a face of the mud on the streets if he were allowed to select the colors that were to go around it.

## 6. Texture

Texture has to do primarily with the perception of touch. It is the element that appeals to our sense of the feel of things, whether they are rough or smooth, bumpy or slippery. It is the difference we feel between satin and velvet, between limestone and marble and bronze, between linen and silk and cotton, between the roughness of tweed and the smoothness of serge. Texture is known first by the actual touch

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of objects. Later it is interpreted by the eye without the need of physical touch, though there is always the image of actual contact. It is as though we have run our hands over the marble or the satin even if we have not touched it.

A sense for texture is fundamental in all the arts. In most cases differences in texture are due primarily to differences in medium and to the way the medium is finished. The lover of any art soon gets to know his textures very thoroughly, and he can identify them by touch alone. The man who knows wood can tell in the dark whether the piece in his hand is pine or oak or mahogany. And the woman who loves china can detect very fine and subtle differences in the texture of porcelains. But since the differences in mediums were all discussed at some length in the chapter on medium they need not be repeated here. An exception will be made for painting and sculpture since texture has two meanings in those arts.

In painting, texture has reference first, as in all arts, to the medium, the way the paint is applied, the effect of the brush stroke, whether it is fine or rough and whether its general effect on the canvas is smooth or rough. It has also another meaning that has come to be much more important than the original one, the painted representation on canvas of texture, the glossy skin of a horse, the damask of a coat, the jewels in the border of a velvet gown, the slick skin of an apple as compared with the fuzzy down on a peach, the smooth face of a young girl, and the wrinkled skin of an old woman. All painters show texture in their paintings, but certain schools, such as the Dutch, and certain painters, such as Chardin and Hals, have taken special pleasure in the representation of texture. There is, moreover, one type of picture in which the representation of texture is the primary interest, still life. It consists, as the title suggests, of the painting of objects that have life but that do not move, as flowers, fruits, and vegetables. However, in the painting of fruits and vegetables, there is abundant opportunity for the display of other textures, the play of light on china or glass, the gleam of a knife, the color of wine, or even. the rich glow of freshly baked bread.

Sculpture likewise shows texture both in the surface of the medium itself and in the representation of texture. Frequently it shows texture in the representation of flesh; we have already spoken of the Hermes of Praxiteles in this connection. Sometimes sculpture shows texture in the representation of cloth or lace; there is, however, much less of this type of representation of texture than in painting, and in sculpture


Fig. 84.-Jean Baptiste Simeon Chardin (1699-1779). Kitchen Table. Oil on canvas. Paris, Louvre. (New York University.)
it is so foreign to the nature of the medium as to partake of the character of a stunt.

## 7. Volume and Modeling

Volume is often called solidity. By volume we mean that an object has a third dimension; it not only has surface up and down and across but in and out. This in and out may be solid, as in a mountain, or it may be hollow, as in a building. Many people are not aware of volume; they live in a flat two-dimensional world, just as others live in a black-and-white world. But the world is not flat; we can walk around the house, put our hands on the four sides of the cracker box, encircle the coffee cup with one hand. We get our impressions of volume through holding an object in our hands, running our hands over the surface, lifting it, punching the sides, walking around it, etc. As we grow older we learn to estimate volume by the eye alone, but the

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Fig. 85.-Four photographs of a tennis ball to show the effect of light. (Tom Binford.)
feeling for touch and weight remains strong; we want to put our hands on things and to lift them, even when we refrain. But if we use only our eyes we perceive volume primarily in two ways, by contour lines and by shadows. We know that the vase is round because we see the oval that represents the top of the vase and because the sides reflect the light differently. The part of the vase that is closest is very light, and the shadows grow lower in value as the sides get farther away.

The four pictures of a tennis ball were taken to illustrate the effect of light on our perception of volume. The camera and the ball were in the same positions in the four pictures; the only changes were in the lighting. In the first the light is arranged to show the solidity of the ball, the shadows making clear the spherical shape. In the second the ball can hardly be distinguished as a sphere, because the shadows


Fig. 86.-Raphael (1483-1520). Entombment (1507). Oil on canvas. Figures under life size. Rome, Borghese.
have been almost entirely eliminated. The third picture shows that the ball is a sphere, because the light coming from above lights the table, and we can see both the contour lines and the shadow of the ball as well as the shadows on the side. In the fourth the light from the side casts no such shadow, and we can only guess that the ball is a sphere.

To these ways of knowing volume a third may be added, the effect on other people. If we see that a group of people lifting an object are having a hard time we get an impression that the object is heavy; this is demonstrated by the vaudeville 'stunt of pulling very hard at what turns out to be very light. On the other hand, if we see that people are lifting an object very easily, we think it is light. In the Entombment, by Raphael, the body of Christ seems very heavy because the disciples have trouble in lifting it, but in Botticelli's Birth of Venus the goddess has no weight at all. She stands on the edge of the shell without even tipping it.

Usually the artist uses all the means at his disposal, and usually he achieves the effect he desires. They are not all necessary, however.

The Japanese give the effect of solidity through the use of line alone. They leave out shadows because they say that shadows are temporary and that only the permanent should be represented in painting. Their work, however, is done so skillfully that one may look at it a long time without realizing that the colors are flat and shadows are missing. The Chinese, on the other hand, get their effects primarily through values. Rembrandt, also, made his figures look solid by the use of values alone; line is almost entirely eliminated.

Obviously some of the visual arts are arts of volume, and some are not. Sculpturé and architecture are outstanding as arts of volume. They must have volume, and they always have volume. Painting is itself two-dimensional, but, as with texture, it represents objects of three dimensions, and we commonly speak of volume in painting just as we do volume in the arts of three dimensions. Of the applied arts, some have volume and some do not. Textiles are to all intents and purposes two-dimensional; we do not get from them effects of solidity. Baskets, on the other hand, are three-dimensional. Most metalwork has solidity: coffeepots, pitchers, even knives and forks are three-dimensional, but iron grills have no solidity; they appeal primarily as flat design. Ceramics, except for flat tiles, are essentially three-dimensional.

There are innumerable kinds of solid, but for purposes of simplification most of them can be reduced to a few fundamental types. An arm or a leg is a cylinder, a head is an ovoid, a skyscraper is a rectangular solid, a tree is a cone, etc. The Parthenon is a rectangular solid with a triangular prism on top; The leaning tower of Pisa is a cylinder. In general, the rectangular forms are more pleasing than the square or the spherical. There is something very satisfying about definite right angles, and we do not tire of them so quickly as we do of cylindrical volumes.

The term volume has reference to any three-dimensional object, whether it be a mountain, a house, a statue, or an ice cube. The term modeling is applied only to the surface of a solid, especially the skin of a human being. For example, the word volume is used with reference to a torso or even an arm or a hand, but the word modeling, for small surface irregularities of the hand, the way the veins stick out, the lines of the knuckles and joints, the myriad small irregularities of the skin. It is a common trick of the sculptor to show modeling by lighting a statue with a single candle so that the light will play over the surface. A good statue will then be seen not as a single smooth surface, as it
appears at a slight distance, but as a series of very slight indentations and depressions. Notice the modeling in the bodies of the Lapith and the centaur in the metope from the Parthenon and in the other statues illustrated.

## 8. Perspective and Foreshortening

Space has to do with the relations between volumes. It enables one to see that this object is in front of that and to the side of the other. It is the "before and after" of objects, just as volume was defined as the "in and out" of objects. Space is distance, whether it be the two feet to the window, four miles to the tree on the hill, or millions of miles to the nearest fixed star.

Very few of the arts are concerned with space as such. The two arts in which space is of primary importance are architecture and painting. Architecture is primarily an art of space; a building is enclosed space. Painting does not deal with space directly, as does architecture, but is the representation of space on a two-dimensional surface. Sculpture has little to do with the perception of space or space relations; even when it shows a large number of people, as in a frieze, they are usually presented in a single, long line, with no other spatial relationship. The minor arts are not, in general, concerned with space. A table, a glass, or a piece of cloth exists and is judged in and for itself without regard to other objects. The arts of transportation have to do with covering space, with getting from one place to another, but a train, a boat, or a car, if considered as an object of beauty, is judged by itself. On the other hand, landscape gardening, city planning, and interior design are primarily arts of space because in them we are interested in the placing of objects, their arrangement in space.

The general name for the appearance of objects in space is perspective. The word comes from the Latin perspicere, "to see" or "to look at." There are two types of perspective, linear and aerial. Aerial perspective has reference to the perception of distance through change in color. Objects at a distance are lighter and hazier than objects close at hand. If an object is very far away it becomes so light and so hazy that it cannot be distinguished from the sky.

Linear perspective has reference to the perception of space through the direction of lines. Under normal circumstances this is the most important single factor in the perception of space. We judge distance and position of objects by referring lines to the horizon. When we try to define the horizon most of us probably remember the elementary-
school definition of the horizon as the place where the earth and sky seem to meet, and we think of it as being a long way off and remaining


Fig. 87.-Diagram of the interior of a room to illustrate vanishing point. at the same distance, in the same place. But if we begin to look we find that the horizon does not stay the same; it is like the shadow in Stevenson's poem; it goes with us everywhere. If, for instance, we are standing on the seashore we look out across the water and find the horizon is just as high as our eyes. But if we look from a second- or third-story window it is still just even with the eyes. Pilots in airplanes say that the same thing is true for even greater heights. The space covered before the horizon is reached is greater; as we go higher, we can see farther, but the apparent height of the horizon is just the same.

Horizontal lines that are not parallel to the horizon seem to rise if they are below the horizon and to fall if they are above. Perhaps the simplest example of this phenomenon is in the curved lines of a simple object such as an inkwell. If the inkwell is below the level of the eye, the curve of the side nearest one is upward, or convex; if the inkwell is above the level of the eye, the curve appears concave. If the bottle is brought from one position to the other the curve straightens out as it approaches the level of the eye, where it is a straight line, and then it assumes the other contour. In the same way, the angle made by the corner of a box or a book will have its point up or down, or the two sides will make a straight line according to its relation to the eye. The angle of the box or the curve of an inkwell may be observed on a larger scale in any building. If it is a circular building, such as the Colosseum, the horizontal lines curve up if they are below the eye and down if they are above the eye. The square corner of a building shows the same characteristic as the corner of a box; the lines lead up when they are below the eye and down when they are above the eye. In an interior the lines of the floor seem to go up, the lines of the ceiling, down. In looking at a photograph we are in the habit of determining


Fig. 88.-Diagram of buildings on a street to illustrate vanishing point.
the position of the photographer by the direction of the lines. In the photograph of the Aqueduct of Segovia, for instance, we know that the photographer is near the top, though not at the top of the aqueduct.

Not only do lines go up or down in relation to the horizon but parallel horizontal lines tend to meet on the horizon. If one will extend the lines of a building he will find that they meet on the horizon; the lines of one side of the building meet at one point on the horizon, and the lines of the other side meet at a point on the opposite side. The points at which the lines meet are called vanishing points. If, however, one is standing between two parallel horizontal lines, as on a railroad track, the lines seem to meet directly in front. A similar impression is gained on a long bridge or on a straight stretch of highway. If one is standing at one end of a long hall the lines of the floor and the lines of the ceiling will meet at a vanishing point just level with the eye.

This discussion of perspective holds true of all the usual situations, but there are other possibilities. If one lies on the ground and looks up at the sky, if he stares at the ground or looks in any other direction, the horizon is not level with the eyes. Otherwise the direction of lines is the same. The lines above and below the level of the eye tend to meet on that level. This point is illustrated in photographs in which the camera is held at an unusual angle, as in an airplane view of a scene or the photograph of Rockefeller Center. The line on which the converging lines meet is called the line of vision. It may be defined as an imaginary horizontal line just opposite the eye. The line of vision is normally the same as the horizon, but, since there are some problems in perspective that use a line of vision that is not the same

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Fig. 89.-Reinhard and Hofmeister; Corbett, Harrison, and MacMurray; Hood and Fouilhoux. RCA Building, Rockefeller Center (1933).
Indiana limestone, Height: 850 feet. New York. (Rockefeller Center.)
as the horizon, it is usual to say that lines converge on the line of vision rather than on the horizon.

As a direct corollary of the points already made, it is clear that objects at a distance appear smaller than objects close at hand. A man near by seems larger than a two-story building at a distance. A twoinch ruler held close to the eye is larger than a man.

The laws of perspective we use instinctively whenever we perceive space. We know how high we are by the perspective lines; we know the length of a room by the size of the objects in it and the lines of perspective. Much of the charm of an architectural monument depends upon the artist's visualization of the lines of perspective. A long succession of arches, such as we find in the Aqueduct at Segovia, would be very monotonous if it could be seen as it actually is, a succession of equal arches, but it can be seen only in perspec-


Fig. 90.-Leonardo da Vinci (1452-1519). Mona Lisa (1503-1506). Oil on wood. Size: 30 by $205 / 8$ inches. Paris, Louvre.
tive, and each arch appears smaller than the one preceding. The long aisles of the Gothic cathedral, the rows of columns on a Greek temple owe their charm to the effect of perspective they give.

Perspective is also important in the placing of a buildıng or a statue. The Greeks frequently placed their temples in a high place in which they got all the advantages of broad spaces and a wide sweep of the horizon. The Pantheon in Paris is at the end of a street, and the buildings on each side of the street make perspective lines that focus on the building. At St. Peter's, in Rome, an ornamental entrance was built before the cathedral in order that the building might be seen in its proper perspective.

The laws of perspective are the same for painting as for objects in three dimensions. The only difference is that in looking at the building or the statue we can change our position and hence change the perspective, whereas in a picture the perspective is fixed. In other words,

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Fre. 91.-Perugino (1446-1524). Christ Delivering the Keys to St. Peter (ca. 1481). Fresco. Figures life size. Rome, Sistine Chapel. (Alinari.)
the painter controls the point of view from which his scene is to be viewed. Millet, for instance, wants his figures to be closely tied to the soil; so he paints them with a relatively high horizon, and we see them close at hand. Perugino, on the other hand, wants to suggest a wide sweep of country, and he paints his figures against a relatively low horizon.

Since the eye tends to look at the horizon the artist frequently places the horizon at the point to which he wishes to attract attention. In Leonardo's Mona Lisa and The Last Supper and in Giorgione's Sleeping Venus the horizon line is about the height of the eyes of the principal character.

Moreover, the painter can indicate distance exactly by the size of the objects. Perugino's Christ Delivering the Keys to St. Peter and Raphael's Marriage of the Virgin, which was undoubtedly influenced by Perugino's painting, illustrate this point exactly. In each case the figures in the foreground are much larger by actual measurement than the buildings in the background. The lines of the pavement point to the center of the building and emphasize the distance, which


Fig. 92.-Giotto (1266-1336). Flight into Egypt (ca. 1305). Fresco. Height of figures: about $31 / 2$ feet. Padua, Arena Chapel. (Alinari.)
is further marked by scattered figures here and there showing by their relative size their distance from the figures in front. Accordingly, the proportions seem exactly right.

In medieval times there was practically no accurate representation of space relations. In the paintings of Giotto the buildings and landscapes that form the background for the figures are mere symbols rather than actual presentations. In the Flight into Egypt, the mountain and trees are intended only to give the idea of a mountain and trees. With the Renaissance, however, came the discovery of perspective and very great interest in it. The painter Paolo Uccello is known in large measure because of his great interest in perspective. The Rout of San Romano, which is hung in the entrance gallery of the National Gallery of London, is a typical example of his work. The spears are


Fig. 93.-Paolo Uccello (1397-1475). Rout of San Romano (ca. 1435). Tempera on wood. Height: 6 feet. London, National Gallery. (Mansell.)
turned, and horses and men are posed; even the corpses are arranged so as to show the artist's ability to handle perspective.

The first great exponent of aerial perspective in the Western world was Masaccio. In his painting of the Expulsion the figure of the angel that is painted directly above the figures of Adam and Eve seems definitely behind them because of Masaccio's skillful use of aerial perspective. Many of the early painters used linear perspective without aerial. The objects at a distance are smaller than the objects close at hand, but they are just as distinct. In Giorgione's Sleeping Venus the objects in the distance are lighter in value and smaller, but they remain clear.

During the Renaissance landscape painting was rarely used by itself; the landscape was introduced only as a background for figures. Often the landscape and the figures constitute practically two separate paintings, as in the Mona Lisa, and they are not always drawn with the same perspective. Later, the landscape and figures are combined in an integral whole, as in the work of Titian in Bacchus and Ariadne.

Accurate painting of aerial perspective is at its best in landscape painting and the greatest of landscape painters are the Chinese. With a few blurred outlines they give an impression of a foreground and a background with infinite space in between.

Perspective in Japanese pictures is not the type of linear perspective we have been studying; it is a diagonal perspective. Approximately
the same effect is gained as if one were at a corner of the ceiling, looking across at the objects on the floor. Horizontal and vertical lines always appear as diagonals, and a square appears as a diamond. There is no diminution in size, however, as objects recede in the distance. The nearer objects are lower in the picture and the further ones higher. Great distance cannot be shown in a picture of this kind; the depth of space is limited by the height of the picture.

Foreshortening is a term of linear perspective applied primarily to the human figure. An arm held even with the eye and parallel to the plane of vision is seen in its entire length. If it is turned slowly the arm seems to grow shorter until, when it is pointing directly toward one, the arm has disappeared and little more than the ends of the fingers can be seen. Similarly, if a person is standing his leg appears full length, but if he begins to walk the upper part of his leg appears shorter. The name of this shortened appearance is foreshortening.

Obviously foreshortening is primarily a problem for the painter. The sculptor makes his arm full length. If it is seen from one point of view it appears full length; if from another, it seems foreshortened. The arms of the


Fig. 94.-Masaccio (1401-1428). The Expulsion (ca. 1427).
Fresco. Figures life size. Florence, Carmine, Brancacci Chapel. Charioter, if the statue is viewed from the side, are seen in full length; if the statue is seen in front the arms are foreshortened. The painter, however, is limited to one point of view and must choose

Fic. 95.-Tung Yüan (Sung Epoch). Landscape scroll (late tenth century).
Brush drawing. Size: about 1 feet 3 inches, by 5 feet. Boston, Museum of Fine Arts. (Museum of Fine Arts.)


Fic. 96.-The Lady Wen-Chi's Return to China, by a Chinese painter of the Sung Epoch, detail of a long roll.
Painted on silk. Size: about $99 / 4$ by 22 inches. Boston, Museum of Fine Arts. (Museum of Fine Arts.)
one pose for each figure. Botticelli always draws the arms and legs in full length, as though he were trying to avoid the problems of foreshortening. Mantegna's Pietà is a study in foreshortening. Michelangelo was so much interested in the problems of foreshortening that he made his statues so that they were almost inevitably seen in a foreshortened pose. And, as would be expected, he used foreshortened poses for his paintings.

## 9. Distortions in Drawing of Three-dimensional Objects

In all our talk of perspective, foreshortening, volume, and modeling, we have tried to keep very clearly in mind the distinction between the three-dimensional object and the two-dimensional representation of that object. In the three-dimensional object the effects of perspective, volume, and texture are taken care of naturally. Because the jug is round there are shadows on the sides, and when we see the shadows we recognize that the jug is round. We know the room is long because


Fig. 97.-Mantegna (1431-1506). Pietd (1459). Tempera on canvas. Size: about 32 by 26 inches. Milan, Brera. (Metropolitan Museum of Art.)
we see the perspective lines of the walls and ceiling. We may not and usually do not realize how we know the jug is round or the room is long; we merely react in the way in which we have learned to interpret the world.

If, however, we try to draw the jug or the room we must put shadows in the jug and draw the right perspective lines of the room if the drawing is to seem right. The lines and shadows in the object must be exact; the drawing of them can be and often is not exact. There are several reasons for this. The reason we shall mention first is the one we are most apt to overlook, namely, that the artist is not interested in making an exact representation. We have already spoken of the fact that the Japanese deliberately omit shadows from their pictures. The artist may decide to pay no attention to perspective. In certain schools, difference in size means difference in importance. In the Egyptian Palette of King Narmer the king is very large, as befits his importance, but the servant at his side fits in easily between his uplifted elbow and his knee.

The other reasons have to do with difficulties in seeing. The first time a child tries to draw a round object such as a bowl or an ink
bottle, he will probably make the bottom a straight line. When one suggests that the line should be curved he is apt to remonstrate, "But


Fra. 98.-Palette of King Narmer (ca. fourth millennium b.c.).
Slate. Height: about 20 inches. Cairo, Egyptian Museum. (Metropolitan Museum of Art) the bottom is flat; if it were round the bottle would wobble." In other words, he wants to draw the bottle as he knows it is, without regard to its appearance. This is a universal tendency. We know that the top of the desk is a rectangle, and when we draw the desk we tend to draw the top as a rectangle, even though we see it in perspective with the ends approaching a vanishing point. Likewise, the wheel of a cart or a machine we see as a full circle only rarely and usually then for only a few seconds at a time. Ordinarily it is seen as some form of an ellipse, but we know it is round, and we tend to draw it as round. The round wheel represents a fact; the ellipse, only an appearance. And knowledge of the fact gets in the way of the drawing of the appearance.
In addition, there is usually some one point of view that becomes the characteristic view of an object that is remembered in that view only. For instance, we usually look down on a fly, and the characteristic view is of the back of the fly. Of a horse, however, the characteristic view is the side. We do not know how the profile of a fly looks or the back of a horse. A nose is just as truly a nose whether viewed from the front or the side, but we remember a nose in profile, not in front view; that is to us the characteristic view. Eyes we remember as they appear from a front view. The torso, likewise, we remember from the front view, but arms and legs in profile. When drawing any of these subjects we remember and draw them in their characteristic views. We draw a dog or a horse in profile, a fly as it is seen from above. If we
are drawing an object that involves several of these characteristic views we put them together as we remember them without regard to their consistency. That these statements are true can very easily be proved if one tries to draw any familiar object, a cart going down the street, a chair, a cup and saucer on the table. These difficulties appear always in the drawings of children and of primitive peoples and in untutored work of all times. The most distinguished representatives of the type are found in Egyptian reliefs and paintings. The face, legs, and arms are drawn in profile; the eyes and body full face as in the relief of Hesire. Throughout the centuries of Egyptian art this convention was observed, and the connection between


Fig. 99.-Winged Bull with Five Legs (ninth century b.c.), from the palace of Ashurnasirpal II. Limestone. Height: 11 feet 6 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.) one part of the figure and another was so skillfully done that it does not seem unnatural.

For another example we may turn to the monster that was placed in front of Assyrian palaces, probably as guardian of the place. The type usually found has the body of a lion or bull, the wings of a bird, and the head of a man; it is supposed to combine the strength of the lion or bull, the swiftness of the eagle, and the intelligence of a man. For our purpose, however, the interest lies in the fact that it has five legs. Seen in front are two legs; the lion is standing still, as the lion was usually still when viewed from the front. Seen from the side it has four legs in action, as the lion was usually in action when seen from the side.

So far we have found three reasons for distortion of a figure; one is the fact that the artist tries to draw something as he knows it is, regardless of the way it appears; the second is that he repeats a single detail as he remembers it, without regard to the way that detail appears in relation to other details. The third is that an artist is not
interested in making his figure like life; he wants it not like life. Here, of course, we are stating again the point made in the first chapter, that art is not like life. And the point is worth making again because of the almost universal comment, when art is not lifelike, that the artist does not know how to draw. It may be that he does not see; it may also be that he does not want his work to be lifelike.

## References

Barnes, A. C.: The Art in Painting, Book II, 1925.
Berenson, B.: The Italian Painters of the Renaissance, rev. ed., 1930.
Blake, V.: The Art and Craft of Drawing, 1927.
Bodkin, T.: The Approach to Painting, 1931.
Dow, A. W.: Composition, 13th ed., 1931.
Friend, L., and Hefter, J.: Graphic Design, 1936.
Fry, T.: Vision and Design, 1924.
Ladd-Franklin, C.: Color and Color Theories, 1929.
McMahon, A. P.: The Art of Enjoying Art, 1938.
Munsell, A. H.: A Color Notation, 1913.
Pope, A.: The Painter's Terms, 1929.
——: The Painter's Modes of Expression, 1931.
Robb, D. M., and Garrison, J. J.: Art in the Western World, Chap. XXIV, 1935.
Ross, D. W.: The Painter's Palette, 1919.
-: On Drawing and Painting, 1912.
Speed, H.: The Practice and Science of Drawing, 1913.
Wallace, C. E.: Commercial Design, revised ed., 1939.

## Questions

1. Make a line analysis of each of the paintings and statues referred to in Section 3.
2. Make twenty "match" drawings of figures, using short straight lines (matches) for bodies, sections of arms, etc.
3. Study ten advertisements for the kind of type used in reference to the subject advertised.
4. Make a list of all the objects in the room in which the perception of design depends on differences in value; e.g., jewelry, tooled leather, etc.
5. Study the effect of lighting on various articles of furniture.
6. Study the character of the sky in ten pictures. Is it hard or soft?
7. Test the truth of the statements about the emotional connotations of lines and values in
a. Ten paintings.
b. Four dresses.
c. Four rooms.
8. Make a color circle.
9. Make color charts showing variations in value and intensity of one hue.
10. Arrange ten neckties of the same hue according to (a) their values and (b) their intensities.

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11. Study for texture
a. The face of an old man or woman.
b. Two pieces of wood.
c. Two pieces of cloth.
12. Make an arrangement for a still-life painting.
13. Reduce the objects in the room to simple solids: cone, sphere, etc.
14. Place by any solid object, cone, sphere, etc., a piece of paper of the same size and shape. Study the shadows on the solid.
15. Notice the shadows on a person's face when he smiles.
16. Determine the exact height of the artist or of the camera in a number of paintings and photographs.
17. Take several "trick" photographs to illustrate unusual angles of perspective and foreshortening.
18. As a parlor game, ask a group of people to draw various animals and men in a short time. How many illustrate primitive perspective in their sketches?

## IX

## The Elements of Music: I

## 1. Prefatory Note to the Elements of Music

The main elements of music are distinguishable from each other as being melody, harmony, rhythm, and timbre, or tone color. But although they may be distinguished from each other, they can almost never be said to occur singly, and the abstracting we must do for the purposes of this chapter is a somewhat false procedure. The elements of music are like the three dimensions of space, distinguishable but inseparable; in fact, each one must almost necessarily be defincd in terms of the others. It is like speaking of a person; we can and do speak of body, soul, and mind, but the person is, of course, all the time a unit, an organism, and only for purposes of thought is it possible to break him up into separate parts.

The order in which we shall consider the elements is an arbitrary one, as, indeed, any order must be. A case may be made out for the priority in theory or in time of either melody or rhythm, and, for that matter, from the standpoint of physics, harmony precedes either of them, but most of us remember music primarily by its tunc, and we shall, therefore, begin with the element of melody.

We must repcat here what we have said already and shall say again: that no generalizations in art are true and that almost every statement is liable to numerous qualifications and exceptions. It may seem to the reader that we are excessively cautious and hesitant, and we can only answer that such is the nature of our subject, and we would rather tell him a difficult but approximate truth than an easy but false generalization.

## 2. Melody

Tones. Before we can understand melody we must understand the material out of which it is made. This is tone. Tone is a musical sound, as opposed to mere noise. More technically, tone is sound of

Chart to Show Notation of Pitch and Names of Tones

regular vibration and fixed pitch. A truck going along the highway makes noise, but if an automobile goes over cobblestones it makes an even sound that might be called a tone. Coal going down a coal chute makes noise, but coffee being ground at the grocery makes something like a tone. The difference lies in the steadiness and regularity of the sound of the cobblestones and the coffee mill; the coal and the truck are scattered and irregular. The vacuum cleaner, too, makes a steady sound, and its pitch varies up and down. But we do not speak of it as tone, because it does not stick to any one pitch long enough for us to discern it separately; it slides up and down through too many tones.

When we come to the tones of music we discover that out of the infinite gradations and possibilities in what the ear is able to hear, our music has selected only twelve tones and confines itself entirely to them, with their reoccurrences higher and lower. We may compare this selection of definite tones out of the world of musical sound to our similar selection in language of vowels and consonants. No language pronounces all the possible sounds; the English language, for instance, makes no use of the nasalization of French or the umlaut sound of German, and no Western language employs the varied intonations used in Chinese and supposed by some scholars to have been used in classic Greek. Just as other languages use other sounds, so other musics use other tones. The selection our music makes is not the only possible one. The music of India, for instance, employs many notes based on
distinctions smaller than ours, which at first sound merely out of tune. Most of us have at one time or another experimented with filling water glasses partially full of water and running a finger along the top to make a tone. We have noticed that we had to add water or pour some out in order to get the tones recognizably related to each other.

The tones we use in our music have names, both absolute ones based on their physical characteristics, which is to say the number of vibrations per second, and relative ones derived from the relation of one tone to another. The absolute names are letters of the alphabet A, B, C, D, E, F, and G (and, in German, H, which is our B natural). The relative names are the solfeggio syllables do, re, mi, fa, sol, la, and si, and others that belong more properly to the study of the relations between tones; unison, second, third, fourth, fifth, sixth, seventh, octave refer to the interval or distance between tones, sounded either simultaneously or successively, and tonic, supertonic, mediant, subdominant, dominant, submediant, and leading-note refer to their place in the scale, or harmonic bearing.

Intervals. For the understanding of what is going to be said about major and minor scales it is essential to learn at this point what the various intervals are and how they are constituted. If we strike C on the piano and consider it do and then strike $D$ for re, we observe that we have left out a key, the black key, D flat. The same thing happens in going from D , re, to $\mathrm{E}, \mathrm{mi}$. But then we go from $\mathrm{E}, \mathrm{mi}$, to $\mathrm{F}, \mathrm{fa}$, without omitting any key; in fact, as the pattern of the piano keyboard is arranged, there is no key there to omit. We discover, then, that our ordinary or diatonic scale of do, re, mi, etc., proceeds sometimes by contiguous notes and sometimes by every other note. If we return to C and strike all the notes as we ascend each will be the same distance from the one on either side. That distance is called a half step, or half tone, or semitone. From do to re, then, is a whole tone; so is it from re to mi ; but from mi to fa is only a half tone. Our ordinary scale is really a selected and arranged pattern, whereas the scale striking all the notes, which is called the chromatic scale, is not a pattern. Some of these intervals are much harder to sing and to recognize than others. The fifth and the octave seem the most natural. Intervals are reckoned by counting both the beginning and the ending notes; thus, from $C$ to E is a third, from C to A , a sixth.

But intervals must have further modifying names; it is a third from do to mi and a third from la to do, and yet they are not the same interval, for it is a whole tone plus a semitone from la to do, and two

Chart to Show Intervals

whole steps from do to mi. A third consisting of a whole tone plus a semitone is called a minor third, and a third consisting of two whole tones is called a major third. The same thing happens with sixths; from do to la and from mi to do are both sixths, but the distance is wider, or a greater number of tones and semitones, from do to la than from mi to do. Hence, do to la is a major sixth, and mi to do, a minor sixth. The same procedure applies to seconds, sevenths, and ninths. Fourths, fifths, and octaves are not referred to as major or minor.

Scales. A sample or alphabet of tones makes a scale. The scale is not so long as the whole range of tone, because the tones begin to repeat themselves when we get a certain distance higher. That distance


Medieval modes (a) Dorian

(c) Lydian

is the octave, at which a tone has double the number of vibrations per second. We saw a moment ago that our tones themselves are selected out of infinite possibilities, and our scales, similarly, are selections or patterns. Of these our music uses predominantly two, the major and
the minor. Both are called diatonic scales, and they may be made up of the same notes; the difference lies in the arrangement, in the sequence of tones farther apart or closer together. The major is the ordinary scale, do, re, mi, fa, sol, la, si, the white keys on the piano starting at C. The minor scale has several forms. One form would be made by singing a scale starting on la, or playing the white keys starting on A. Specifically, the difference between the major and minor scales is the difference between the major and minor thirds and sixths. All minor scales have a minor third between the first and third steps. A plain scale may make a melody just as the notes of a chord can; in the example quoted from César Franck the theme for the variations is announced at first as little more than a minor scale, and later it gaily reappears in major.

There are, however, many other scales. One of the oldest of these, occurring in the folk music of a great many countries, is the five-tone or pentatonic scale, do, re, mi, sol, la, exemplified by the black keys of the piano, with G flat as do. Auld Lang Syne, for instance, can be played entirely on the black keys. The pentatonic scale, being as ancient and fundamental. as it is, provides an eminently singable scaleone free from the intervals that are difficult for the voice or ear, and many good tunes that the listener or even the composer might not have suspected of being pentatonic turn out, upon examination, to be so, as the famous melody in the slow movement of Dvořák's Fifth Symphony or the winsome little piano piece by Debussy, The Maid with the Flaxen Hair. Other old scales are the medieval modes, of which there are, theoretically at least, eight-one starting on each white note of the pianoforte. If we are unaccustomed to them they sound like slightly "off" versions of our major and minor scales; they sound strange and ecclesiastical. The chromatic scale consists of all the tones, leaving none out and progressing by the smallest interval. One would have supposed it, if music were logical, to be the basic scale, for it is the only one that contains the twelve notes to which Western music confines itself. It is, as a matter of fact, of fairly late occurrence in music, or at least of fairly recent exploitation. But, on the principle that "where everybody's somebody, nobody's anybody," the chromatic scale, lacking as it does any variation or pattern, becomes meaningless for melodic purposes, save for harmonic implications; we shall see, in considering harmony, how certain beautiful effects of Wagner deceive us into mistaking for melody what is really harmony. The whole-tone scale consists only of every other tone and progresses by whole steps

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-for instance, C, D, E, F sharp, G sharp, A sharp. Its extensive use dates only from the end of the nineteenth century, and it is very limited. Its most effective use is only for contrast; its exclusive use degenerates very quickly into monotony, which might be explained by the theory that the whole-tone scale is not a scale but only a single chord with its notes sounded successively and is, therefore, monotonous, as any single harmony is bound to become. The arbitrary alteration of any of the intervals of the scale will produce a special effect, and probably an exotic one.

Key, Tonality, and Phrasing. For the purposes of melody, key is scarcely more than the fact of what floor you are on in the building of music, and tonality is the feeling of what floor you are on, or where you are in the room; the coherence that makes a succession of sounds intelligible with regard to some horizon-some center or the top and bottom or where do is. The sense of tonality that results from our extensive use of merely the major and minor scales makes us want our melodies to end on do, much the way we like sentences to end with a period. But some sentences end not with a period but with a question mark or an exclamation point or even with dots or dashes, and so, although the vast majority of melodies end on do, they may be found ending on mi, like the "Intermezzo" from Cavalleria Rusticana, or on sol, like Tristan and Isolde or the Twilight of the Gods.

Phrasing may be considered an attribute of either melody or rhythm. Most obviously, phrasing is the observing of the pauses at the ends of the musical sentences, which are usually two or four bars long, and readily discernible by external means, such as symmetry or the behavior of the harmony or melody. In Drink to Me Only With Thine Eyes, for example, there are four main phrases, one for each line of the poem. Each of these is divided into two smaller phrases by the slight break of sense and movement in the middle of the line.

Drink to me only with thine eyes, and I will pledge with mine; Or leave' a kiss but in the cup, and I'll not look for wine. The thirst that from the soul doth rise doth ask a drink divine; But might I of Jove's nectar sup I would not change for thine.

Less obviously, phrasing is the difference between saying
What-song-the-sirens-sang-what-name-Achilles-assumed-when-he-hid-himself-among-women-though-puzzling-questions-are-not-beyond -all-conjecture
and reading it intelligibly, grouping the words according to their sense and their relation to each other:

## Drink To Me Only With Thine Eyes



What song the sirens sang-what name Achilles assumed-when he hid himself among women-though puzzling questions-are not beyond all conjecture.

Correct phrasing in reading depends not upon the ability of the eye to read or the tongue to say the language but upon the mind's grasping of its import; so in music phrasing depends not on the eye or the voice or the hand but on the musical understanding and insight of the performer.

The Organization of Tones into Melody. Melody is a pleasing succession of tones. But pleasing is a very relative term, and the table of examples shows us how melody may vary from simple to complex, from short to long, from easy to difficult, and still be pleasing. In its variety it is like prose and verse, which ranges all the way from jingles and nursery rhymes to the lengthy and sustained paragraphs of Milton
or from the first reader, with its "Jack has a dog. The dog's name is Rover," to the architectural complication of Sir Thomas Browne. In music and in literature, being simple is not a fault; the simplicity of the language of the New Testament and the poems of Wordsworth is highly artistic, but intelligence and maturity in music as in literature demand a widening of the range of what we can find intelligible and pleasing. We must be able to understand and enjoy the complex as well as the simple.

Melody is a succession of tones, something a person can or could sing, and one person can sing only a note at a time. The succession also implies that the melody must go higher or lower; it may approach but cannot be a monotone. The main theme of the slow movement of Beethoven's Seventh Symphony repeats a note eleven times before it changes, but the harmony is varied, and we are not aware of the monotone. There is, indeed, a song by Cornelius called The Monotone wherein the voice has a single note throughout, but it is a stunt, and so varied and ingenious is the accompaniment that the hearer is seldom aware of the monotone until it is pointed out to him.

The length of melody varies as much as the length of a sentence and in much the way that a succession of short, simple sentences is clear and easy to understand but likely to become monotonous; so the very limited breath of Grieg and Wagner is rather childish in comparison to the long melodies of Bach and Berlioz.

The appreciation of melody is very natural; those persons are extremely few who have no ear or voice to the extent that they never hear or sing a tune. But we should, of course, extend our acquaintance, the range of our melodic appreciation, the vocabulary and length, as it were, of our musical sentences. It is good to try to sing melodies, for, in spite of the enormous influence of instruments upon our music since the time of Bach and the fact that violin and pianoforte music may be and often must be totally unvocal in their character, nevertheless, the great melodies, consciously or unconsciously, are still framed or conditioned by the voice; the ability to be sung is the tacit but almost inescapable standard by which melody is measured.

All the great composers have been great melodists, but in ways that vary-the disembodied soaring and gliding of Gregorian chant, the gently undulating line of Palestrina and Victoria, the massive breadth of Handel, the winsome grace of Mozart, the long paragraphs of Berlioz, the rich emotion of Tschaikovsky, the opulent singableness of Verdi (and in this list we are omitting the supreme melodists Bach,

Beethoven, and Schubert)-but we must not expect the melodies of the great composers to make themselves at once obvious to us as those of lesser composers do. When we have once heard Rubinstein's Melody in For Grieg's Ase's Death or Rachmaninov's Prelude in C sharp minor, the melody has told us all it has to say; though pleasing, it is rather shallow, rather obvious, and such pieces quickly wear themselves out. That is the essence of popular music; it is generally too easy, too obvious, exploited, and, before long, exhausted.

## Examples of Melody

1. César Franck, Symphonic Variations, theme.
a. First appearance in minor.
b. Later appearance in major.

Symphonic Variations

(b) Allegro non troppo


Example 1 strikingly illustrates the contrast between the major and the minor scales. Franck has altered the minor scale somewhat in the first phrase by the insertion of an augmented fourth.
2. Dvořák, Symphony No. 5, Largo.

Symphony No. 5 in E minor


Example 2 has achieved fame on several counts. It is as simple and persuasive as a folk song and is one of the best known passages for English horn in symphonic literature. It is in the pentatonic scale. Its naively short phrases may be contrasted with Example 9, which demonstrates the characteristic length of phrase and prose articulation of Berlioz.

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3. a. Gregorian chant, Ite missa est, in festis duplicibus.
b. Spanish folk song, El Paño Moruno.
c. Chopin, Mazurka, op. 24, No. 2.
d. Old English and American ballad, Fair Eleanor and the Brown Girl. Ite missa est in festis duplicibus
(a) Dorian mode

Gregorian Chant


El Paño Moruno
Spanish Folksong
(b) Phrygian mode


## Fair Eleanor and the Brown Girl



Example 3 gives four modal melodics. Example $3 a$ is in the Dorian mode, the scale formed by the white keys of the piano starting on D . Example $3 b$ is in the Phrygian mode, which would start on E. Much Spanish music is founded on the Phrygian mode; the last phrase of our example, in particular, is very common in Spanish music. Example $3 c$ is in the Lydian mode, which is like F major without the B flat. Example $3 d$ is in the Mixolydian mode, which is like G major without the F sharp. This melody is also in the pentatonic scale, as are many of the old ballad tunes.
4. Wagner, Tannhäuser, "To the Evening Star." Tannhäuser, act III scene II


Example 4 is an almost universally known melody that is merely a chromatic descent from the dominant to the tonic.
5. Beethoven, Symphony No. 7 in A major, slow movement, Allegretto.


Example 5 daringly repeats its first note eleven times. We shall meet it again when we shall consider the interest added to it by harmony and counterpoint.

The remaining examples display various contrasts of style and phrase.
6. Victoria, motet, $O$ magnum mysterium.

Motet $\mathbf{O}$ Magnum Mysterium


The beauty of Example 6 is not at once apparent to ears accustomed to readily measurable four-bar phrases and unmistakable major or minor tonality; we must hear it several times (fortunately the motet
is well recorded) before its ineffable and mystic sweetness make themsclves felt.
7. Bach, The Well-tempered Clavier, Book II, Prelude in F sharp minor.


Example 7 shows the long rhapsodic prose line of Bach, paralleled by almost no composer save Berlioz, who is quoted in Example 9.

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8. Mozart, serenade, Eine kleine Nachtmusik, romanze.

Serenade<br>Eine Kleine Nachtmusik

Romanze
Mozart


Example 8 exhibits the symmetry of phrase and simplicity of structure that are the chief characteristics of Mozart's melody.

## THE ELEMENTS OF MUSIC: I

9. Berlioz, overture, The Roman Carnival.

The Roman Carnival
Overture

10. Verdi, Rigoletto, "La donna é mobile."

Rigoletto
Act III
Verdi


Example 10 is world-famous; it is said that Verdi refused to write it down until the day Rigoletto was to be given its first performance for fear of its being "stolen." He was right in his premonition of its popularity, which has remained with it to the present time. In lively contrast to the essential singableness of Verdi's operatic melodies is the characteristically orchestral quality of many of those of Wagner; the example that follows was deliberately chosen for its unvocal line, and yet it is one of the most cloquent phrases in the second act of Götterdämmerung ("Twilight of the Gods" or "Dusk of the Gods").

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11. Wagner, Act II, scene V.
Dusk of the Gods
    Act II scene V
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Wagner

$\begin{array}{ll}\text { - hier ver-hoh-len } & \text { Wel - ches Zau-bers } \\ \text { - here deep hid-den } & \text { What_ en-chant-er's }\end{array}$

3. Two Melodies at Once-Counterpoint

Counterpoint, or polyphony (which is the same thing), is a putting together of independent melodies, a thinking of music horizontally and attending to its separate lines or, more technically, a conveying of the harmony by the coincidence and combination of melodies rather than by purely vertical treatment.

For purposes of classification, though not in practice, counterpoint divides itself into two kinds: either that in which a melody makes an accompaniment out of itself by imitation or that in which two different melodies are put together. Any round is an example of the first, and the
second is easily exemplified in the stunt of putting together disparate pieces such as Dvorák's Humoresque and Swanee River.

Imitation and Canon. Imitation means in counterpoint just what its name implies; the imitation by another part or voice of what has been or is being stated in a first part or voice.

A melody that makes its own accompaniment by exact imitation in another voice or part, after an interval of time, is said to be in canon. In simple words, canon is follow-the-leader in music. This comparison forces at once on our attention the salient feature of canonic writing-namely, that, like all counterpoint, it is a method or fiber, a way of doing something, and not a thing to be done. The game of follow-the-leader might go on forever, for the game does not prescribe what the leader shall do or when he shall stop but merely that we shall follow him. So, in singing a round, when we have all entered with our part, there is nothing to do but sing until we arbitrarily stop. This characteristic quality of canon, that it is endless, can be its vice or its virtue, and the canon is usually either fairly short and used for the purpose of heightening the rhetorical effect, as in the Symphony of César Franck or the Roman Carnival of Berlioz, or garrulous and naïve, as in the F major Invention of Bach and the Finale of César Franck's Sonata for violin and pianoforte.

The Coincidence of Separate Melodies. The second type of counterpoint, the putting together of independent melodies, is bound only by the rule that they shall sound as the composer intends. This statement may seem paradoxical in view of the fact that the writing of strict counterpoint is an exact and often vexatious discipline and subject, apparently, to numerous rules and prohibitions. But rules in art are really merely forms of economy, in that they enable the composer or the painter to be sure of his effect without necessarily taking the pains to imagine it accurately. In classical counterpoint the object of the writing is that the melodies shall combine mellifluously, but in much writing since the classical period the object of the composer is rather that they shall collide. In the example to be quoted from Palestrina, for instance, we are aware of the serene weaving in and out of the voices, but single melodies do not prominently stand out. On the other hand, in the examples by Beethoven, Franck, and Bizet the composer wishes to call the separate melodies to our attention, heightening one melody by displaying it in relation to another. In the example by Bach we should particularly notice how adroitly Bach contrives to make all three of his melodies heard. If he has made us attend to the
one by its melodic or harmonic import he will make another spring out with rhythmic insistence and give a figure to the third, which will trickle through the music like water through stones.

Various Contrapuntal Devices. The composer may utilize other devices as well, and for the sake of completeness we shall define some of them here. Double counterpoint (or triple, or quadruple) is the writing of two melodies in such a way that they may be displayed in more than one relationship to each other-above or below or at a different interval. Inversion is the turning of the theme upside down, which, if the melody is suitably constructed, will add to its effect. Augmentation is the giving of the theme in slower notes, and diminution is the giving of the theme in faster notes. Diminution can produce a feeling of hurry or of "belittling" the theme, and augmentation can add to its grandeur.

General Remarks. The understanding and enjoyment of counterpoint is one of the most important aspects of the appreciation of music, for, with the single exception of Gregorian chant, it may be said almost without hesitation that all the greatest music is contrapuntal and that the great composers have either written in polyphonic style throughout their lives, or, like Beethoven, have turned eventually more and more to contrapuntal writing.

It is polyphony that most enriches musical texture, makes harmony most expressive, and most enlivens the rhythmic fiber of the music. At the same time it demands economy and forbids otiose and padded writing. Hence it is, since polyphony originated in vocal music and still strongly retains vocal influences, that a composer ought to be able to write for voices whether he does so or not, much as an artist should be able to draw in perspective or a poet to write in strict forms, even if his own style does not employ such technique.

For the enjoyment of counterpoint we need not worry about the large command of science and technique that it demands from the composer. These devices are interesting, but the important thing in music is what we hear, not what we see or what we know is there. This statement must not be pushed too far or applied too hastily; we must not expect to get everything in music from a single hearing. But sooner or later, if the composer has been successful, everything he intends to be heard is able to make itself heard. As listeners we should hear as much as we can, literally, actively, and figuratively; literally, by exposing ourselves to the music of Bach and Palestrina and the great contrapuntal masters, and actively, by practicing counterpoint in the
singing of rounds, which provides both amusement and superlative training for the ear. Figuratively speaking, we should hear as much as we can by listening horizontally to the music, by ridding ourselves of the habit of looking for a tune on top of an accompaniment. We should attend to the inner parts of the music as well, for in good counterpoint everything is tune, and all tunes are created equal. If we are aware beforehand that a piece is going to be contrapuntal, it is well to be especially attentive to its beginnings, for the themes announced at the outset, and often by only one part, will usually turn out to be highly pregnant with the composer's mcaning and to be the foundation, at least, of the rest of the piece.

## Examples of Counterpoint

1. The round.
a. In two parts, White Coral Bells.
b. In three parts, White Sands and Grey Sands.
c. In four parts, Row, Row, Row Your Boat.

Our examples begin with rounds in two, three, and four parts, written out so as to display the canon. The four-part onc, at least, is familiar to everyone. The others, unlike the better known Three Blind Mice and Scotland's Burning, are truly contrapuntal in feeling and well worth learning.

(b) Round in three parts


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2. Canon.
a. Bach, Two-part Invention in $F$ major.
b. Berlioz, Overture, The Roman Carnival.
c. Franck, Symphony, First Movement.
d. Franck, Sonata for violin and pianoforte, Finale.

Two-Part Invention in F major


## THE HUMANITIES

## The Roman Carnival



Symphony in D minor


Sonata for violin and piano
Franck


## THE ELEMENTS OF MUSIC: I



Of the examples of canon, Examples $2 b$ and $2 c$ use it as a heightening device; we have already been made familiar with the melodies earlier in the movements and now are shown that they can provide their own accompaniment. Example $2 b$ will be quoted again, for Berlioz has subjected it to two contrapuntal treatments-combination with another melody and canon.
3. Combination of melodies.
a. Beethoven, Symphony No. 7, Allegretto.
b. Berlioz, overture, The Roman Carnival
c. Franck, Symphony, Allegretto
d. Bizet, L'Arlésienne, Minuet.

THE ELEMENTS OF MUSIC: I

> Symphony No. 7 in A major Slow movement


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The Roman Carnival
Overture


## THE ELEMENTS OF MUSIC: I

Symphony in D minor
Slow movement
(c) 1

(c) 2


## L'Arlésienne

Minuet


Of the examples of melodies in combination, $3 a, 3 b$, and $3 c$ have all familiarized us with the main melody before it is combined with a counterpoint. Example $3 d$ states both its melodies together, but the
passage occurs three times, and Bizet gradually intensifies the lower melody.
4. Triple counterpoint. Bach, The Well-tempered Clavier, Book I, Fugue in C sharp minor.

Well-tempered Clavier<br>Book I, Fugue in C\#minor

4 Triple counterpoint
I Subject of the fugue


II First countersubject


III Second countersubject



The fugue from which Example 4 is taken should be technically called a fugue with two countersubjects; our example shows five of the six possible combinations.

## THE ELEMENTS OF MUSIC: I

5. Inversion, augmentation and diminution. Bach, The Art of Fugue, Fugue No. 7.

Art of Fugue<br>Fugue VII




Example 5 is from a work in which Bach was consciously displaying his enormous command of the resources of fugue by writing a whole set of fugues on the same subject and treating it with every kind of contrapuntal device.
6. Polyphonic texture.
a. Palestrina, Mass, Assumpta est Maria, "Christe."
b. Bach, Fugue in $F$ minor for organ.
Polyphonic texture Christe Eleison Palestrina


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The examples of polyphonic texture show how contrapuntal writing uses both imitation and melodies in combination.

## 4. Rhythm

Rhythm is perhaps the most basic and the most universal of all the elements of music. The blood in our veins and the stars in their courses all move in rhythm, and rhythm partakes of the mystery of everything

## THE HUMANITIES

cosmic. It is in some ways the first element of music, and that mythical savage beloved of musical historians beats out his primitive rhythms before he intones his war cries or joins his voice to that of his jungle mate in the rough harmony of his love song. But, though rhythm may be the first element of music, it paradoxically remains the most rare and difficult; we have only to hear a really rhythmic performance to realize how ataxic is most of the music we hear, for true rhythm is not merely a steady and deadening thump but the organization and differentiating of groups of beats, of heavy and soft accents, and the measuring of members, one in relation to another.

Pulsation, Accent, and Duration. Within rhythm we may distinguish three separable qualities. The first and basic quality is regularity of pulsation. That is the first requisite for rhythm, the regular occurrence of something in time, whatever it be. It may be a beat or a sound or a movement-anything discernible by the sensesbut it must occur in time. Pulsation, however, is very difficult for us to hear as being absolutely undifferentiated. We do not hear the steady tick of a clock, for instance, as tick, tick, tick, tick, tick, tick, etc., forever; we hear it as groups of pulsations. Even though the sound of the clock itself is perfectly even, we tend to hear it in groups of accents: tick, tick, tick, tick, tick, tick; or tick, tick, tick, tick, tick, tick; or, if the sound is fairly fast, tick, tick, tick, tick, tick, tick, tick, tick. This desire for differentiating groups within a uniform progression is quite similar to that which makes us think of an even surface of dots as being an organization of lines or diamonds or stars.

Upon the pulsation, grouped by accents, music then imposes its own special quality of duration. There is not necessarily a note for every beat of the rhythm; some notes are held over several beats, or a beat may be divided among several notes. Thus we might tap at a moderate rate on a table: tap, tap, tap, tap. Then we might accent the taps: tap, tap, tap, tap. And then we might start to sing Yankee Doodle, with two notes to every tap, or Dixie, which often has four.

The Kinds of Rhythm: Syncopation. Most often we think of pulsations as moving in twos or threes or fours, and music confines itself mainly to these and to combinations of these, called compound rhythm-two times three, three times three, and four times three. Some music is written in fives and sevens, but it is a very small amount compared to that written in the more usual rhythms.

The commonest rhythm is four rhythm; in fact, it is given the name of common time. It is the natural rhythm for marching. Almost all
martial music, most hymns, and many folk songs are in common time. In itself it is rather undistinguished; the hymn Old Hundredth, which moves in unbroken fours, could never be recognized by its rhythm. But it is, of course, a firm basis for more varied rhythms, such as Ancient of Days, to take another hymn as an example, or the Welsh hymn tune called Ton-y-botel. Two rhythm-the rhythm of Yankee Doodle, Dixie, and Oh, Susannah-is generally brisker in movement. Three rhythm, moving slowly, has nobility and stateliness; it is the longest slow measure we can hear as a unit, for a slow four tends to make us break it up mentally into two twos. Three rhythm, fast, is lilting-a dance measure the world over; who can remain immobile if a Strauss waltz is being played with any verve? .

The compound rhythms are also lilting ones and occur mainly in dance music. A fairly slow nine can give an effect of serenity and yet aliveness; Bach is almost the only composer who so used it. Twelve must be very light and rapid, or the ear hears it as six or three. Six rhythm can be slower than nine or twelve; the lighter accent on the fourth beat must be maintaincd to keep it from being heard as three.

Syncopation of rhythm is a kind of "robbing Peter to pay Paul," a taking of the accents away from where they belong and putting them somewhere else. It may be seen in a simple form in Swanee River at "river" and "ever," in My Old Kentucky Home at "lady," and in the chorus of Dixie at "Dixie." Despite the prevalent belief that syncopation is the discovery of contemporary popular music, it is of very common occurrence throughout all music. Syncopation may be subtle or obvious, but it must obey the rule of common sense that variation is measured by what it varies from. Syncopated music must be founded on sufficient regularity for us to detect the syncopation; otherwise it would be as though we were to write a letter and underline all the words; the underlining would soon cease to carry any emphasis whatsoever. The effect of syncopation, if there is balance between the irregularity and the regularity, is to stimulate and enliven the whole rhythmic fiber.

Not all composers or periods in music have been equally gifted in rhythm. The elasticity, vividness, and variety that make the finest rhythm (as also they do the finest melody and harmony) are the particular glory of the sixteenth and eighteenth centuries. The nineteenth century, for all its achievements in melody and harmony and color, is rhythmically rather weak; in fact, the strongest criticism to be leveled against Brahms and Wagner is their lack of rhythmic interest. The

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great masters of rhythm are, first of all, the writers of the polyphonic period, Palestrina, Victoria, and the English madrigal school; then Bach, who has to be included in any list of the great masters of almost anything musical; the Viennese masters Haydn, Mozart, and Beethoven, the prodigious Berlioz, and the Strauss of the irresistible waltzes.

## Examples of Rhythm

The examples have been quoted at some length to display the organization and variety that may be obtained within a single rhythm.

1. Bach, chorale, Jesu, joy of man's desiring.

Chorale, Jesu Joy of Man's Desiring


Example 1 is an apparent contradiction, since it moves in unbroken eighth notes. But it serves to prove another point, namely, that rhythm depends not only upon pulsation and accent but upon articulation as well. The fluid and springy quality of this passage comes from the relation of the pine notes to three main accents in the measure and of those three to the principal stress on the first, and then from the phrasing and grouping of bars in relation to each other and to higher divi-sions-all making a lithe and supple rhythm.
2. Haydn, Symphony in $G$ major (Letter V), Finale.
"Letter V" Symphony Finale


Example 2 is a contagious and apparently simple rhythm, but the way in which Haydn interrupts and inverts its gambols shows the hand of an exceedingly deft master.
3. Mozart, Symphony in $G$ minor (Kochel No. 550), first movement.
Symphony in G minor

$$
\text { K. } 550
$$




Example 3 states three themes from the first movement in the G minor symphony of Mozart to display some of the variety Mozart achieves within a continuous movement.
4. Beethoven, Symphony No. 5 in $C$ minor, Andante con moto.

> Symphony No. 5 in C minor
> Slow movement


In Example 4, Beethoven begins the movement with a complicated triple rhythm and then throws it into contrast with a broad theme in the simplest rhythm.
5. Berlioz, Fantastic Symphony, second movement.

## Fantastic Symphony

Second movement
Berlioz


Example 5 shows Berlioz writing in fairly regular four-bar phrases; his characteristic melodies are often longer. The extreme buoyancy of the passage may be perhaps due to the avoidance of any accent on the second beat of the bar.
6. Schumann, Carnival, "Preambule."

Carnival


Example 6 is one of the most celebrated pieces of syncopation in the whole pianoforte literature. Schumann inserts a bar in four time to make the rhythm more complicated; it might look at first glance as though his love of syncopation had betrayed him into writing out in triple time a passage that is simply duple, but playing it in duple time will quickly correct that impression. It is genuine syncopation all the way through.
7. J. Strauss, waltz, Tales from the Vienna Woods.


In this example we see the variety that Strauss obtains within the waltz rhythm-contrasts of staccato and legato, of straightforward and syncopated accents, of the smooth phrase $\Omega d$, and the more jerky phrase $\sqrt{.2} \mathrm{~d}_{\mathrm{y}}$.

## 5. Harmony

Before commencing the discussion of the element of harmony we must note that it is even more difficult than with the other elements to determine just how much of its technical side is relevant for the listener to know. Almost everything, of course, will ultimately benefit his understanding of the music, but, at the same time, the merging of harmony with physics and acoustics, though an important and fascinating subject, has little to do with the average listener.


Chords and Triads: Consonances and Dissonances. Harmony is the pleasing simultaneous combination of tones. Tones in combination make chords, which must consist of three notes or more, made by building upward on any given note by thirds and named from the basic note-the chord on C , tonic chord in D minor, dominant in the key of F , etc. We do not count octaves or repetitions in analyzing the number of notes in a chord. The usual chord, consisting of a note with its third and fifth, is called a triad. The triads of the tonic, dominant, and subdominant occur most frequently. Triads are further distinguished as major or minor, depending on whether the third is major or minor, and as diminished or augmented, depending on whether the fifth is diminished, as C to G flat, or augmented, as C to G sharp.

Certain chords are in themselves static or reposeful; these are called consonances. Such are all the major and minor triads. Certain others are not static but restless or unfinished; they imperatively call for some other chord to finish them. They are called dissonances. Such are all diminished or augmented chords and all chords of more than three notes. The finishing of a dissonant chord by a consonance is called resolution.

The Importance of the Tonig Triad. The most important of the chords is the tonic major triad, also called the common chord. The vast majority of melodies, as we saw in the section on melody, end on the tonic, and, even more universally, the concluding triad of the harmony is the tonic triad, whether major or minor. But, furthermore, the notes of the tonic major triad-tonic, mediant, and dominant-are extremely important melody notes, and there are numerous melodies formed on these three notes alone. The basis of this is partly physical and lies in the nature of overtones; bugle calls, for instance, are all written on these thfee notes, not because we like them but because they are the tones that it is natural for the bugle to produce. But the basis is also aesthetic; these are the notes that we know best and most easily
remember, and composers who are under no limitations of physics in their harmony write melodies that display only a chord, because they know that such a melody, if not too long, is solid and easily remembered. If too long, the same harmony becomes monotonous.

Key, Modulation, Cadence. Since the harmonic implications of key, modulation, and cadence are rather technical matters, we shall attempt to simplify them here by an extended comparison.

Most houses have more than one floor, or at least a main floor, an attic, and a cellar. Houses on only one floor tend to be simple and small; a large house all on one level would be monotonous, as a very large apartment is. But some houses, not content with having the living room on one floor and the sleeping rooms on another, derive a great deal of their charm and individuality from having different rooms on different levels, so that perhaps we go up steps to the dining room or look down over the living room from a balcony. Furthermore, staircases can be a distinctive and impressive feature of a house-broad or narrow, steep or gradual, straight or winding. And, finally, when we leave a house there is usually some sort of step or pavement to link us with the ground.

In the house of music the floors are keys. Small picces may be content with just one key, but even these will usually have some reference to the related key above, the dominant, or the related one below, the subdominant. A long piece all in the same key is monotonous. Larger pieces will usually be in several keys, and the staircases by which we get from one to another are modulations. These may be abrupt or gradual, straightforward or devious. The important thing is that, like stairs, they get us to a different level. In music, as in houses, we do not like stairs that get us nowhere. Usually a modulation will bring us to different music as well as a different key, but sometimes it will merely bring us to a new vantage point from which to overlook the already familiar music. And, finally, when the music is ending, there will usually be harmonies to give it a conclusive feeling. These make the cadence.

General Remarks. Harmony is the pleasing, simultaneous combination of tones, and certain observations and reservations apply to "pleasing" in the definition of harmony as in that of melody. The history of music is the history of one generation finding "pleasing" the harmonies that shocked its elders and being shocked in turn by those that delight its children or-a less usual phenomenon-a generation looking back to rediscover beauties lost during intervening ages, as

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we are now beginning to recognize the beauty in medieval music and the music of the fourteenth century, which offended our elders and elicited from them only a smug patronage as being "historically important."

Harmony cannot be explained historically, no matter how hard the historian may try; in fact, the more extensive his research into the origin of harmony the more willing he is to admit the obscurity and contradictions of its origin. Harmony and counterpoint developed together, and harmony divorced from contrapuntal thinking becomes shallow and eventually sterile. The enriching of harmony, however, was among the particular achievements of the nineteenth century, and so accustomed have we become to harmonic thinking that a melody is for us the top line of a series of harmonies; to put ourselves into the frame of mind of unharmonized music, of folk song, or Gregorian chant requires considerable effort. Harmony in music is rather like perspective in painting; we get completely accustomed to its presence, and we are shocked, at least momentarily, if we find it disregarded.

Music, as we never tire of insisting in these pages, is a time art, and harmonic progression takes time. But-and here is a clue to the importance of harmony-a single chord can have great beauty, can arrest our attention, and arouse our admiration, even though it lead to nothing and be without the extension in time that makes music. Therefore, it is possible to be arrested by the beautics of almost meaningless harmonies; most players of keyboard instruments and most listeners, if they knew it, have at one time or another fallen in love with chords of the dominant ninth and such luscious suspensions as are given on the chart. Some popular music is harmonized in such ninth chords and virtually nothing else.

Harmony can do a great deal for quite ordinary, undistinguished tunes. Ask someone to name you a common hymn with a beautiful melody, and he will as likely as not name you Now the Day Is Overwhich has no melody to speak of and derives what little distinction it has exclusively from its rich harmonization. But we may go higher up than that. In Wagner's The Valkyrie one of the most ravishing passages is that associated first in "Wotan's Farewell" with the words Zum letzten Mal letz' es mich heut' mit des Lebewohles letzten Kuss ("One final time, gleaming today on my lips that give their farewell kiss'), which reappears at the very close of the opera and later on in the cycle. And in Tristan and Isolde nowhere is the love music more melting than the
rising melody in which Isolde sings Barg in Busen uns sich die Sonne ("Could our souls imprison the sunlight"). But on examination we -find that these melodies are little more than chromatic scales, and their supreme utterance is almost entirely accounted for by Wagner's superb harmony.

Harmony is mysterious and infinite-in the lines of Browning, whose references to music were not always so felicitous:

And I know not if, save in this, such gift be allowed to man, That out of three sounds he frame, not a fourth sound, but a star.
-Abt Vogler.
Yet the appreciation of harmony does not impose on the listener the attention or the familiarity that other elements may call for. There is, of course, this exception, that for some of us it takes a little time to become accustomed to the dissonances of very modern composers. To enjoy harmony most fully we must train our ears in both directions: to enjoy the mellifluousness of the fifteenth and sixteenth centuries, serene and undisturbed, and to enjoy also the complications and acerbities of Strauss and Stravinski. The harmony of Puccini and Debussy, novel and striking as it is, is often not harmony at all but merely an extension of the medieval practice of doubling the melody at various intervals.

Examples of Harmony

1. Bugle calls.
a. Reveille.
b. Assembly.
c. Taps.
2. 

(a) Reveille

(b) Assembly

(c) Taps


Example 1 cites threc bugle calls to show how they are all founded on the common chord, or tonic triad.
2. Some melodies founded on the common chord:
a. Beethoven, Symphony No. 3, first movement.
b. Beethoven, Symphony No. 5, first movement.
c. Beethoven, Symphony No. 9, first movement.
d. Weber, Sonata in A flat, first movement.
e. Wagner, The Flying Dutchman, theme of the Dutchman.
f. Wagner, The Ring of the Nibelung, Rhine theme.
g. Wagner, The Ring of the Nibelung, gold theme.
h. Wagner, The Ring of the Nibelung, sword theme.

THE ELEMENTS OF MUSIC: I
Symphony No. 3 in E flat major
2. First movement

$$
\text { Symphony No. } 5 \text { in } \mathbf{C} \text { minor }
$$



Symphony No. 9 in D minor


Sonata for Piano in A flat


The Flying Dutchman


The Ring of the Nibelungs The Rhine Wagner


## THE HUMANITIES



Example 2 gives a number of themes and motives also founded upon it. These are for the most part short and pregnant passages, designed to be subjected to considerable development, but the Weber is fairly extended.
3. Beethoven, Sonata in $F$ minor, op. 57, slow movement.

$$
\text { Sonata Op. } 57
$$

Slow movement


Example 3, the subject of the variations which constitute the second movement of Beethoven's Sonata Appassionata, owes its solemnity to its rich harmonies, and to their being placed in the sonorous lower register of the piano.
4. Chopin, Prelude, Op. 45.


Of Example 4 Chopin himself wrote that it was well modulated. He spoke very modestly; it would be difficult to imagine a more ravishing series of key changes than the ones cited above.
5. Wagner, Tristan and Isolde, Act II, scene 2.

Tristan and Isolde
5.

Act II scene II
Wagner


Examples 5 and 7 have already been spoken of; their beauty is almost entirely due to the beauty of the harmony.
6. Wagner, The Rhinegold, scene 1.

## The Rhinegold

Scene I


Example 6 is a simple dissonance and resolution-the chord of the thirteenth resolved by the tonic chord. The interest comes from the dissonance; it is not present in the melody alone.

THE ELEMENTS OF MUSIC: I
7. Wagner, The Valkyrie, Act III, scene 3.


## 8. Dvởák, Symphony No. 5, Largo.



Example 8 illustrates the modern practice of using a beautiful series of unrelated harmonies simply for their atmospheric or sensuous effect.

## Questions

1. Have someone play for you these intervals until you can recognize and sing them accurately: major and minor thirds, perfect fifth, major and minor sixths.
2. Make a facsimile of the piano keyboard. Find on it major and minor seconds, thirds, and sixths, starting on every key.
3. Study these pirces to see how much their melodies are based on scales:
a. Grainger, Country Gardens.
b. Saint-Saëns, "My heart at thy sweet voice," from Samson and Delilah.
c. Rimski-Korsakov, "Song of India" from Sadko.
4. Read through a collection of folk songs, such as One Hundred Folk Songs of All Nations or One Hundred English Folk Songs, in The Musician's Library, and see how many you can discover that are not in the ordinary major scale.
5. Start to sing a familiar song. Find out at the piano what key you are singing in. Then ask someone who has not overheard you to do the same. How divergent are the keys? Or decide on a song to sing with someone, and, without giving any pitch start it at the same time. At what interval apart are you?
6. Observe the phrasing of five popular dance tunes. Is there any similarity? Can you infer that there is a regular pattern for popular tunes?
7. Sing the familiar rounds Are You Sleeping (Frère Jacques), Row, Row, Row Your Boat, and Three Blind Mice for counterpoint in three and four voices. Then try singing them all simultaneously. (This will employ twelve people.)
8. Experiment with singing divergent pieces together. See how many you can discover, for example, There's a Long, Long Trail and Keep the Home Fires Burning, or Solomon Levi and Spanish Cavalier.
9. Take half a dozen familiar tunes, and tap the rhythm-first just the main accents, then the subordinate accents. Determine whether they are duple or triple or compound.
10. Find the various kinds of triad on your keyboard facsimile.
11. Get someone to play dissonances for you, and see whether you can sing the note that will resolve the dissonance.
12. Write a melody that is only a rhythmical arrangement of the scale up and down. Write a melody that is only a rhythmical arrangement of the notes of a chord.

## X

## The Elements of Music: II

## 1. Timbre

It has been remarked elsewhere in this book that each art has one element that is coterminous with medium. In music that element is timbre, or tone color. The timbre of any piece of music is occasioned by the instruments producing it, and the instruments that produce music are the medium of music. The distinction that we may make, however, between instruments as medium and timbre as element is this: the medium has been considered simply as a physical phenomenon, with no regard to its aesthetic implications. Here, on the other hand, in discussing the element, we shall not concern ourselves at all with the facts of tone production but only with their artistic effect.

The citing of examples for this section presents something of a quandary. Melody, rhythm, and harmony can all be adequately exemplified by notation, and from a printed example anyone can reconstruct the music. Such is not the case with regard to timbre; if a person has never heard a horn, the printing of any number of examples of felicitous or famous passages for the horn cannot give him any idea what it sounds like, any more than one could convey the idea of yellow to a blind person. We shall have to be content, therefore, with merely referring to examples, taking pains to be sure that they are all on phonograph records and hoping that the reader can get access to them.

Many of the most celebrated passages for particular instruments are embodied in extended works. It is a great pleasure to point out and dwell on such passages, but they are informative only if one already knows enough to recognize the instrument. Otherwise it is only vexatious to be told to listen for the English horn if one is not going to recognize it when he does hear it and the passage is going to be over before someone can say, "There it is." We shall attempt, therefore, to refer to works in which the instruments are unmistakable, even though
this compels us sometimes to rely on compositions that are of secondary musical importance.

And, finally, we must warn the reader that our language in describing timbre must necessarily be highly figurative. It is of a certainty not literally true that the tone of the oboe is complaining or that of the English horn, melancholy. But their connotations and the passages written for them suggest such qualities, and it is in that sense that we shall speak of them.

## 2. Voices

In the discussion of melody in the chapter on the Elements of Music: I, we observed that the voice and what it can sing constitute the standard of reference by which we judge melody. Vocal music, therefore, has immediacy and directness of communication and appeal -witness the glamour that always surrounds great singers and the more pertinently musical fact that a great and varied body of orchestral tone, if a voice is introduced, will at once become in our attention subservient to it. Vocal music is the most directly expressive kind of music, because it uses the body itself as its medium, and its expressive qualities are second only to those of dancing, in which the entire body is the instrument. Voices, or, more particularly, unaccompanied voices, are the most exquisite, subtle, and sensuous medium in music and the least predictable. Whether through habit or through the nature of music, our experience is that we can look at a page of instrumental music and surmise quite correctly what it will sound like, whereas a page of music for voices, looking bare and unpromising, may turn out to be music of the most glowing and moving beauty.

Solo Voices. The exploitation of the characteristic timbres of the four natural kinds of voice, apart from boys' voices and choral works, has been the especial province of opera. Songs are generally written without reference to a particular voice and transposed into convenient keys to suit the individual singer. The airs in oratorios, though prescribed for soprano or tenor or alto or bass, seldom have any very close connection with the particular timbre. In the Messiah, for instance, Handel writes an air for alto, "He shall feed his flock," and merely transposes it higher to serve as the soprano air, "Come unto Him."

If someone wants a simple recipe for bringing about a revolution in opera let him write an opera in which the hero and heroine are a bass and an alto and the villain and villainess, a tenor and a soprano; he will thus defy a usage immemorial but for one exception. The exception
is that in the seventeenth and eighteenth centuries the parts of the hero were sometimes written for artificial male sopranos or altos. Otherwise the whole literature of opera is one wherein the heroine is a soprano and the leading man a tenor; the bass must be satisfied to be villain or father or both, and the contralto must content herself with the colorless role of a confidante or, at best, a rival.

Within these operatic conventions we discover classifiable differences of treatment. The coloratura soprano sings music, agile and florid, that displays high notes and is often paired with a flute. The lyric soprano depends more on the charm and expressiveness of her music. The dramatic soprano has the grand passions for her province, the tumults and tempests of Carmen and Isolde and Tosca. The lyric tenor is the ardent lover or nobleman in disguise or lovesick feudal foe. The heroic tenor, generally called by the German name Heldentenor, is the special product of the operas of Wagner, where he must accomplish the mighty feats and wear the heavy accoutrements of Lohengrin and Tristan and Siegfried. The villain with beautiful airs to sing will generally be a baritone.

Voices in Combination. The ensemble of solo voices has also been a province of opera, but one that it shares with the many-colored madrigal literature of the sixteenth and seventeenth centuries. In operatic ensemble the idea of the dramatic role is often retained; madrigals are written only for voices as voices. But the achievement of balance and unity is much more difficult in madrigal singing, for there is no accompaniment to cover up sins of intonation or dynamics.

Choral Voices. At no other time have choral voices as timbre been treated with such mastery as in the fifteenth and sixteenth centuries. Too often today we think of a chorus or choir as consisting of four parts all the time and all alike; absent from our spectrum are the luminous half colors or glowing, somber shades that Palestrina obtains by varying the voices in his scoring. The Mass Assumpta est Maria is preponderantly high and clear and light, because it is written for two sopranos, alto, two tenors, and bass; the emphasis is on high voices. But its second movement, the "Christe," is of a pearly and' serene sonority, which it derives from leaving off the two top voices and being written for alto, two tenors, and bass. Were it not for the difficulty of hearing them, one would be tempted to multiply examples, for, as we said a moment ago, no medium is so exquisite and sensuous as unaccompanied voices.

## 3. Instruments

Mankind is born with a voice, but he must invent his instruments. The act of singing, if not the art, is inherent in our physiological structure, and the time when men did not raise their voices in song is almost inconceivable. The development of musical instruments, on the other hand, has been slow and awkward and to a startling degree dependent upon contingency; nor are musical instruments even yet anywhere near logical completion.

Vocal music is, therefore, older than instrumental music, and almost until the seventeenth century instrumental music was scarcely to be distinguished at all from vocal music, as witnessed by the celebrated statement in Byrd's madrigals, "Apt for Voices or Viols." Even when instrumental music began to have a literature in its own right, the influence upon it of vocal thought was tremendous. The fugue, for instance, is still a purely vocal concept. With the rise of instruments, gradually came into being orchestration as an art-writing for the proper techniques and timbres of various instruments-but, even so, really idiomatic writing for instruments is not so plentiful as one might suppose.

Keyboard Instruments. General utility has always been the blessing and the bane of the kcyboard instruments. They alone can provide complete harmonies by themselves; they alone can suit any style of composition, contrapuntal or homophonic, classic or romantic; they alone can play both melody and full accompaniment. From earliest times the organ has had a home in church; throughout the seventeenth and eighteenth centuries the harpsichord was present in every orchestra, directing and filling out the harmony; the pianoforte, expelled from the symphony orchestra, became the sole vehicle of music to many people until the advent of the phonograph and the radio.

Of three desirable qualities in an instrument-variety of color, duration of tone, and nuance of expression and dynamics-neither the organ nor the harpsichord nor the piano possesses all three. The organ can sustain tone indefinitely and vary its color, but has little dynamic and no expressive interest, save for purely mechanical devices. The harpsichord has a brilliant variety of color but small sustaining power and little possibility for variation in expression. The piano reflects the subtlest differences in expression, but it is monochromatic and cannot long sustain its tone.

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Each has its own best qualities-monumental objectivity or disembodied meditation for the organ, brilliance and verve for the harpsichord, poetry and imagination for the piano-and to each its best writers have given those qualities; Bach, whose organ works alone entitle musician and instrument to immortality; Scarlatti, whose witty and glittering harpsichord sonatas have too long suffered from the deprecation Scarlatti himself placed upon them; and Chopin, the piano's incomparable composer, who limited himself to that instrument and made himself its most sensitive exponent.

Among them, the keyboard instruments have a great literature of first-class music, and, of the three, the piano is the richest, for in addition to its own it often inherits the literature of the other two, although not without objection from those of us who prefer the originals. The amount of music actually written for piano is vast, although the amount that can be called true and appropriate piano music is not large. Too many composers forget its essential nature and numerous limitations and treat it merely as an instrument able conveniently to provide as many notes at once as they are likely to want.

Strings. The strings are without question the most important group of instruments in the orchestra, and of the strings the violin is the most versatile and indispensable. It is capable of a wide range of tone and expression; its tone can be indefinitely sustained and never grows cloying or wearisome, as might that of the wind instruments. It is usually bowed, but, like all the strings, can also be pluckedplayed pizzicato. As a solo instrument, it has a literature second only to that of the kcyboard instruments, and in chamber and orchestral music it has always had the lion's share of importance. No emotional expression is denied the violin, unless it be that of sheer violence or power, which it must concede to brass and percussion. Brilliance and energy and tenderness and languor are equally becoming to it. There is small wonder that it is the first member of the orchestra.

The viola has long been treated as a poor relation of the violin, given all the drudgery and never a word of appreciation or praise. Almost throughout classical orchestral literature the viola has filled in the harmony and supported the other instruments and never spoken for itself. The rescuing of this Cinderella bids fair to occur in modern music, however; its inferiority complex is being psychoanalyzed, and modern composers are teaching the viola that it need no longer be ashamed of its austere and melancholy voice.

The violoncello, or cello, is the masculine voice in the string choir. Its rich and romantic tone is the string counterpart of the chalumeau register of the clarinet; fervent eloquence is its heightened speech. Its more everyday work is to fill in the harmony with the violas or supply the bass with the double bass.

The double bass, or bass viol, is occupied almost exclusively with the modest but indispensable function of supplying the bass. Only rarely does it leave this role for mammoth gambols, as in the Scherzo of Beethoven's Fifth Symphony, or basso profundo eloquence, as in the introduction to the Finale of his Ninth Symphony.

Wood Winds. There is no other instrument so nostalgic as the flute. The acrid complaints of the oboe, the unshakable melancholy of the English horn-these have not its ancient appeal; they are morose or choleric; but the flute speaks straight to the heart of things far away and long ago, of remote happiness and "Joy, whose hand is ever at his lips bidding adieu." If such description seems too poetic, let the reader listen to the music that Gluck wrote for the scene in the Elysian fields in Orpheus and Eurydice. But this nostalgic quality is only half of the flute; the other half is an airy sprite, nimble, sparkling, and evanescent. The flute's little brother, the piccolo, can be only shrill and piercing; Its high whistle can add brilliance and bite, however, when it doubles the flute.

The oboe and its big brother the English horn are acid and lemonflavored; they see too clearly the bitter and pathetic side of life. Whereas Gluck's flute told us of serene repose in the Islands of the Blessed, Sibelius's English horn gives us the lament of the swan of Tuonela, singing on the river of death. The other side of the oboe's nature is to be rustic and pastoral. The clarinet is versatile and melodious and fervent and romantic beyond any other of the wood winds. Its upper registers are firm and singing, and the lower, or chalumeau, register, particularly rich and ardent. The bassoon has often been treated like a maid-of-all-work; it is diffident and selfeffacing, more at home if it is filling in and supporting other instruments than if it is taking the lead. When given a passage for its own, the bassoon can be pompous and officious and thence humorous, or lugubrious and ailing.

Brasses. All the brasses are powerful and sonorous-Milton's "Sonorous metal blowing martial sounds"-and all have majesty and nobility. The trumpet is the most martial; its tone can shine through the orchestra like a meteor; its voice is a portent of war or triumph and

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is rarely devoted to strains of peace. A more balanced hero is the horn, whose tone is always noble but as eloquent and golden in unobtrusive passages as in splendid dominance. If Strauss makes the horn delineate Don Juan at his most virile and irresistible, so does Brahms give to the horn the intimation of a supernal world in the Finale of his First Symphony, and Tschaikovsky, with the same voice, speaks straight to the heart in the Andante cantabile of his Fifth Symphony. Majesty and solemnity belong to the trombone, and even majesty intensified to titanic grandeur. But, like titanic grandeur, which is not to be supported every day, trombones must make their effects sparingly, or we begin to find them blatant.

Percussion Instruments; Instruments for Special Effects. The only percussion instruments regularly domesticated in the orchestra are the kettledrums or timpani, which have fixed pitch and can be tuned as the composer may direct. Their main function is to underline the rhythm and accentuate the climaxes, but they have a certain limited expressive quality of their own, especially for sinister effects.

Numerous other instruments may be added to the battery for special effects; in fact, sporadic attempts have been made at having a percussion section in the orchestra as varied and important as the strings or winds. The bass drum and side drums never lose their military associations. The triangle tinkles happily, and, if continued, wearisomely. Cymbals give the last crashing resonance to fortissimo chords and, sparingly used, are brilliantly dramatic, as, for example, at the great climax in the Prelude to Lohengrin. The gong is the most menacing sound in the orchestra, almost purely melodramatic.

Of other orchestral instruments used for special effects, the harp is most important in modern music. Its silver, plangent tone is unmistakable; unfortunately, its literary and popular associations make it suggest angels and heavenly episodes; writing for it without connotation is difficult. The same is true of bells, although they are much more seldom used. The glockenspiel and celesta are limited to a metallic and icy delicacy.

## 4. Chamber Music

Solo Instruments in Combination. Chamber music is music written for more than one kind of instrument but not designed for more than one of each kind. Its great beauty comes from intimacy in its writing and perfection of ensemble in its execution. Much the most usual combination of instruments is the string quartet: two violins,

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viola, and violoncello. Indeed, some would hold that the string quartet is the most exquisite and subtle medium for a composer's thought; certainly Mozart, Haydn, Beethoven, and Brahms devoted many of their finest pages to it. Properly to enjoy the string quartet, we must strip ourselves of our habitual expectation of powerful sonorities and dramatic contrasts; we must look instead for tints and half tones, for subtleties and nuances, and, in all chamber music, for balance among the various parts, both in the music itself and in its execution.

## 5. The Orghestra

Orchestral Instruments in Combination; the Orchestra and Its Composition. As the symphony is the supreme form of instrumental music, so is the symphony orchestra the supreme vehicle for its communication. Its richness, variety, contrast, and resources are to be found nowhere else. And, as the symphony has grown from the comparative simplicity and brevity of Haydn to the length and complexity of Brahms and Sibelius, so has the orchestra grown in its numbers and virtuosity.

But from Haydn to Sibelius its basic composition has remained the same. The four groups of instruments that make up the orchestra are not there as a result of fashion or arbitrary caprice but because, after centuries of trial-and-error experiment, they have survived-survived because they are at the same time the most flexible and the most dependable, the most individual and the best blending of the countless instruments known to man. The growth of the orchestra has been in increased numbers and amplified sections rather than novel instruments, although, as we saw a moment ago, exotic instruments may find their way into the orchestra for special effects. The composer is at liberty to write for anything he pleases-even, like Schönberg, lengths of iron chain to be dropped into buckets. The test is in the music. But such caprices of scoring usually remain freakish, and the modern orchestra, like Mozart's, consists of strings, wood winds, brass, and percussion-more strings than any one other ingredient, since the other instruments can make themselves heard singly. But, whereas Mozart's orchestra consisted of 35 or 40 players, the modern orchestra sometimes numbers 150. A score by Haydn or Mozart might call for these instruments:

[^11]Brass: 2 horns, 2 trumpets.

Percussion: 2 timpani.
Strings: First and second violins, violas, violoncellos, and double basses.
Beethoven, in more than half of his symphonies, contented himself with the same orchestra. Writing on his largest scale, in the Ninth Symphony, this score calls for these instruments:

> Wood wind: 2 flutes, 1 piccolo, 2 oboes, 2 clarinets, 2 bassoons, 1 double bassoon. Brass: 4 horns, 2 trumpets, 3 trombones.
> Percussion: 2 timpani, triangle, cymbals, bass drum.
> Strings: First and second violins, violas, violoncellos, double basses.

Wagner in The Ring of the Nibelung increased the orchestra greatly, even specifying the number of string players:

Wood wind: 3 flutes, 2 piccolos, 3 obocs, 1 English horn, 3 clarinets, 1 bass clarinet, 3 bassoons.
Brass: 8 horns, 3 trumpets, 1 bass trumpet, 4 trombones, 5 tubas.
Percussion: 4 timpani, side drum, bass drum, triangle, cymbals, glockenspiel, gong.
Strings: 16 first violins, 16 second violins, 12 violas, 12 violoncellos, 8 double basses, 6 harps.

And since the time of Wagner the orchestra has gone on increasing to the gigantic scores of some modern composers. But the multiplication of instruments does not mean that they are all going to be playing all the time; the resulting monotony would defeat the very purpose of the score. The strings have the most work to do, the brasses the least. There are over twelve hundred bars in Brahms' First Symphony, for instance, and the trombones play less than a hundred.

The Stage. A word about the disposition of the orchestra on the concert platform. This varies with the conductor, but in general stays within certain common-sense practices. The strings stay in a body, where the players can hear each other. The first violins stretch away to the conductor's left, the second violins, to the right, or they are sometimes joined with the firsts. The violas and cellos are in between, with the double basses back to the left. The sensitive wood winds directly face the conductor in the middle of the platform where he can see them individually to convey nuances. The noisy brasses are at the back, or back and to one side. The percussion is at the very back, or at the left back corner.

Orchestration. Orchestration is the disposing of orchestral music for the specific instruments that are to play it. Orchestration is both a technique and an art; every composer must know at least its general principles as part of his stock in trade, but with some composers the

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music and the instrument to play it seem to have been conceived together; in the works of Berlioz, Wagner, Dvoŕák, Tschaikovsky, Strauss, the orchestration is as important an element as the melodies themselves.

Preclassical orchestration-that is to say, orchestration through the time of Bach-seldom has justice done it in modern performance, although we are learning to be more respectful in observing its conventions. Its salient features were the continuo and the massing of wood winds, principally oboes. The continuo, or thorough bass, was the part given to the harpsichord, which was usually played by the conductor. It consisted merely of the bass of the composition and the harmonies in a kind of shorthand; the performer was expected to amplify and embellish it according to his own abilities, but within fairly fixed traditions. The wood winds were treated not as solo instruments, unless they were actually playing a solo part, but as a massed section such as our strings. Such a difference in the balance of the orchestra makes a material difference in its sound, and, to realize the intentions of Bach and Handel in their orchestral works, it is essential to diminish the number of strings, increase the number of wood winds, and provide a harpsichord for the continuo. Thus heard, the orchestration of the preclassic period is as rich and distinctive as any since.

Classical orchestration aimed at the clear, economical, and euphonious presentation of musical ideas and has been standard ever since. In it the melodic lines are principally entrusted to violins, flutes, and oboes; violas, horns, and bassoons fill out the harmony, violoncellos, double basses, and bassoons supply the bass, and trumpets and timpani reinforce the climaxes. This, with numerous variations of detail in individual works, is the system of Haydn, Mozart, and Beethoven.

With romantic or dramatic orchestration comes the awakening of interest in the timbre of instruments for their own sake. In the works of Weber and Schubert, and much more in those of Wagner and Tschaikovsky, we not only hear a melody but are intensely aware of the instrument playing it. We cannot think of the cantabile in the Slow Movement of Tschaikovsky's Fifth Symphony without thinking of the horn that plays it.

Modern orchestration has tried every experiment and committed many excesses, but the opulence of Strauss, the luminosity and elegance of Debussy and Ravel, the barbaric force of Stravinski have increased our experience of tone color to a dazzling richness.

## 6. Dynamics

The element of dynamics refers to the degree and variations of sonority and force with which music is played, from soft to loud. The gradations of intensity are indicated by Italian words, for which there are abbreviations and arbitrary symbols:
\(\left.\begin{array}{cll}p p . \& pianissimo \& as soft as possible <br>
p . \& piano \& soft <br>
m p . \& mezzo piano \& somewhat soft <br>
m f . \& mezzo forte \& somewhat loud <br>
f . \& forte \& loud <br>
f f . \& fortissimo \& as loud as possible <br>
<cresc. \& crescendo \& louder <br>
>decresc. \& decrescendo <br>

>dim. \& diminuendo\end{array}\right\}\)| soften |  |
| :--- | :--- |
| sf. | sforzando | abruptly loud

These symbols, as often happens elsewhere in notation, become detached from the words they mean, and symbols sometimes confront us on the page for which the Italian language would be badly stretched to make an adequate superlative. Tschaikovsky ends his Sixth Symphony with the direction ppppp., and Albéniz, in his Corpus Christi in Seville, calls for the pianist to play $f f f f f$. in defiance of the fact that the pianoforte's range of tone can be reasonably considered to extend only from a dubious $p p$. to $f f$.

Two things are at once obvious with regard to dynamics: first, that dynamics is relative and, second, that it is a matter of taste. In a predominantly soft piece of music, a loud effect can be got by a degree of tone that would be soft by contrast in a loud piece. The pianist playing a concerto by Mozart seldom employs the full sonorities of his instrument, whereas if he is playing a concerto by Tschaikovsky or Rachmaninov he taxes its power of sonority to the utmost. The relative scale of dynamics will, therefore, be conditioned by the period and general scope of the music. The more intimate songs of Schubert would be ruined if they were sung with the degree of force appropriate to even a fairly modest passage in the operas of Wagner.

Taste in dynamics means that we should look for force and loudness only as conditioned by the scale of the music, which goes all the way from the exquisite delicacy of the lute and the clavichord, through the sensitive gradations of chamber music, to the massive and imposing sonorities of Berlioz and Wagner. We must train our ears to enjoy small
and subtle nuances of color and sonority as well as the brilliant resonance of the full prchestra.

## 7. Tempo

Tempo refers to the pace at which music is performed, from slow to fast. The terms to indicate this, as the terms for dynamics, are Italian. We shall cite only a few of the gradations here:

| - largo | very slowly and broadly |
| :--- | :--- |
| adagio | very slowly |
| andante | moderately slowly |
| allegro | fairly fast |
| presto | very fast |
| prestissimo | as fast as possible |

In the last two centuries the sense of tempo in music has changed toward both extremes. The largo of Bach's day was less slow and the presto less fast than ours, and in the choruses of Handel andante allegro is a fairly common indication. It may be seen at once that tempo, like dynamics, is a matter of scale and taste. How slow is largo? How fast is presto? Who is to decide? There does exist an instrument, the metronome, which can be set to measure any given number of beats per minute, and metronome markings can sometimes be found on music, indicated by the abbreviations M. M. a note, and a figure. Thus M. M. $d=88$ means that the metronome is to be set at 88 , and cach tick will correspond to a quarter note of the music. But the metronome is a fairly recent invention unknown to the composers bcfore Beethoven. When we find metronome markings in the works of Bach or Scarlatti they have been put there by editors, and even since the time of Beethoven the survival of the tradition that the executant is to decide many things about the performance of the music is so strong that composers have hesitated to set down exactly the pace at which their music is to go, and the indications of the composer are still left to the relative Italian terms.

## 8. Notation

Notation is the way of writing music down with signs and characters so that it can be read and communicated and the sound reconstructed. It is the far from perfected outcome of centuries of painful experiment and development and is even yet cumbersome and inadequate in several ways, presenting only about as much logical coherence as a typewriter would to which the letters had only been added as the need for them occurred.

Pirch. The first problem that notation faces is that of indicating sounds themselves. This is done by means of notes: o $d d \delta d$, etc. Then comes at once the problem of indicating which sounds and how they go up or down. This is met by placing them on a staff and agreeing that each line and each space shall mean a difference in pitch of one step (whether whole or half to be otherwise determined) up or down. But which line shall mean which tone as far as actual pitch is concerned? Again we agree on a convention and use three signs, called clefs: 佥, the treble, to indicate that the line around which the sign curls, second line from the bottom, is G above middle C (the sign itself was originally a letter G); the bass clef, to indicate that the line between the dots, second line from the top, is F below middle C (the sign itself was originally a letter F ) and, much less often, the C clef, which we shall not illustrate. The rest of the lines have the sound they indicate determined by the clef. Ordinarily the lines of the treble staff, reading up, are E, G, B, D, F, and the bass, G, B, D, F, A. Notes higher or lower than the nine that go on a staff can be added by using leger lines above and below the staff 青 or . With this much equipment, we can write down, as far as pitch is concerned, many melodies-America, Dixie, and Yankee Doodle. But a deficiency soon confronts us. Suppose we try to put down the Starspangled Banner. We get along all right with "Oh say, can you see by the dawn's ear- . . . "It will go like this, if we want it to correspond to the white notes on the piano:

| G | E | C | E | G | C | E | D | C | E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| sol | mi | do | mi | sol | do | mi | re | do | mi |
| "Oh | say | can | you | see | by | the dawn's ear . . ." |  |  |  |

Or, writing it as it would appear in notes:


But then occurs a tone that is not F or fa but something between F ard G ; an F , only a little higher. What we must do to that F is to make it sharp, \#.


If the contrary were needed, we would make the note $f a t, \ddot{b}$, and if we wished to say "as you were" we would cancel the sharp or flat by a natural, \&. These signs are called accidentals. Now we can can write down any and all tones a melody may call for.

But there is another problem in pitch. When we are singing by ourselves, or with friends around a campfire, if the song lies too high or too low for our voices, we can just shift the whole thing up or down. That is to say, our pitch is relative, and if our dos and sols are consistent with themselves it does not concern us how high or low the whole thing is. But if we are around a piano, or somebody has an instrument of any kind, our pitch must be not only relative but specific, or absolute, on account of the limitations of playing and fingering instruments. This brings us to the problem of key. Do, re, mi, etc., are relative, but A, B, C, etc., are absolute-there is only one A, with its recurrences, called octaves. We can start singing do and go on up or down the scale on any letter, at any level; the business of key is to indicate on what letter do is. The key of C means that do is on C ; the key of D means that do is on $D$, etc. In the key of $C$ we need use only the white keys of the piano or the lines and spaces of the staff without accidentals in order to get do, re, etc., to come out right. But in every other key we must sharp or flat some of the notes all the time in order to make it come out. This is how the passage quoted from the Star-spangled Banner looks in several keys:


For the sake of convenience, the sharps or flats that will prevail throughout a piece are gathered all together at the beginning of the piece and are called the key signature. Some keys are harder to play than others, depending on the instruments. But key is really only the recurrence of the scales on higher or lower levels; there is no difference in theory but only in fact between the key of C and the key of G .

A Chart of the Major Keys, Giving the Key Signature and Position of Do


FLAT KEYS


MNEMONIC: In Sharp Keys Do is the note above the last sharp in the sig. nature: In Flat Keys Do is the last flat but one in the sig. nature.

## ENHARMONIC KEYS



Duration. The comparative length of time that a note is held is indicated by the formation of the note itself, as follows:


Each of these notes lasts half as long as the one preceding it, which it halves. A dot placed after a note prolongs it by half again its length; thus $d .=d+d$, or $d d_{d} d .=d+d$, or $\delta d^{d}$. Every kind of note has a corresponding kind of rest to indicate that nothing shall be sounded:.
> - whole rest
> - half rest
> \} quarter rest
> $y$ eighth rest
> y sixteenth rest
> 9) thirty-second rest

Rhythm. The general measurement into which the rhythm of a piece is cast is indicated by what looks like a fraction placed at the beginning of the piece with the key signature: $2 / 4,3 / 4,4 / 4$, etc. Two rhythm schemes have alternate signs: $C=4 / 4$, and $\phi=2 / 2$. The upper part of this fraction tells us by what groups of pulsations the music is going to move-whether in twos or threes or fours or whatever. The lower part of the fraction tells us what kind of note is going to be the unit; in $2 / 4,3 / 4,4 / 4,6 / 4$, each quarter note will receive one of the beats. If the signature were $2 / 2$, a half note would receive

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one of the two beats; if it were $3 / 8$, an eighth note would receive one of the three beats.

Thus, America moves by groups of three pulsations:

$$
\text { My country } \quad \text { Tis of thee } \quad \text { Sweet land of }
$$

and we could write out its rhythm in $3 / 2$ or $3 / 4$ or $3 / 8$-the three must stay the same, but the kind of note that will be the unit is arbitrarily decided.


Dixie moves by groups of two pulsations. It does not begin on the main one:


Old Hundredth moves in fours. It, too, does not begin on its main beat:


Rhythm is marked, the more easily to be noticed, by bars or measures:
In most music, the first beat of the measure receives the main stress. The sum of the notes in the measure must equal the time signature. Thus, any of the following equals one measure in $4 / 4$ time:

1. 0
2. d d d
3. d d d d
4. $d \sqrt{3} d \sqrt{J}$
5. d. d d. d
6. $d$.
7. 」 ॠみन ๗ ॠन
8. $\int d d d$.

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A double bar indicates some larger division, or the end of a section. A double bar with dots means that the section toward the dots is to be repeated.

General Observations. The foregoing discussion of notation is only elementary, and there are numerous other signs and conventions. But these are the essential ones, and the reader who understands them can at least make sense of a line of music. We said at the beginning that notation was still cumbersome and inadequate; the ordinary person, who feels that it is overcomplicated, has a genuine grievance. To give but one example, our music limits itself to twelve sounds and their recurrences above and below, and yet for those twelve sounds we quite commonly use thirty symbols! It is not unlike our English language and its confusing habit of using several spellings for one sound, or, conversely, one spelling for several sounds: through and threw, or rough, plough, cough, and though. Similarly, that sound in music which has only one description in physics- 256 vibrations per second-can be indicated in notation by either of two symbols C or B sharp It may also be placed in various places: below the treble clef, as first illustrated, or above the bass clef:

How our notation came to be is a very interesting historical study but one outside the scope of this book, and when we come to consider its actual methods we shall take it simply as it is, and has been, roughly, since the time of Mozart. But we must note that the accuracy and importance of notation and the degree to which it was explicit have varied extensively in various periods, although the tendency has been rather steadily toward greater explicitness. In present-day music we expect to see indicated not only all the actual notes that are to be sounded but specific directions as well to tell us the composer's intentions with regard to pace, phrasing, dynamics, and all sorts of nuance. But in Palestrina's day, not only were all these things omitted, but the very notes themselves were only partially indicated, and most, if not all, of the sharps and flats left to be supplied by the performers. And in the period of Bach and Handel, even though the harpsichordist was the most important single member of the orchestra, all he had given him was a kind of shorthand called the figured bass, and he was expected to improvise the rest of the accompaniment, depending only on certain conventions.

The importance for music of notation is, of coursc, vast; without it music would be in the same position as literature ras before the inven-
tion of writing, the same position that the art of the dance finds itself in even today. This point is obvious and needs no elaboration, for an art can be a great art only if it is able to rest on an accumulated body or literature of itself, but less obvious is the importance of notation for the listener.

The listener, indeed, does not have to know musical notation at all, and there are many enthusiastic people who have enjoyed music all their lives without being able to read it. But, to be absolutely unlettered in music, though it need not hamper one's enjoyment of the sensuous sounds, is to be uncomfortably tongue-tied and, so to speak, thoughttied, for it is exceedingly difficult, if not impossible, to think clearly of that for which one has no words. Or, if one wishes to go halfway and learn musical terminology without learning notation, he will discover that some terms are unintelligible save through notation. Such a term as dotted rhythm refers entircly to notation, to the look of the music
 venient description than "characterized by accented notes of very long, and unaccented notes of very short duration."

Like learning to read in Greek, or the Morse code, or any alphabet other than our own, the theory of reading music is easy; the practice, the acquisition of facility is the hard part. But it is fortunately easier for the listener than for the performer, and to learn to follow a score is not anything like impossible, even for a person previously illiterate in music. Most of us have been taught in school, at least to some slight extent, to read music; if so, we should do our best to keep in practice. If not, we should learn at least enough to follow themes to the extent that they are given in symphony program notes or books about music and should supplement our meager knowledge by knowing as many musical terms as possible.

In this chapter, a knowledge of musical notation has been presumed only to the extent of solfeggio (do, re, mi, etc.). Whether the reader wishes to practice the further reading of music or not depends on him, but, if not, he should at least get someone to play the musical examples for him.

## References

Gehrkens, K. W.: The Fundamentals of Music, 1924.
Goetschius, P.: Lessons in Music Form, 1904.
Kitson, C. H.: Rudiments of Music, 1927.
Moore, D.: Listening to Music, 1932.
Scholes, P. A.: Listener's Guide to Music, 1919.

## THE HUMANITIES

Stokowski, O. Samaroff: The Layman's Music Book, 1935.
Welch, R. D.: The Appreciation of Music, Chap. I, 1927.

## Questions

1. Analyze the recording of a dance band to see whether you can tell the various instruments as they enter with the tune.
2. Analyze a recording of a dance band with a vocal chorus. Does the voice come near the beginning or near the ending? Does the arrangement make sure we know the tune before it calls the words to our attention?
3. Obtain recordings of a popular piece in more than one arrangement, and compare them carefully to see where they are the same and where they differ.
4. Get someone to play you a typical piano piece, such as a Chopin waltz, on the organ, and a typical organ piece, such as Bach's Herzlich thut much verlangen, on the piano. What do you learn about the characteristics of the instruments and the style of writing for them?
5. Go to an orchestral rehearsal. Notice where the different sections of instruments are placed. If possible, get close to the wind instruments, and notice the difference in their sound and the method of playing them.
6. a. Write out on a single line the notation of the rhythm of five familiar songs.
$b$. Write out on the staff the notation of the pitch of the same songs.
c. Put $a$ and $b$ together.
7. Write out the rhythm of a familiar song. Then write it, halving the beat unit, then doubling it, as $2 / 4,2 / 8$, then $2 / 2$.
8. Tap out the rhythm of a number of familiar songs. Can the song be recognized from the rhythm alone?
9. Experiment with organum, drone bass, and canon by taking a familiar tune, such as We Three Kings of Orient Are and (a) having two pcople sing it, keeping always a fifth apart, a fourth apart, (b) having one person sing it while two others sing a single note or two notes throughout, (c) having two or three or four people enter with the beginning at successive intervals of time.
10. Compositions illustrative of timbre which may be found on records:

Coloratura soprano:
Mozart, the "Queen of Night" aria from the Magic Flute, Act II.
Donizetti, mad scene from Lucia di Lammermoor.
Verdi, "Caro nome" from Rigoletto.
Lyric soprano:
Mozart, "Voi che sapete" from the Marriage of Figaro.
Charpentier, "Depuis le jour" from Louise.
Puccini, "Musetta's Waltz" from La Bohème.
Dramatic soprano:
Verdi, "Ritorna vincitor" from Aida.
Puccini, "Un bel di" from Madam Butterfly.
Wagner, Isolde's "Liebestod" from Tristan and Isolde.
Wagner, "Brunnhilde's Immolation" from Twilight of the Gods.

## Contralto:

Meyerbeer, "Ah, mon fils" from The Prophet.
Wagner, "Erda's Warning" from The Rhinegold.

## Lyric tenor:

Mozart, "Il mio tesoro" from Don Juan.
Donizetti, "Tu che a Dio"' (Finale) from Lucia di Lammermoor.
Verdi, "Questa o quella" from Rigoletto.
Massenet, "The Dream" from Manon.
Gounod, "Salut demeure" from Faust.
Heroic tenor:
Wagner, "Lohengrin's Narrative" from Lohengrin.
Wagner, "Forging Song" from Siegfried.
Baritone:
Verdi, "Di provenza" from La Traviata.
Verdi, "Il balen" from Il Trovatore.
Gounod, "Valentine's Farcwell" from Faust.
Wagner, "To the Evening Star" from Tannhauser.
Bass:
Gounod, "Mephisto's Screnade," from Faust.
Wagner, "Hagen's Watch" ("Hier sitz' ich") from Twilight of the Gods.
Operatic vocal ensemble:
Donizetti, sextet from Lucia di Lammermoor.
Verdi, quartet from Regoletto.
Wagner, quintet from Die Meistersinger.
Chamber vocal ensemble:
Gibbons, The Silver Swan.
Gibbons, Ah, Dear Heart.
Wilbye, Sweet Honey-sucking Bees.
Unaccompanied chorus:
Palestrina, mass, Assumpta est Maria.
Victoria, motet, $O$ magnum mysterium.
Organ:
Bach, sonata trios or chorale preludes recorded by Weinrich for Musicraft.
Harpsichord:
Scarlatti, sonatas, recorded for His Master's Voice by Landowska, or for Columbia by Pessl.
Handel, suites, recorded by Landowska for Victor.
Piano:
Chopin, nocturnes, scherzos, or polonaises, recorded by Rubinstein for Victor.
Violin:
Bach, sonatas for violin, unaccompanied, e.g., Sonata in $G$ minor.
Beethoven, sonatas for violin and pianoforte, e.g., No. 8, in A major (Kreutzer).
Mendelssohn, Concerto for violin.
Brahms, Concerto for violin.
Tschaikovsky, Concerto for violin.
Sibelius, Concerto for violin.
Viola:
Hindemith, Sonata for viola, accompanied.

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Delius, Sonata for violin and pianoforte, arranged for viola and piano by Lionel Tertis.
Walton, Concerto for viola.
Violoncello:
Bach, sonatas for unaccompanied cello, recorded by Casals.
Haydn (Kraft), Concerto for cello.
Dvớák, Concerto for cello.
Wood winds in general (also strings and horns):
Prokofiev, Peter and the Wolf.
Flute:
Bach, sonatas for flute and clavier.
Gluck, "Paradise Music" from Orpheus and Eurydice (also called "Scene in the Elysian Fields" and "Dance of the Blessed Spirits.')
Mozart, Concerto for flute.

## Oboe:

Handel, Concerto grosso for oboe.
Mozart, Quartet for oboe and strings.
Clarinet:
Mozart, Quintet for clarinet and strings.
Brahms, Sonata for clarinet and piano.
English horn:
Sibelius, The Swan of Tuonela.
Bassoon:
Mozart, Concerto for bassoon.
Weber, Hungarian rondo for bassoon.
Horn:
Beethoven, Sonata for French horn and pianoforte.
Brahms, Trio in E flat for violin, horn, and piano.
Trumpet:
Purcell, Trumpet Tune.
Trombone:
Wagner, Overture to Tannhäuser ('Pilgrim's Chorus").
Harp:
Ravel, Introduction and Allegro.

## XI

## The Elements of Literature: I

## 1. The Dual Aspect of Literature

Words are like lines and colors and values in that they must be considered from two different aspects. A line is a line, but it may also stand for or represent something. A curved line must fulfill the specific functions of a curve in the picture; at the same time it may represent a woman's back. The half circle in the Discus Thrower is not only a half circle; it is also the arm and leg of a man. The dark with which Rembrandt wants to fill the corner of his picture cannot merely be dark; it must seem like the shadow in the room. So in literature there are two ends that must be satisfied, sound and sense. A word consists of a certain sound or sounds; it has also a certain meaning. The word horse represents the sound horse and the animal horse. The word steed has almost the same meaning as horse; it signifies the same animal; but the sound steed is not at all the same as the sound horse. Ordinarily we are inclined to say that the sense is much more important than the sound, but the meaning may at any time be altered, if not completely changed, by the sound. As an illustration Professor Bradley quotes the lines from Byron:
"Bring forth the horse!" The horse was brought:
In truth he was a noble steed!"
If the words horse and steed are interchanged, the meaning is entirely different.

> "Bring forth the steed!" The steed was brought: In truth he was a noble horse!

The passage has become ridiculous. It may be argued here that the words horse and steed do not have exactly the same meaning, since steed is a less common word and has different connotations. And it is true

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that no two words have exactly the same meaning; any change in sound is necessarily a change in sense.

In The Two Gentlemen of Verona the host sings a little song that begins:

Who is Silvia? What is she,
That all our swains commend her?
Holy, fair, and wise is she;
The heaven such grace did lend her,
That she might admired be.

$$
-I V, \text { ii, 39-43. }
$$

Here the name Silvia means as little as a word could mean; it is a woman's name, and, besides, it is a sound, nothing more. But change the name Silvia to almost any other woman's name-Alice, Peggy, Margaret, Louise, Phoebe, Laura, Hortense-the effect is spoiled; the charm is gone.

Or let us take a single line from Milton:
And I shall shortly be with them that rest.
—Samson Agonistes, line 598.
We shall change the sound, kceping as nearly as possible the same sense. Shortly means soon; them has the same meaning as those; and that as who; in fact, those who is a more common English idiom than them that. Make the substitutions, and the line reads:

And I shall soon be with those who rest.
There is no appreciable difference in sense; but it-is no longer poetry.
This dual aspect of literature is most clearly seen in the literature of a language one does not understand. If he hears the words of the original he gets the sound without the sense; if he hears a translation he gets the sense without the sound. In neither case does he know the work as it should be known.

The study of literature, when considered as sound, falls again into two divisions that may be illustrated by the line from Milton just quoted. The first is rhythm. Something is lost when soon is substituted for shortly because the word of two syllables sounds better than the word of one syllable. The second is the sound of the letters or the combination of sounds known as tone color. $S$ sounds are repeated in shall and shortly, $t$ sounds in them and that. These are followed by the combination of $s$ and $t$ sounds in the word rest. Rhythm and tone color are the head-
ings under which literature is discussed when it is considered primarily from the point of view of sound.

Tempo in literature, which is the same as in music-the speed at which the rhythm procecds-is not studied as one of the elements because, with few exceptions, authors do not indicate whether the tempo is to be fast or slow but leave it entirely to the discretion of the reader.

## 2. Tone Color

The term tone color in literature is borrowed from music because the writer gets effects somewhat comparable to those of different instruments by the sounds of the words or letters he uses. Compare Blake's Introduction to Songs of Innocence with the opening lines of Vachel Lindsay's The Congo for contrast in tone color. The first, in musical terms, seems to have the timbre of a high-pitched, sensitive, delicate instrument, such as the violin, whereas the sccond, as Lindsay tells us, is to be delivered in a deep, rolling bass.

Piping down the valleys wild, Piping songs of pleasant glee, On a cloud I saw a child, And he laughing said to me:
"Pipe a song about a Lamb!" So I piped with merry cheer.
"Piper, pipe that song again;"
So I piped; he wept to hear.
"Drop thy pipe, thy happy pipe; Sing thy songs of happy cheer!"
So I sung the same again, While he wept with joy to hear.

> "Piper, sit thee down and write
> In a book, that all may read."
> So he vanished from my sight, And I plucked a hollow reed,

And I made a rural pen, And I stained the water clear,
And I wrote my happy songs Every child may joy to hear. -William Blake, Introduction to Songs of Innocence.

> Fat black bucks in a wine-barrel room,
> Barrel-house kings, with feet unstable,
> Sagged and reeled and pounded on the table, Pounded on the table,
> Beat an empty barrel with the handle of a broom,
> Hard as they were able,
> Boom, boom, BOOM,
> With a silk umbrella and the handle of a broom,
> Boomlay, boomlay, boomlay, BOOM.
> $\quad$-VACHEL LindsAy, The Congo. ${ }^{1}$

If we want to understand how these effects are produced we must analyze the sounds. The consonants and vowels may be grouped as follows:

| Consonants: Stops: $p-b ; t-d ; k-g$. |  |
| :---: | :---: |
|  | Fricatives: $f-v ; s-z ; s h-z h ; c h-j ; w h-w ; y$ (consonant); $h ;$ th (thin)- th (their). |
|  | Nasals: m; $\boldsymbol{n}$; $\boldsymbol{n g}$. |
|  | Liquids: $l$; $r$. |
| Vowels: | Front: $\bar{e}$ (scene); $\boldsymbol{\imath}$ (begin); $\bar{a}$ (ate). $\hat{a}$ (rare); $\boldsymbol{\gamma}$ (edge); $\bar{a}$ (cat); $\vec{a}$ (ask). Middle: $\not{ }^{\prime}$ (cut, above); $\mathfrak{u}$ (burn). |
|  | Back: $\overline{o 0}$ (moon); $\bar{o} 0$ (foot); $\bar{o}$ (cold). $\delta$ (all); $\gamma$ (stop); ${ }^{\text {a }}$ (far). |
|  | Diphthongs: $\bar{i}$ (fly); ou (mound); oi (coin); $\tilde{u}$ (unit). |

The reason for each name becomes clear if one tries to form the sound in question-the sound of the letter, not the name. A stop is a sound that does stop, the sound ends abruptly. The sound of a fricative is caused by friction; it lingers; it can be carried on for a long time; it may also be called a continuous sound. The two words stop and cease, for example, have about the same meaning; both begin with fricatives, but the stop sound at the end of the one makes it much more positive than the fricative at the end of the other. The sound of the word stop implies a more immediate reaction than is conveyed by cease, which seems to allow the action to discontinue gradually. If a mother tells her little boy to stop she wants him to do so at once; but when it is said that the sound of the waves had ceased, a long, gradual dying out is implied. In the nasals the air comes out of the nose. They are used exclusively in humming; therefore, when they are used frequently they produce a sound that suggests humming. The liquids are very soft, easy, flowing sounds, such as lull or roll; hence their name.

The vowels are named by the position at which they are formed in the mouth. The front vowels, as in cat, they, met, are formed in the front of the mouth. The back vowels, as in cold, or far, are formed in

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the back of the mouth. The back vowels produce much larger, fuller sounds than do the front vowels, which are lighter and more delicate. In the song by Blake at the beginning of this chapter the vowels are all at the front of the mouth; hence the light staccato effect. In the lines from Vachel Lindsay the vowels are at the back of the mouth.

The effects to be gained from tone color are very subtle and varied.

$$
\begin{aligned}
& \text { Break, break, break, } \\
& \text { On thy cold gray stones, O Sea! } \\
& \text { And I would that my tongue could utter } \\
& \text { The thoughts that arise in me. } \\
& \quad \text {-Tennyson, Break, Break, Break. }{ }^{1}
\end{aligned}
$$

In the second line of this stanza, for example, the words do not themselves express any great grief; yet from the line we have a sense almost of desolation. The explanation is to be found in the tone color. Oh is universally a cry of grief and mourning; the person who cannot be consoled laments, Oh, Oh, Oh. Tennyson uses the exclamation only once, but he repeats the sound two other times in the short line:

On thy cold gray stones, $O$ Sea!

## 3. Phrasing

Rhythm in literature, as in music, depends on the recurrence of stress or accent. English is a language of pronounced word accent. Words of more than one syllable have at least one accent. Words such as dismay, avoid, contend have the accent on the second syllable. Words like saying, duple, accent have the accent on the first syllable. A few words of two syllables, such as baseball, or blackguard, have accents on both syllables. November, promenade, vertical, butterfy have three syllables each. In November the accent is on the second, in promenade, on the third, and in vertical, on the first syllable. Butterfly has accents on the first and third syllables. Commemorate has four syllables, with a primary accent on the second syllable and a secondary accent on the last syllable.

Word accent is preserved when words are combined into sentences, and there is an additional sentence or phrase accent. In the sentences Where are you going? and I am going to school, words are accented according to the sense. In the first sentence where and the first syllable of going receive the accent; in the second, the first syllable of going and
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.

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school receive the accents. This sentence accent is the basis of the phrase. Phrasing is found in all literature, as in all music; and it is the same in literature as in music. It is a grouping, a sense unit, followed by a pause, which in literature is usually indicated by punctuation.

To a certain extent all speech is rhythmic in that it is grouped in phrases; only a child just learning to read gives the same intonation to every word. However, some language is more rhythmic than other, and the term rhythmic is usually reserved for that speech in which the recurrence of the accents in the phrases is pleasing to the ear.

Compare these examples:
Mr. Davies does not let his learning cause him to treat the paintings as material only to be studied by the Egyptologist with a critical and scientific eye.

But, so far as I could see, nobody carried away burning candles to rekindle with holy fire the lamp in front of the ikon at home, which should burn throughout the year except for the short time it is extinguished in order to receive anew the light that is relit every year throughout the Christian world by Christ's victory over death. 1

The young spirit has awakened out of Eternity, and knows not what we mean by Time; as yet Time is no fast-hurrying stream, but a sportful sunlit ocean; years to the child are as ages. . . . Sleep on, thou fair Child, for thy long rough journcy is at hand! A little while, and thou too shalt sleep no more, but thy very dreams shall be mimic battles; thou too, with old Arnauld, wilt have to say in stern patience: "Rest? Rest? Shall I not have all Eternity to rest in?"
-Cariyle, Sartor Resartus.
And as we dwell, we living things, in our isle of terror and under the imminent hand of death, God forbid it should be man the erected, the reasoner, the wise in his own eyes-God forbid it should be man that wearies in well-doing, that despairs of unrewarded effort, or utters the language of complaint. Let it be enough for faith, that the whole creation groans in mortal frailty, strives with unconquerable constancy: Surely not all in vain.
-Stevenson, Pulvis et Umbra.
Hast thou not known? hast thou not heard? The cverlasting God, the Lord, the Creator of the ends of the earth, fainteth not, neither is weary; there is no searching of his understanding. He giveth power to the faint; and to him that hath no might he increaseth strength. Even the youths shall faint and be weary, and the young men shall utterly fall: but they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; they shall walk, and not faint.
Isa., XL, 28-31.

[^14]And the king was much moved, and went up to the chamber over the gate, and wept: and as he went, thus he said, O my son Absalom, my son, my son Absalom! would God I had died for thee. O Absalom, my son, my son!

II Sam., XVIII, 33.
The last four passages are much more rhythmic than the first two. In the first passage one has a disagreeable sense of being constantly jerked up; he cannot get into the swing of the paragraph; there are no pauses. The second passage goes very well until one reaches the word except; then this passage, like the first, becomes jerky and abrupt; it does not have the even swing of the last four passages; the phrasing is not rhythmic.

These examples of phrasing are all from prose, but phrasing is found in poetry as well as in prose. Often the phrase is practically synonymous with the line, as in these poems:

> Shall I, wasting in despair, Die, because a woman's fair? Or make pale my cheeks with care, 'Cause another's rosy are? Be she fairer than the day, Or the fowery meads in May!
> If she be not so to me, What care I how fair she be? -GeORGE WITHer, Shall I Wasting in Despair.
> O, saw ye bonie Lesley, As she gaed o'er the Border? She's gane, like Alexander, To spread her conquests farther!

To sce her is to love her, And love but her for ever; For Nature made her what she is, And never made anither!
-Robert Burns, Saw Te Bonie Lesley.
More often the phrase is not synonymous with the line. It may end in the middle of a line, as in this couplet from Pope's An Essay on Man:

And spite of Pride, in erring Reason's spite,
One truth is clear, whatever is, is right.
Or it may carry over from line to line. In the last lines of Lilysses, note how Tennyson varies both the length of the phrase and its relation to the line:

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Come, my friends.
'Tis not too late to seek a newer world.
Push off, and sitting well in order smite The sounding furrows; for my purpose holds To sail beyond the sunset, and the baths Of all the western stars, until I die. It may be that the gulfs will wash us down;
It may be we shall touch the Happy Isles, And see the great Achilles, whom we knew. Tho' much is taken, much abides; and tho' We are not now that strength which in old days Moved earth and heaven, that which we are, we are,One equal temper of heroic hearts, Made weak by time and fate, but strong in will To strive, to seek, to find, and not to yield. ${ }^{1}$
When a phrase is not synonymous with the line it necessitates a pause, which is called a caesura; more briefly, a caesura is a pause in a line.

The rhythms of phrase are irregular; they cannot be traced in definite patterns. They depend on the piling up of phrase on phrase rather than on the regular recurrence of individual accents. Many attempts have been made to find definite patterns in phrase rhythms, but such attempts have largely resulted in failure. Of three points, however, we can be fairly certain:

1. The phrases are similar, though not identical in length.

And as we dwell, we living things

The young spirit has awakened out of Eternity, and knows not what we mean of Time
2. They are often parallel in structure. Similar thoughts are expressed in similar language.

> God forbid it should be manGod forbid it should be man

> To strive, to seek. to find and not to yield.
3. They make frequent use of cadence. The word cadence, which comes from the Latin cadere, "to fall," refers to a "falling" sound, as
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.
when one is coming to a close. Cadence is illustrated in all the selections quoted except the first two prose passages. It is especially noticeable in the quotations from Carlyle, Stevenson, and the Bible.

## 4. Free Verse

Free verse, or "cadenced verse," is built on the rhythm of phrase. Its unit is the strophe, which is composed of a number of phrases subtly balanced so as to constitute a complete cadence.

They set the slave free, striking off his chains-
Then he was as much of a slave as ever.
He was still chained to servility, He was still manacled to indolence and sloth, He was still bound by fear and superstition,
By ignorance, suspicion, and savagery -
His slavery was not in the chains, But in himself-

They can only set free men freeAnd there is no need of that:
Free men set themselves free.
-James Oppenheim, The Slave. ${ }^{1}$

Pile the bodies high at Austerlitz and Waterloo.
Shovel them under and let me work-
I am the grass; I cover all.

And pile them high at Gettysburg
And pile them high at Ypres and Verdun.
Shovel them under and let me work.
Two years, ten years, and passengers ask the conductor:
What place is this?
Where are we now?
[ am the grass,
Let me work.
-Carl Sandburg, Grass. ${ }^{2}$
Hebrew meter, which is often classed with free verse, is based on parallelism of phrases, one clause or phrase being balanced against

[^15]another of similar structure. It is, of course, found most conspicuously in the Bible.

## Purge me with hyssop, and I shall be clean:

Wash me, and I shall be whiter than snow.
Make me to hear joy and gladness;
That the bones which thou hast broken may rejoice.
Hide thy face from my sins,
And blot out all mine iniquities.
Create in me a clean heart, O God;
And renew a right spirit within me.
Cast me not away from thy presence;
And take not thy holy spirit from me.
Restore unto me the joy of thy salvation:
And uphold me with a free spirit.
Then will I teach transgressors thy ways;
And sinners shall be converted unto thec.
Deliver me from bloodguiltincss, O God, thou God of my salvation;
And my tongue shall sing aloud of thy rightcousness.
O Lord, open thou my lips;
And my mouth shall shew forth thy praise.
For thou delightest not in sacrifice; else would I give it:
Thou hast no pleasure in burnt-offering.
The sacrifices of God are a broken spirit:
A broken and a contrite heart, O God, thou wilt not despise.
-Ps. LI, 7-17.

## 5. Meter

The term rhythm is used of all effects of rhythm; the term meter is used of units in which the rhythm can be definitely mcasured; hence the name meter. Prose, free verse, and bound verse all have rhythm; only bound verse has meter. The fundamental difference between prose and bound verse, it need hardly be said, lies in the regularity of the recurrence of accents. In meter the rhythms can be reduced to a norm or pattern; in prose and free verse they cannot. Passages in meter do not follow the norm literally, but, reading them, one can get the norm, whereas in unmetrical passages there is no norm.

In literature, as in music, meter is predominantly duple or triple, as the accent falls on every second or third beat. In the following selections the first and last are triple; the second and third are duple:

It was many and many a year ago,
In a kingdom by the sea,
That a maiden there lived, whom you may know By the name of Annabel Lee;
And this maiden she lived with no other thought
Than to love and be loved by me.

I was a child and she was a child, In this kingdom by the sea,
But we loved with a love that was more than love, I and my Annabel Lee;
With a love that the wingèd seraphs of heaven Coveted her and me.

For the moon never beams, without bringing me dreams Of the beautiful Annabel Lee;
And the stars never rise, but I feel the bright eyes Of the beautiful Annabel Lee;
And so, all the night-tide, I lie down by the side
Of my darling-my darling-my life and my bride,
In her sepulcher there by the sea,
In her tomb by the sounding sea.
-Edgar Allan Poe, Annabel Lee. ${ }^{1}$
2. We the fairies blithe and antic, Of dimensions not gigantic, Though the moonshine mostly keep us
Oft in orchards frisk and peep us.
Stolen sweets are always sweeter;
Stolen kisses much completer;
Stolen looks are nice in chapels;
Stolen, stolen be your apples.

When to bed the world are bobbing,
Then's the time for orchard-robbing;
Yet the fruit were scarce worth pecling
Were it not for stealing, stealing.
-Leigh Hunt, Fairies' Song.
3. I dare not ask a kiss;

I dare not beg a smile;
Lest having that or this,
I might grow proud the while.
${ }^{1}$ By permission of the publishers, Charles Scribner's Sons.

No, no, the utmost share
Of my desire shall be
Only to kiss that air
That lately kissed thee.
-Robert Herrick, To Electra.
4. Just for a handful of silver he left us, Just for a riband to stick in his coat-
Found the one gift of which fortune bercft us, Lost all the others she lets us devote;
They, with the gold to give, doled him out silver, So much was theirs who so little allowed:
How all our copper had gone for his service! Rags-were they purple, his heart had been proud!
We that had loved him so, followed him, honored him, Lived in his mild and magnificent eye,
Learned his great language, caught his clear accents, Made him our pattern to live and to die!
-Robert Browning, The Lost Leader.
Duple and triple meters are further subdivided according to the position of the accent. In the poem from Herrick the accent falls on the even syllables and the meter is called iambic:

$$
\begin{array}{cccccc}
x & a & x & a & x & a \\
\text { I } & \text { dare } & \text { not } & \text { ask } & \text { a } & \text { kiss } \\
(a= & \text { accented syllable, } & x=\text { unaccented syllable })
\end{array}
$$

In the Fairies' Song by Leigh Hunt the accent falls on the odd syllables and the meter is called trochaic:

| $a x$ | $a x$ | $a$ | $x$ | $a x$ |
| :---: | :---: | :---: | :---: | :---: |
| We the | fairies | blithe | and | antic |

Triple meters are divided in the same way: dactylic meter has the accent on the first syllable:

| $a$ | $\boldsymbol{x}$ | $\boldsymbol{x}$ | $\boldsymbol{a} \boldsymbol{x}$ | $\boldsymbol{x}$ | $\boldsymbol{a} \boldsymbol{x}$ | $\boldsymbol{x}$ | $\boldsymbol{a}$ | $\boldsymbol{x}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Just | for | a | handful | of | silver | he | left | us |

and anapestic on the third:

| $x$ | $x$ | $a x$ | $x$ | $a x$ | $x$ | $a$ | $x a$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| It | was | many | and | many | a | year | ago |

A foot is a combination of accented and unaccented syllables, and verse is named according to the prevailing type of foot it contains. To the four feet already named must be added the spondee, a foot composed of two accented syllables, aa. For obvious reasons, the
spondee cannot be used in an entire poem or even in an entire line.

A summary of meters shows two varieties of duple and two varieties of triple rhythm, besides the spondee.

Duple meters:

1. Iambic. An iambic foot, called an iamb, is composed of one unaccented and one accented syllable: $x a$.
2. Trochaic. A trochaic foot, called a trochee, is composed of one accented and one unaccented syllable: ax.

Triple meters:

1. Anapestic. An anapestic foot, called an anapest, is composed of two unaccented and one accented syllables: xxa.
2. Dactylic. A dactylic foot, called a dactyl, is composed of one accented syllable followed by two unaccented syllables: axx.

## 6. Characteristics of the Different Meters

A. Iambic. Iambic verse approximates very closely the rhythms of ordinary conversation. In fact, many a line of iambic meter differs not at all from the usual speech of ordinary people.

> And never lifted up a single stone.
> -Wordsworth, Michael.

When I see birches bend to left and right
Across the line of straighter darker trees, I like to think some boy's been swinging them.
But swinging doesn't bend them down to stay.
-Robert Frost, Birches. ${ }^{1}$
Because iambic verse is the meter most like ordinary speech and because it is therefore adapted to the expression of any kind of emotion, it is the meter most commonly used in English poetry. In long English poems it is almost universal.
B. Trochaic. The trochaic is a sprightly meter.

Jenny kissed me when we met,
Jumping from the chair she sat in;
Time, you thief, who love to get
Sweets into your list, put that in:
Say I'm weary, say I'm sad,
Say that health and wealth have missed me,
Say I'm growing old, but add, Jenny kissed me.
-Leigh Hunt, Rondeau.

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When the first syllable is very strongly emphasized, trochaic meter can take on the rhythm of a spell or incantation, as in the lines from the "Witches' Song" in Macbeth.

Double, double, toil and trouble;
Fire burn and cauldron bubble.
C. Triple Meters. The English language flows more normally in alternate than in triple accents, and there are, therefore, fewer examples of triple than of duple meters. In all triple meters, also, trochees and iambs are frequently combined with the dactyls and anapests.

Triple meters by nature have a long swing to the verse, which may be very graceful.

Queen rose of the rosebud garden of girls, Come hither, the dances are done, In gloss of satin and glimmer of pearls, Queen lily and rose in one;
Shine out, little head, sunning over with curls, To the flowers, and be their sun.

There has fallen a splendid tear From the passion-flower at the gate.
She is coming, my dove, my dear;
She is coming, my life, my fate.
The red rose cries, "She is near, she is near;"
And the white rose weeps, "She is late;"
The larkspur listens, "I hear, I hear;"
And the lily whispers, "I wait."
She is coming, my own, my sweet;
Were it ever so airy a tread,
My heart would hear her and beat,
Were it earth in an earthy bed;
My dust would hear her and beat,
Had I lain for a century dead,
Would start and tremble under her feet,
And blossom in purple and red.
-Tennyson, Maud. ${ }^{1}$
Triple meters are often used for poems descriptive of riding, the triple character of the rhythm fitting the natural rhythm of a horse's gait. In Browning's poem one can fairly hear the clumpety clump of a galloping horse.
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.

I sprang to the stirrup, and Joris, and he;
I galloped, Dirck galloped, we galloped all three;
"Good speed!" cried the watch, as the gatebolts undrew;
"Speed!" echoed the wall to us galloping through;
Behind shut the postern, the lights sank to rest.
And into the midnight we galloped abreast.
Not a word to each other; we kept the great pace
Neck by neck, stride by stride, never changing our place;
I turned in my saddle and made its girths tight,
Then shortened each stirrup, and set the pique right,
Rebuckled the cheek-strap, chained slacker the bit,
Nor galloped less steadily Roland a whit.
-How They Brought the Good News from Ghent to Aix.
This swing shortly becomes very pronounced and for that reason triple meters are usually the most easily recognized. On the other hand, their very obviousness make them poor meters for long connected verse. Dactylic, the commonest meter in Greek and Latin poetry, is the least common in English. Various attempts have been made to reproduce the effect of the classical dactyls in English verse, but they have been only partially successful.

## 7. Line Length

The length of a line is named according to the number of feet in it.

| one foot <br> two feet | monometer <br> three feet <br> dimeter |
| :--- | :--- |
| trimeter |  |
| four feet | tetrameter |
| five feet | pentameter |
| six feet | hexameter |
| seven feet | heptameter |
| eight feet | octameter |

Ordinarily a line is designated by the kind of foot and the number of feet in a line, as iambic tetrameter, dactylic dimeter, etc. The symbol for a line puts the numeral for the number of feet before the symbol for the foot, $5 x a$ for iambic pentameter, $6 x x a$ for anapestic hexameter, etc.

Each line has its own rhythm, and the poet chooses a line to express the particular effect he wishes to produce. Trimeter, tetrameter, and pentameter lines are the most common in English poetry. In shorter lines the pause at the end of a line comes so frequently that the verse tends to become choppy or jerky, and in longer lines the pauses are so infrequent as to make the rhythm difficult to hear.

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Monometer is so rarely employed as to give the impression of a stunt. One of the few poems in the language that is composed entirely in monometers is Herrick's poem Upon His Departure Hence, which begins,

Thus I
Pass by
And die
It is obvious, however, that such short lines could not be employed in a poem of any length.

Dimeter verse offers many more possibilities, especially when it is used in triple meters, since the triple meter necessitates a longer line than does duple meter. Dactylic dimeter is used by Tennyson in Merlin and the Gleam. ${ }^{1}$

> O Young Mariner,
> You from the haven
> Under the sea-cliff,
> You that are watching
> The gray Magician
> With eyes of wonder, $I$ am Merlin,
> And $I$ am dying, $I$ am Merlin Who follow the Gleam.

Here the shortness of the line suggests the flashing of the gleam. But monometers and dimeters are so short they are never quiet. Therefore they are best used in connection with other lines, as in Browning's Love among the Ruins.

Where the quiet-colored end of evening smiles Miles and miles
On the solitary pastures where our sheep Half-asleep
Tinkle homeward through the twilight, stray or stop
As they crop-
Was the site once of a city great and gay, (So they say)
Of our country's very capital, its prince Ages since
Held his court in, gathered councils, wielding far Peace or war.

Lines longer than pentameter-hexameter, heptameter, octame-ter-all suffer in that the line is too long to serve as an easy unit in
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.

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itself, and hence they are very awkward, or they tend to break into shorter lines. Take the famous lines from Lowell's The Present Crisis: ${ }^{1}$

Once to every man and nation comes the moment to decide, In the strife of Truth with Falsehood, for the good or evil side.
There is a pause at the end of the fourth foot, and the lines might almost have been written as tetrameter verse.

> Once to every man and nation
> Comes the moment to decide, In the strife of Truth with Falsehood, For the good or evil side.

Similarly heptameter verse divides naturally into alternating tetrameters and trimeters.

Hexameter verse was said by Oliver Wendell Holmes to be "almost intolerable," because the line is too long for a single unit and not long enough to be easily divisible. Possibly for this reason it has been very little employed in English verse, the most famous examples being imitations of the Greek.

As already stated, the only lines commonly used in English poetry are the trimeter, tetrameter, and pentameter. Trimeter and tetrameter lines and combinations of these two are the favorites for lyrical pieces. They have a pronounced swing and swinging rhythm.

> With rue my heart is laden For golden friends I had, For many a rose-lipt maiden And many a lightfoot lad. By brooks too broad for leaping The lightfoot boys are laid; The rose-lipt girls are sleeping In fields where roses fade. -A. E. Housman, With Rue My Heart Is Laden. ${ }^{2}$ He came and took me by the hand Up to a red rose tree, He kept His meaning to Himself But gave a rose to me. I did not pray Him to lay bare The mystery to me, Enough the rose was Heaven to smell, And His own face to see. -RALpH Hobcson, The Mystery. ${ }^{\text {a }}$ ${ }^{1}$ By permission of Houghton Mifflin Company, publishers. ${ }^{2}$ From $A$ Shropshire Lad by A. E. Housman, Henry Holt \& Company, Inc. ${ }^{\mathbf{3}}$ By permission of The Macmillan Company, publishers.

However, this emphasis on the singing quality tends to become monotonous if it is continued for a long time, and for this reason trimeter and tetrameter verses are not employed in long poems as often as pentameter. Tetrameter lines, however, have been employed to excellent effect in many long poems, as in Tennyson's In Memoriam, Coleridge's Christabel, and Byron's The Prisoner of Chillon.

The usual and, one may almost say, the ideal meter for longer poems is the pentameter. It is long enough to allow for variety and not so long as to be cumbersome. Shakespeare's plays, Milton's Paradise Lost, Tennyson's Idylls of the King, Chaucer's Prologue to The Canterbury Tales, Browning's The Ring and the Book-all these and many more are in pentameter verse. However, the dignity and the solidity that make pentameter verse appropriate for long poems are not so good for lyrics. Just as tetrameter verse is a little short for long poems, pentameter lines are a little long for short lyrical poems. But in art all things are possible. and any meter can be used for almost any effect. The example of lyrical pentameters usually quoted is the song from Tennyson's The Princess.

> Tears, idle tears, I know not what they mean, Tears from the depth of some divine despair Rise in the heart, and gather to the eyes, In looking on the happy autumn-fields, And thinking of the days that are no more.

## 8. Verse Forms

Rhyme. Lines are combined into stanzas or strophes; usually a strophe has a characteristic rhyme. Two words are said to rhyme when they are identical in sound from the vowel of the accented syllable to the end, provided the sounds that precede the accented vowel are not identical. Romantic and chromatic do not rhyme because they are not identical in the syllables following the accented vowel. Wright, write, right, do not rhyme because the letters before the accented vowel do not differ in sound. Cry, buy; face, place; sorrow, tomorrow; cunning, running do rhyme. A rhyme is said to be masculine if the rhyming portion of the words is a single syllable; feminine if the rhyming portion-is more than one syllable; cry, buy; face, place are masculine rhymes; sorrow, tomorrow; cunning, running are feminine rhymes.

A rhyme scheme is usually indicated by the letters of the alphabet, the letter $a$ being used for the first rhyme word, $b$ for the second, $c$ for the third, etc.

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My heart leaps up when I behold ..... a
A rainbow in the sky: ..... b
So was it when my life began; ..... $c$
So is it now I am a man, ..... $c$
So be it when I shall grow old ..... $a$
Or let me die! ..... b
The Child is father of the Man: ..... c
And I could wish my days to be ..... d
Bound each to each by natural piety. ..... d-Wordsworth, My Heart Leaps Up.

To indicate stanza form the meter and line length are placed in parentheses preceded by a numeral showing the number of lines in a stanza and followed by the rhyme scheme. Thus a strophe of four lines of iambic pentameter with alternate rhymes is abbreviated 4(5xa) abab.

The Couplet. Any stanza of two lines is called a couplet; one of three lines is called a triplet, or tercet; and a stanza of four lines, a quatrain. The simplest stanzaic form possible is the couplet. It is also a favorite form because of its flexibility. The two lines may be used as a complete stanza, as in Tennyson's Locksley Hall: ${ }^{1}$

Yet I doubt not thro' the ages one increasing purpose runs, And the thoughts of men are widen'd with the process of the suns.

Knowledge comes, but wisdom lingers, and I linger on the shore, And the individual withers, and the world is more and more.
Couplets may be united into stanzas of a definite number of lines, as in Keats's Lines on the Mermaid Tavern. Or they may be printed continuously and divided into paragraphs. This is the favorite use of the couplet, the form followed by Chaucer, Pope, Byron, Coleridge, and many others.

In couplets the lines are ordinarily of the same length, though not necessarily so, as we saw in Browning's Love among the Ruins. The lines most commonly used for couplets are the tetrameter and pentameter.

Heroic Couplet. The iambic pentameter couplet, known as the heroic couplet, is the form most widely used. It takes two distinct forms according as the couplet is or is not emphasized. When the couplet is emphasized as a unit, each couplet expresses a complete thought, and the second line balances or offers an antithesis to the first line. For this reason it is called the closed couplet or rocking-horse couplet. This couplet was the standard verse of the seventeenth and eighteenth centuries and
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.
was used by almost all the writers of the classic period; the most typical exponents are Dryden and Pope.

> Great wits are sure to madness near allied And thin partitions do their bounds divide. -Dryden, Absalom and Achitophel. Damn with faint praise, assent with civil leer, And without sneering teach the rest to sneer. ** * As yet a child, not yet a fool to fame, I lisp'd in numbers, for the numbers came. -Pope, Epistle to Dr. Arbuthnot. Then say not man's imperfect, Heav'n in fault; Say rather man's as perfect as he ought. $$
\quad * \quad *
$$ All are but parts of one stupendous whole, Whose body Nature is, and God the soul. $\quad * \quad *$ Hope springs eternal in the human breast: Man never is, but always to be, blest. -Pope, An Essay on Man.

In the work of Chaucer and Keats, to choose again two typical poets, the thought runs on from line to line, and the rhyme of the couplet merely emphasizes the rhythm of line. This is naturally a much more flexible verse, as we see in the opening lines of Keats's Endymion.

A thing of beauty is a joy for ever:
Its loveliness increases; it will never
Pass into nothingness; but still will keep
A bower quiet for us, and a sleep
Full of sweet dreams, and health, and quiet breathing.
The Triplet. The triplet is not a popular stanza in English verse, and examples are comparatively rare. Sometimes the poet has tried to relieve the monotony of the triple rhyme by leaving the middle line unrhymed, aba. In the form known as the terza rima the middle line of one stanza rhymes with the first and third of the following stanza, the rhyme scheme of a number of stanzas running thus: $a b a b c b c d c$ ded, etc. This is the stanza used by Dante for the Divine Comedy. The only conspicuous example in English is that of Shelley in the Ode to the

West Wind. However, he stops the terza rima with a couplet at the end of each fourteen lines.

O Wild West Wind, thou breath of Autumn's being, Thou, from whose unseen presence the leaves dead Are driven, like ghosts from an enchanter fleeing,

Yellow, and black, and pale, and hectic red, Pestilence-stricken multitudes: $\mathbf{O}$ thou, Who chariotest to their dark wintry bed

The wingèd seeds, where they lie cold and low, Each like a corpse within its grave, until Thine azure sister of the Spring shall blow

Her clarion o'er the dreaming earth, and fill
(Driving sweet buds like flocks to feed in air)
With living hues and odours plain and hill:
Wild Spirit, which art moving everywhere;
Destroyer and preserver; hear, oh, hear!
The Quatrain. The quatrain is the stanza most commonly found in English poetry. In the quatrain the rhymes most commonly employed are $a b a b$ and $a b c b$; the rhyme $a b b a$, however, is often used, especially for serious verse; Tennyson uses it in In Memoriam; aaba is used by Fitzgerald in the Rubáiyát of Omar Khayyám.

A book of verses underneath the bough,
A jug of wine, a loaf of bread-and Thou
Beside me singing in the wilderness-
Oh, wilderness were Paradise enow!
The most popular of all quatrains is the one called ballad meter. This is a quatrain of alternating tetrameter and trimeter lines in iambic meter, rhyming $a b a b$ or $a b c b$. It was regularly employed in the popular ballads; hence its name.

The king sits in Dumferling toune,
Drinking the blude-reid wine:
"O whar will I get a guid sailor,
To sail this schip of mine?"
Up and spak an eldern knicht,
Sat at the kings richt kne:
"Sir Patrick Spence is the best sailor, That sails upon the se."

The king has written a braid letter,
And signd it wi his hand,
And sent it to Sir Patrick Spence, Was walking on the sand.

The first line that Sir Patrick red,
A loud lauch lauched he;
The next line that Sir Patrick red, The teir blinded his ee.
"O wha is this has don this deid, This ill deid don to me, To send me out this time o' the yeir, To sail upon the se!
"Mak hast, mak hast, my mirry men all, Our guid schip sails the morne:"
"O say na sae, my master deir, For I feir a deadlie storme.
"Late late yestreen I saw the new moone, Wi the auld moone in her arme,
And I feir, I feir, my deir master, That we will cum to harme."

O our Scots nobles wer richt laith To weet their cork-heild schoone;
Bot lang owre a' the play wer playd, Thair hats they swam aboone.

O lang, lang may their ladies sit, Wi thair fans into their hand, Or eir they se Sir Patrick Spence Cum sailing to the land.

O lang, lang may the ladies stand, Wi thair gold kems in their hair, Waiting for thair ain deir lords, -For they'll se thame na mair.

Haf owre, haf owre to Aberdour, It's fiftie fadom deip,
And thair lies guid Sir Patrick Spence, Wi the Scots lords at his feit. -Anonymous, Sir Patrick Spence.

It is also called common meter, from its use in familiar hymns.

> Our God, our help in ages past, Our hope for years to come, Our shelter from the stormy blast And our eternal home!
> -IsaAc Watts, Our God, Our Help in Ages Past.

The Sonnet. There are also certain definite stanzaic forms that are so important as to deserve detailed treatment here. They are the sonnet, the Spenserian stanza, and blank verse.

A sonnet is composed of fourteen lines, usually in iambic pentameter verse. There are two main types of sonnet, the Italian and the English. The Italian sonnet divides into two parts, the first eight lines being called the octave (eight), the last six, the sestet (six). The octave is composed of two quatrains; the sestet, of two tercets. The English sonnet is composed of three quatrains and a couplet. The Italian and the English sonnets are further distinguished by fixed rhymes. The quatrains of the Italian sonnet always rhyme $a b b a$; the tercets allow variety of rhyme: $c d e, c d e$, and $c d, c d, c d$ being the more popular endings. The English sonnet contains three quatrains of alternating rhyme followed by a couplet. The English sonnet is further subdivided into the Shakespearean and the Spenserian sonnets; in the Spenserian sonnet the quatrains are linked by the rhyme ( $a b a b, b c b c, c d c d, e e$ ); in the Shakespearean, the quatrains are separate ( $a b a b, c d c d$, efef, $g g$ ).

The sonnet originated in Italy. It was introduced into England by Sir Thomas Wyatt at the time of the Renaissance and became one of the most popular poetic forms of the period, especially in the sonnet sequence with the English rhyme. These sonnet sequences were almost always on the subject of love, the sonnets usually being addressed to the loved one; there were interspersed, however, sonnets on allied subjects such as death, sleep, fame. Three of the more famous of these series are Shakespeare's Sonnets, Sidney's Astrophel and Stella, and Spenser's Amoretti.

> With how sad steps, O Moon, thou climb'st the skies,
> How silently, and with how wan a face!
> What, may it be that even in heav'nly place
> That busy archer his sharp arrows tries?
> Sure, if that long-with-love-acquainted eyes
> Can judge of love, thou fecl'st a lover's case, I read it in thy looks; thy languished grace, To me, that feel the like, thy state descries. Then, ev'n of fellowship, O Moon, tell me,

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Is constant love deem'd there but want of wit?
Are beauties there as proud ás here they be?
Do they above love to be lov'd, and yet
Those lovers scorn whom that love doth possess?
Do they call virtue there ungratefulness?
-Sidney, Astrophel and Stella.
That time of year thou mayst in me behold When yellow leaves, or none, or few, do hang Upon those boughs which shake against the cold,
Bare ruin'd choirs where late the sweet birds sang.
In me thou see'st the twilight of such day
As after sunset fadeth in the west,
Which by and by black night doth take away,
Death's second self, that seals up all in rest.
In me thou see'st the glowing of such fire
That on the ashes of his youth doth lie,
As the death-bed whereon it must expire,
Consum'd with that which it was nourish'd by.
This thou perceiv'st, which makes thy love more strong,
To love that well which thou must leave ere long.
-Shakespeare, Sonnets, 73.
Since the Renaissance the use of the sonnet has changed in each of the three ways most characteristic of the Elizabethan custom: (1) it is used chiefly as a separate poem, not in sonnet sequence, (2) the Italian and the English forms are used equally, and (3) the sonnet is written on a great variety of subjects. The sonnet series on love is still found, as we see in Mrs. Browning's Sonnets from the Portuguese and Leonard's Two Lives, but there are also sonnets on every other subject. Compare this sonnet by Shelley:

I met a traveller from an antique land
Who said: Two vast and trunkless legs of stone
Stand in the desert. . . . Near them, on the sand,
Half sunk, a shattered visage lies, whose frown,
And wrinkled lip, and sneer of cold command,
Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless things,
The hand that mocked them, and the heart that fed:
And on the pedestal these words appear:
"My name is Ozymandias, king of kings:
Look on my works, ye Mighty, and despair!"
Nothing beside remains. Round the decay
Of that colossal wreck, boundless and bare
The lone and level sands stretch far away.

Spenserian Stanza. The Spenserian stanza is a nine-line stanza; the beginning eight lines are identical with the first two quatrains of the Spenserian sonnet, i.e., iambic pentameter, rhyming $a b a b, b c b c$. To this is added a line of iambic hexameter, called an Alexandrine, which rhymes with the eighth line. The complete rhyme thus is abab, $b c b c, c$.

The Spenserian stanza was invented by Spenser for The Faerie Queene and used successfully by him in that poem. It is too heavy for short lyrics but is successfully used in longer narratives and serious verse. Byron's Childe Harold's Pilgrimage and Keats's The Eve of St. Agnes are excellent examples.

Blank Verse. Blank verse is unrhymed iambic pentameter. Since there is no rhyme, there is no stanza division; the larger unit is the paragraph. Blank verse was invented in the sixteenth century by Henry Howard, Earl of Surrey, for his translation of Virgil's Aeneid. His verse, however, was very stiff and monotonous. Marlowe gave life and vigor to the meter. This is a portion of the dialogue between Faust and Mephistopheles, from Marlowe's Dr. Faustus:

Faust. Tell me what is that Lucifer thy lord?
Meph. Arch-regent and commander of all spirits.
Faust. Was not that Lucifer an angel once?
Meph. Yes, Faustus, and most dearly loved of God.
Faust. How comes it then that he is Prince of devils?
Meph. O, by aspiring pride and insolence; For which God threw him from the face of Heaven.
Faust. And what are you that live with Lucifer?
Meph. Unhappy spirits that fell with Lucifer, Conspired against our God with Lucifer, And are forever damned with Lucifer.
Faust. Where are you damned?
Meph. In hell.
Faust. How comes it then that thou art out of hell?
Meph. Why this is hell, nor am I out of it:
Think'st thou that I who saw the face of God, And tasted the eternal joys of Heaven, Am not tormented with ten thousand hells, In being deprived of everlasting bliss?
-Scene 3.
Blank verse is not well adapted to lyric poetry, though it was used by Tennyson in the lyric already quoted from Maud, but it is the favorite verse for long poems and for drama. It is the most important single verse form in English poetry.

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Other Stanzaic Forms. Other set forms may be indicated briefly. Ode. In English verse the term ode refers primarily to content rather than to form. As the name of a form the ode may be either regular or irregular. The regular ode, also called the Pindaric ode, is composed of three triads, each triad consisting of three stanzas. The stanzas of one triad may vary greatly, but the corresponding stanzas of the other triads must be identical in metrical structure.

The irregular ode is, as the name implies, irregular in stanzaic structure. The length of stanza and the length of lines are both varied, without any set plan. An example is Wordsworth's Ode on Intimations of Immortality.

Ottava Rima. An eight-line stanza of iambic pentameter, rhyming abababcc. Example: Keats, Isabella; Byron, Don Juan.

Rime Royal. A seven-line stanza of iambic pentameter, rhyming ababbcc. Example: Masefield, Dauber.

Exotic Forms. The ballade, rondeau, villanelle, and triolet are complicated French forms that have never been thoroughly naturalized in English verse. The student who is interested may find them explained in a book on meters.

## References

Alden, R. M.: English Verse, 1903.
Blair, W., and Chandler, W. K.: Approaches to Poetry, 1935.
Hubbell, J. B., and Beaty, J. O.: An Introduction to Poetry, rev. ed., 1936.
Lowell, A.: Tendencies in Modern American Poetry, 1917.
Perry, B.: A Study of Poetry, Chap. IV, 1920.
Pyre, J. F. A.: A Short Introduction to English Versification, 1929.
Rickert, E., New Methods for the Study of Literature, 1927.
Sitwell, E.: The Pleasures of Poetry, 3 vols., 1934.
Untermeyer, L.: The Forms of Poetry, 1926.
Untermeyer, L., and Davidson, C.: Poetry-Its Appreciation and Enjoyment, 1934.

## Questions

1. Collect fifteen popular slogans, and analyze in each the reason for its appeal.
2. Select five of your favorite quotations; analyze them for tone color, phrasing, and rhythm.
3. For rhythm of prose, read Ecclesiastes, XII; Sir Thomas Browne, Hydriotaphia: Urn Burial, Chap. V.
4. Rank ten passages of prose according to their rhythmic qualities, putting the most rhythmic first.
5. Do the same for ten passages of poetry.
6. Copy the selection from Ulysses and the lines from Isaiah and Stevenson as though they were free verse. What is gained? What is lost?
7. Experiment with the writing of verse in different meters and verse forms.
8. Rewrite Old Mother Hubbard as a Shakespearean sonnet, a series of rhymed couplets, blank verse, a popular ballad, etc.
9. Imitate the rhythm of three passages of great prose.
10. Do the same for three passages of poetry.

## XII

## The Elements of Literature: II

## 1. The Sentence

Important as is sound in literature, sense is more important, for literature is fundamentally and essentially an art of sense. Words have meaning as separate units, but they do not make sense until they are combined in some grammatical relationship. In one sense every art has its grammar, for in every art there are certain relations between the different parts that must be observed if the whole is to make sense. Music, for example, sticks to the tones of the scale and follows the laws of melody and harmony. Architecture obeys the laws of balance and coherence. Even in the sound of literature we expect some relation either in the recurrence of the accent in poetry or in the repetition of letters or words.

In literature grammar has to do with the sense relations of words. Suppose, for instance, we take three words- John, Henry, struck. If they are put together in this order, John struck Henry, the sense is just the opposite from what it would be if they were arranged in this order, Henry struck John. The sense is different because the grammatical relation between the words is different. In the first sentence John is the subject, and in the second, Henry is the subject. If the order were changed again and the sentence appeared as John Henry struck or Henry John struck, it is not clear who was struck, for in these words the grammatical relation is dependent entirely on the position, and there is no accepted understanding as to what the relation is. If, however, we substitute the first personal pronoun for John, we have a different form of the word for each sentence: I struck Henry; Henry struck me. When we say, Henry I struck, there is no ambiguity at all as to meaning. Even if we say, I Henry struck or Henry struck I, there is no doubt as to the meaning, though the sentences are awkward.

Grammar, we have said, has to do with the relation between words whereby they make sense. If we say, on the head he, there is no
sense because the word or words necessary to make sense are missing; part of the grammatical structure is missing. If we add to those words fell or hit me, we have a correct relationship, because the words added complete the idea.

We have the same sense of incompleteness when reading these expressions:

The cow

- When the bell rings

If it rains
Coming down the street this morning
Ran away
When reading them we ask, "Well, what of it? What are you going to say? What happened to the cow? What will happen when the bell rings or if it rains? Who was coming down the street, and what was he doing? Who ran away?" And we are not satisfied until we have the answers to these questions:

The cow died.
When the bell rings, you may go.
If it rains, we shall not have the picnic.
Coming down the street this morning I met a friend whom I had not seen for ten years.

The horse ran away.
This demand for completeness of idea is the primary demand of grammar. The idea may be an assertion, a question, a command, or an exclamation, but it must be complete.

In the expression of a complete idea two factors are necessary; first, there must be the subject of the idea and second, there must be the expression of an idea about the subject. The second is missing in the first of the examples given above; the first is missing in the last of those examples; both are missing in the other examples: we do not know who is concerned or how he is affected when the bell rings. The first, the subject of the idea, is called the subject; the second, the idea about the subject, is the predicate. The two together make a
sentence. The subject of a sentence always answers the questions "What is he talking about?" and the predicate always answers the question "What is he saying about the subject?"

Subject and predicate need not always be expressed; sometimes they are omitted because they can clearly be supplied from the context, as in the sentence Fire! or Run!

The subject and predicate may be modified or changed in various ways. In the third sentence above, the skeleton is you may go, but the idea is modified by the clause when the bell rings, which tells when you may go. Likewise, in the last sentence the skeleton is I met a friend. The subject $I$ is modified by the phrase coming down the street this morning, which tells the place and the time of the meeting, and the clause whom I had not seen for ten years defines the friend.

There are three kinds of sentence, according to the number of subjects and predicates: simple, complex, and compound. A simple sentence has a single subject and single predicate. The examples have been taken from Bacon's Essays.

A mixture of a lie doth ever add pleasure.
The vices of authority are chiefly four; delays, corruption, roughness, and facility.
It is still called a simple sentence, even though it has a compound subject or a compound predicate.

Men in great place are thrice servants: servants of the sovereign or state; servants of fame; and servants of business.

A complex sentence consists of one independent and one or more dependent clauses.

A man that is young in years may be old in hours, if he have lost no time.
I had rather believe all the fables in the Legend, and the Talmud, and the Alcoran, than that this universal frame is without a mind.

A compound sentence ahas more than one independent clause.
The rising unto place is laborious; and by pains men come to greater pains; and it is sometimes base; and by indignities men come to dignities.

Certainly wife and children are a kind of discipline of humanity; and single men, though they may be many times more charitable, because their means are less exhaust, yet, on the other side, they are more cruel and hardhearted (good to make severe inquisitors), because their tenderness is not so oft called upon.

Sentences are further classified as long or short, loose or periodic. The short sentence has the advantage of being easily understood, clear, and forceful; on the other hand, a succession of short sentences becomes monotonous. The long sentence has possibilities for rhythm and cadence that are denied the short sentence, but it loses in force. A loose sentence is one that is loosely put together; one in which the sense is clear as it advances but which might be divided into a number of smaller sentences. The periodic sentence is one of suspense; the sense of the sentence is not made clear until the end. The loose sentence is in effect a series of short sentences.

Ordinarily sentence structure is simple and clear, and it is understood without difficulty. But there are times when it is not clear, and one has to go hunting for subjects and predicates like a dog after a bone. In the sonnet that follows Keats states a condition, When I have fears, and leaves the sense of the entire poem hanging until the end, when he states the conclusion, then I stand and think.

When I have fears that I may cease to be
Before my pen has glean'd my teeming brain, Before high-piled books, in charactery, Hold like rich garners the full-ripen'd grain; When I behold, upon the night's starr'd face, Huge cloudy symbols of a high romance, And think that I may never live to trace Their shadows, with the magic hand of chance; And when I feel, fair creature of an hour, That I shall never look upon thee more, Never have relish in the faery power Of unreflecting love;-then on the shore Of the wide world I stand alone, and think Till love and fame to nothingness do sink.

The opening lines of Paradise Lost usually give trouble; and it is not easy to get the sense from them.

Of Man's first disobedience, and the fruit
Of that forbidden tree whose mortal taste
Brought death into the World, and all our woe, With loss of Eden, till one greater Man Restore us, and regain the blissful Seat, Sing, Heavenly Muse, that, on the secret top
Of Oreb, or of Sinai, didst inspire
That Shepherd who first taught the chosen seed In the beginning how the heavens and earth
Rose out of Chaos: or, if Sion hill

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Delight thee more, and Siloa's brook that flowed
Fast by the oracle of God, I thence
Invoke thy aid to my adventrous song,
That with no middle flight intends to soar
Above the Aonian mount, while it pursues
Things unattempted yet in prose or rhyme.
And chiefly Thou, O Spirit, that dost prefer
Before all temples the upright heart and pure,
Instruct me, for Thou know'st; Thou from the first
Wast present, and with mighty wings outspread,
Dove-like sat'st brooding on the vast Abyss,
And mad'st it pregnant: what in me is dark
Illumine, what is low raise and support;
That, to the highth of this great argument, I may assert Eternal Providence,
And justify the ways of God to men.
The first sentence lasts for sixteen lines. It is composed of two independent clauses; the first ends with Chaos. If Milton were writing today he would probably use a semicolon instead of a colon after Chaos. The first thing is to find the skeleton of each of these clauses. In the first clause everything hinges on the words at the beginning of the sixth line, Sing, Heavenly Muse. The lines before tell what the muse is to sing of, and the lines that follow tell who the muse is. In the second clause the skeleton is I invoke thy aid. The lines that precede give the condition of this invoking of aid; those that follow describe the song for which he wants the aid. The second sentence is made of three independent clauses. The first is addressed to the Spirit of God and says simply, Instruct me. The second identifies the spirit. Thou wast present from the first and sat'st brooding on the Abyss, and mad'st it pregnant. The third is the prayer, Illumine what is dark in me, raise and support what is low.

Milton's sonnet On His Blindness (page 4) contains but two sentences, the question of Milton and the reply of Patience. The first sentence, if simply put, is, When I consider how my light is spent, I ask, doth God exact day-labour, light denied? In the first stanza of the Ode to the West Wind (page 285) Shelley names the wind in the first line but does not complete the sentence until the end of the stanza, when he calls to the wind, "Oh, hear!"

In this matter of complicated sentence structure poetry is a more frequent offender than prose, but prose is not free.

As Florian Deleal walked, one hot afternoon, he overtook by the wayside a poor aged man, and, as he seemed weary with the road, helped him on with the burden
which he carried, a certain distance. And as the man told his story, it chanced that he named the place, a little place in the neighborhood of a great city, where Florian had passed his earliest years, but which he had never since seen, and, the story told, went forward on his journey comforted. And that night, like a reward for his pity, a dream of that place came to Florian, a dream which did for him the office of the finer sort of memory, bringing its object to mind with a great clearness, yet, as sometimes happens in dreams, raised a little above itself, and above ordinary retrospect. The true aspect of the place, especially of the house there in which he had lived as a child, the fashion of its doors, its hearths, its windows, the very scent upon the air of it, was with him in sleep for a season; only, with tints more musically blent on wall and floor, and some finer light and shadow running in and out along its curves and angles, and with all its little carvings daintier.
-Walter Pater, The Child in the House. ${ }^{1}$
When the language is spoken, sentence structure is made clear by the intonations of the voice; when written, by punctuation. Compare the first sentence of Lamb's A Dissertation upon Roast Pig when it is printed with and without punctuation.
mankind says a chinese manuscript which my friend $m$ was obliging enough to read and explain to me for the first seventy thousand ages ate their meat raw clawing or biting it from the living animal just as they do in abyssinia to this day

Mankind, says a Chinese manuscript, which my friend M. was obliging enough to read and explain to me, for the first seventy thousand ages ate their meat raw, clawing or biting it from the living animal, just as they do in Abyssinia to this day.

Everyone has encountered similar difficulties in reading telegrams. E. E. Cummings, a modern poet, does away with conventional capitalization and punctuation and uses them in a way of his own in an attempt to present his rhythms more clearly and more naturally; but his devices are more confusing than clarifying.
> here's a little mouse)and what does he think about, $i$ wonder as over this floor(quietly with
> bright eyes)drifts(nobody can tell because
> Nobody knows, or why
> jerks Here \& here, $\mathrm{gr}(\mathrm{o})$ ving the room's Silence)this like a littlest
> poem a
> (with wee ears and see?

[^17]tail frisks)
'mouse', (gonE)
We are not the same you and
i, since here's a little he
or is
it It
? (or was something we saw in the mirror)?
therefore we'll kiss; for maybe
what was Disappeared
into ourselves
who (look)., startled
-here's a little mouse.'

## 2. Words

A word has no meaning in itself; it is merely a sound to which a certain meaning has been given. New meanings are constantly being given words, or, as we say, the meanings of words change. The word dog is the name of an animal, but it refers to man when we say, a gay $d o g$ or $a \operatorname{sad} d o g$. Some of these changes have come about very gradually and naturally through a long period of time. The word treacle, which now means molasses, comes originally from the Greek $\theta \eta \rho i o v$, which means wild beast. This change in meaning, though startling at first, has come about very naturally; the word was first used for anything that had to do with a wild animal; then it came to mean the medicine that was good for the bite of a wild animal, and, since that medicine was usually sweet and sticky, it came to mean any such sweet and sticky substance; hence, molasses. In the same way the word hound, which originally meant any kind of dog, as it does today in German, came to mean only a certain type.

Sometimes a change in meaning is made suddenly, even violently. It becomes a game to use an old word in a new sense, to call a woman, a skirt; a beau, a date. This is, of course, slang. Sometimes slang words are good enough to be retained permanently in the language, as, for example, tenderfoot or highbrow. Usually they are lost; and we have the quaint and amusing examples of last year's slang, daisy, 23 skidoo, tin Lizzie, college widow, lounge lizard.

[^18]Not only does the meaning of a word change but each word has certain connotations or allied meanings or associated ideas that are called to mind whenever the word is used. The word father, for instance, has always had the same meaning, the male parent; its connotations are love, kindliness, protection, greater experience, guidance, wisdom. Not all male parents show these qualities; some fathers are cruel, unkind, foolish; but if one wants to make it clear that a father is of this class he must state the fact clearly and definitely, for the connotations of the word make one suppose just the opposite. The word spinster originally meant a person who spins; now it means an unmarried woman and has the same connotations as old maid, precise and tidy, fidgety and nervous. The cowboy herds cattle, but the word cowboy connotes youth, beauty, bravery, adventure, romance, whereas cattle herder is merely a person who herds cattle. Oxford is much more than a town or university. It connotes culture, leisure, the gentleman, the future statesman of the British Empire.

Every word carries with it some association with its former meanings and some connotations. Words do not exist in utter nakedness, but they trail clouds of glory or shame to confuse, confound, or illuminate the context. On the basis of meaning and connotations, certain special words are grouped together. The list that follows is only suggestive.

Formal and Informal Words. The greatest difference in words is between the formal and the informal expression. The written word, even in an informal writing, is more formal than the spoken. Abbreviations, can't, isn't, are always used in the spoken but almost never in the written language. Conversation in stories may, of course, be exactly like the speech of real people, but even in an informal story the narrative is much more formal than conversation.

Learned Words. Learned words are just what the name indicates, words that savor of great learning. In the following passage the tone is definitely learned.

Methinks I see in my mind a noble and puissant nation rousing herself like a strong man after sleep, and shaking her invincible locks; methinks I see her as an eagle mewing her mighty youth, and kindling her undazzled eyes at the full midday beam; purging and unscaling her long-abused sight at the fountain itself of heavenly radiance; while the whole noise of timorous and flocking birds, with those also that love the twilight, flutter about, amazed at what she means, and in their envious gabble would prognosticate a year of sects and schisms.
-Mnton, Areopagitica.

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Technical Terms. Technical terms belong to the general class of learned words but are distinguished as being the language of a particular profession, business, or trade. Often technical words get into the ordinary language; examples are tuberculosis, static, carburetor, ignition, wave length. A great part of this book is devoted to the technical language of the arts. In each art some of the terms have become general knowledge, whereas others have remained terms for the specialist. In architecture, for instance, cornice, pediment, column, and frieze are universally known, whereas architrave, entablature, basilica, clerestory belong to the specialist.

Foreign Words. Greek, Latin, French, German, and Italian words are sometimes introduced into an English text.

Latinized Words. Some authors use words with the meaning of their Latin originals. In the opening sentence of Paradise Lost, for example, Milton uses secret in the sense of the Latin secretus, "apart," "remote"; it has none of the connotations of secret in the sense of that which is purposely kept hidden.

Obsolete Words. Obsolete words are no longer in common speech. In the passage just quoted from Milton, methinks, mewing, unscaling are not words in common use; they smack of an earlier time. Obsolete words in writing come from two sources. They may have been in common use when the book was written but have grown obsolete since that time. Or an author may go back to the words of an earlier time to give dignity or atmosphere and age to his work, as when one uses the word wight for person, or ope for open.

Poetic Words. Certain words have been thought poetic and have been used for that reason. These words include (a) obsolete terms, methinks, (b) abbreviations, e'en, e'er, 'mongst, (c) unusual forms of words, beauteous and bounteous for beautiful and bountiful, (d) unusual words instead of the usual words, azure for blue, zephyr for wind, and (e) the use of the second person, thou, sayest.

Such words are no longer sought by poets, who almost universally choose a simpler language. Marguerite Wilkinson in New Voices ${ }^{1}$ quotes two poems from Florence Earle Coates, one showing poetic diction, the other free from it.

> Deem not, O Pain, that thou shalt vanquish me Who know each treacherous pang, each last device, Whereby thou barrest the way to Paradise!
-Unconquered. ${ }^{2}$

[^19]
## THE ELEMENTS OF LITERATURE: II

If love were but a little thing-
Strange love, which, more than all, is great-
One might not such devotion bring, Early to serve and late.

If love were but a passing breath-
Wild love-which, as God knows, is sweet-
One might not make of life and death
A pillow for love's feet.

$$
\text { -Song. }{ }^{1}
$$

Fine Writing. Fine writing is the attempt to dress up a commonplace expression by putting it into high-sounding language. It is used for writing in which the words are too grand for the sense or the context, as in the speech of Micawber.
"Under the impression," said Mr. Micawber, "that your peregrinations in this metropolis have not as yet been extensive, and that you might have some difficulty in penetrating the arcana of the Modern Babylon in the direction of the City Roadin short," said Mr. Micawber, in another burst of confidence, "that you might lose yourself-I shall be happy to call this evening, and install you in the knowledge of the nearest way."
-Dickens, David Copperfield.
To the general class of fine writing belong vulgar expressions such as the use of lady for woman, washer lady for wash woman, or parlor in phrases like ice-cream parlor, mortuary parlor.

The obvious use of long or learned words for comical effect is not a case of fine writing.

I have no ear.-
Mistake me not, reader,-nor imagine that I am by nature destitute of those exterior twin appendages, hanging ornaments, and (architecturally speaking) handsome volutes to the human capital. Better my mother had never borne me.-I am, I think, rather delicately than copiously provided with those conduits; and I feel no disposition to envy the mule for his plenty, or the mole for her exactness, in those ingenious labyrinthine inlets-those indispensable side-intelligencers.
-Charles Lamb, A Chapter on Eats.
Trite Expressions. Trite expressions have been used until they are worn out, such as the use of worthy and injured member by Thomas Wolfe:
"Carl-Carl- are you hurt bad? How's your arm?" said Sidney Purtle.
"I think it's broken," groaned that worthy, clutching the injured member with his other hand. ${ }^{2}$

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Idiom. Idiom is the particular expression of a language, as, for instance, wait for as against wait on; need of as against need for. We do not notice an idiom if it is correctly used. Dryden uses an idiom that is now obsolete when he says, "Those who accuse him to have wanted learning."

Dialect, Provincialisms. A dialect is the language of a certain part of a country, as, for instance, the Scottish dialect or the Irish dialect.

A provincialism is a word or phrase peculiar to a province or a small section of a country as, for instance, the use of clever for goodnatured.

New Words. Some words we are conscious of as new: burglarized, extradited, educationist, tycoon. Some of these get into the permanent language; some do not. Genung calls attention to the great discussion caused by the word telegram, which was coined from telegraph and the demand for a similar word telephem for a message over the telephone. ${ }^{1}$

Nonsense Words. Nonsense words are kept strictly for nonsense writing, intended chiefly for children but enjoyed by everyone.
> 'Twas brillig, and the slithy toves
> Did gyre and gimble in the wabe:
> All mimsy were the borogoves,
> And the mome raths outgrabe.
> -Lewis Carroll, Jabberwocky.

Most words are used normally by all people all the time, and we do not notice them as belonging to any special category. But as we read we notice the unusual words, and on the basis of those words say that the writing is learned, technical, trite, or provincial.

## 3. Figures of Speech

Words are symbols and as symbols have no meaning in themselves; their only meaning is what is given them by convention. Moreover, a symbol can never be specific; it is always abstract or general.We call words abstract or concrete as they signify concrete objects or abstractions; we say, truth and honor are abstract; dog and lilac are concrete. But these concrete words are themselves abstractions in that they stand for a whole class of objects. The dog may be any one of a large number of species, of any known color. And when we say lilac, we may mean any variety of lilac, in any color, or any one of the other

[^21]sensations concerned with lilac: its fragrance, the shape of the flower or the leaf, the bush on which the flower grows.

This abstractness of words becomes very clear if it is compared with the necessary concreteness of the other arts. Obviously, a sculptor cannot carve the abstraction dog; he must carve a dog of certain species, age, and size. The painter cannot paint lilac; he must paint a white lilac or a purple lilac, a plant in full blossom, beginning to fade, in bud, or without blossoms. He cannot paint what we mean by lilac, for that is essentially an abstraction. In the same way, the actor or the musician can make only concrete tones, but in describing his tones the poet can use only abstractions; the poet will speak of "clear, ringing tones," but the actor or the musician must make certain definite tones, just as the sculptor must carve a certain kind of dog or the painter portray a certain species of lilac.

Because of this indefiniteness of words there have grown up certain deviations or roundabout methods of expression that attempt to make more clear the exact meaning of the words. If, for instance, Coleridge says the ice is green, he leaves it to us to imagine the shade of green; but he gives the exact shade when he says:

And ice, mast-high, came floating by, As green as emerald. -The Ancient Mariner.

He can make us see more clearly the color of hair, the feeling of fear, and the sound of the departing souls by stating his point indirectly.

> Her lips were red, her looks were free, Her locks were yellow as gold: Her skin was as white as leprosy, The Nightmare Life-in-Death was she, Who thicks man's blood with cold. Fear at my heart, as at a cup, My life-blood seemed to sip! ................................................. The souls did from their bodies fly, They fled to bliss or woe! And every soul, it passed me by, Like the whizz of my cross-bow! $\quad$-The Ancient Mariner.

Such indirect methods of expression are called figures of speech. Webster's Dictionary defines a figure as "A mode of expressing abstract
ideas by words which suggest pictures or images; pictorial language; a trope."

Simile and Metaphor. The most common and therefore the most important of the figures of speech are the simile and the metaphor. Both depend upon the comparison of one thing to another. The simile puts in the word of comparison; the metaphor leaves it out. The simile says, the ice was as green as emerald; the metaphor says, the ice was emerald. The simile says, fear was like a monster which sipped my blood; the metaphor says, fear sipped my blood. The simile would say, Thou, Peter, art like a rock; the metaphor says, Thou art Peter, and upon this rock I will build my church. ${ }^{1}$ The simile would say, The arms are like the keepers of a house, and the legs are like strong men; the metaphor says, In the day when the keepers of the house shall tremble, and the strong men shall bow themselves. ${ }^{2}$ The simile says:

> And he shall be like a Tree planted by the streams of water,
> That bringeth forth its fruit in its season,
> Whose leaf also doth not wither;
> And whatsoever he doeth shall prosper.
> The wicked are not so;
> But are like the Chaff which the wind driveth away.

-Ps. I.
The metaphor says:

## The Lord is my shepherd;

I shall not want.
He maketh me to lie down in green pastures:
He leadeth me beside the still waters.
He restoreth my soul:
He leadeth me in the paths of righteousness for his name's sake.
-Ps. XXIII.
Both simile and metaphor are used very commonly by all people at all times. It is hard to find a paragraph of prose or verse that does not contain either a simile or a metaphor. From the nature of the two the metaphor is used most often in short, vigorous passages, whereas the simile may be expanded to any length. There are, however, long and detailed metaphors; many of the parables of the New Testament are but extended metaphors, as is the parable of the sower.

Behold, the sower went forth to sow; and as he sowed, some seeds fell by the way side, and the birds came and devoured them: and others fell upon the rocky places,
${ }^{1}$ Matt., XVI, 18.
${ }^{2}$ Eccles., XII, 3.

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where they had not much earth: and straightway they sprang up, because they had no deepness of earth: and when the sun was risen, they were scorched; and because they had no root, they withered away. And others fell upon the thorns; and the thorns grew up, and choked them: and others fell upon the good ground, and yielded fruit, some a hundredfold, some sixty, some thirty.
-Matt., XIII, 4-7.
The simile and the metaphor are often used in succession, one piled on the other, as in this selection from Shelley's To a Skylark, in whiclShelley says he is trying to find what is "most like" the skylark:

What thou art we know not;
What is most like thee?
From rainbow clouds there flow not
Drops so bright to see
As from thy presence showers a rain of melody.

## Like a Poet hidden

In the light of thought,
Singing hymns unbidden,
Till the world is wrought
To sympathy with hopes and fears it heeded not:

## Like a high-born maiden

In a palace-tower,
Soothing her love-laden
Soul in secret hour
With music sweet as love, which overflows her bower:
Like a glow-worm golden
In a dell of dew,
Scattering unbeholden
Its aëreal hue
Among the flowers and grass. which screen it from the view!
Like a rose embowered
In its own green leaves,
By warm winds deflowered,
Till the scent it gives
Makes faint with too much sweet those heavy-winged thieves:
Sound of vernal showers
On the twinkling grass,

## Rain-awakened flowers,

All that ever was
Joyous, and clear, and fresh, thy music doth surpass.

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The long simile is used often in the epic; in fact, it is sometimes counted one of the characteristics of the epic. Milton compares the brilliance of Satan to the sun shining through a cloud, or the moon in eclipse.

> | He, above the rest |
| :--- |
| In shape and gesture proudly eminent, |
| Stood like a tower. His form had yet not lost |
| All her original brightness, nor appeared |
| Less than Archangel ruined, and the excess |
| Of glory obscured: as when the sun new-risen |
| Looks through the horizontal misty air |
| Shorn of his beams, or, from behind the moon, |
| In dim eclipse, disastrous twilight hheds |
| On half the nations, and with fear of change |
| Perplexes monarchs. |
| -Paradise Lost, I, 589-599. |

These long comparisons are one of the chief reasons for the reputed difficulty of the epic; the reader gets to work on the comparison, and he loses its connection with the main story. This difficulty is increased when several similes are combined in one long comparison, as when Milton tries to make clear the size of Satan by comparing him to the fabulous monsters of old, with emphasis on the Leviathan. However, in this passage Milton brings the reader sharply back to the subject in hand by his last line.

> Thus Satan, talking to his nearest Mate, With head uplift above the wave, and eyes That sparkling blazed; his other parts besides Prone on the flood, extended long and large, Lay floating many a rood, in bulk as huge As whom the fables name of monstrous size, Titanian or Earth-born, that warred on Jove, Briareos or Typhon, whom the den By ancient Tarsus held, or that sea-beast Leviathan, which God of all his works Created hugest that swim the ocean-stream. Him, haply slumbering on the Norway foam, The pilot of some small night-foundered skiff, Deeming some island, oft, as seamen tell, With fixèd anchor in his scaly rind, Moors by his side under the lee, while night Invests the sea, and wishèd morn delays. So stretched out huge in length the Arch-Fiend lay.

The conceit is a special form of figurative language consisting of very fine-drawn and ingenious comparisons that are designed not primarily to make clear but to startle by the cleverness and the unexpectedness of the comparison. There was much writing of conceits in sixteenth and seventeenth century English poetry, a game in which Shakespeare indulged and which he also made sport of, as in Sonnet CXXX.

> My mistress' eyes are nothing like the sun, Coral is far more red than her lips' red; If snow be white, why then her breasts are dun;
> If hairs be wires, black wires grow on her head.
> I have seen roses darnask'd, red and white,
> But no such roses see I in her cheeks;
> And in some perfumes is there more delight
> Than in the breath that from my mistress reeks.
> I love to hear her speak, yet well I know
> That music hath a far more pleasing sound;
> I grant I never saw a goddess go;
> My mistress, when she walks, treads on the ground:
> And yet, by heaven, I think my love as rare As any she beli'd with false compare.

John Donne makes his comparisons more serious than most of the writers of conceits, but in his verse we are often conscious of a striving for the unusual.

Go and catch a falling star, Get with child a mandrake root, Tell me where all past years are, Or who cleft the devil's foot; Teach me to hear mermaids singing, Or to kcep off envy's stinging,

And find
What wind
Serves to advance an honest mind.
If thou be'st born to strange sights,
Things invisible to sec,
Ride ten thousand days and nights
Till age snow white hairs on thee;
Thou, when thou return'st, wilt tell me
All strange wonders that befell thee,
And swear
No where
Lives a woman true and fair.

> If thou find'st one, let me know;
> Such a pilgrimage were sweet.
> Yet do not; I would not go, Though at next door we might meet. Though she were true when you met her, And last till you write your letter,

> Yet she
> Will be

False, ere I come, to two or three.
-Song.
Other Figures of Speech. Next to simile and metaphor, synecdoche and metonymy are the most important figures of speech. Synecdoche is a figure in which a part is used for the whole or the whole is used for a part. Metonymy is a figure in which one word is put for another that it suggests. These two figures are very much alike, and often the terms are used interchangeably, though they may always be distinguished. We use synecdoche when we speak of a fleet of ten sail instead of a fleet of ten ships or when we say this will bring my gray hairs in sorrow to the grave, where a part is used for the whole. The whole is used for the part in expressions such as Missouri won when we mean that the football team from the University of Missouri won. Metonymy is used in such phrases as the crown, Shakespeare, the bar, for the man who wears the crown, the works of Shakespeare, and the legal profession.

There are several other ways of writing classed among the figures of speech: personification, apostrophe or address, hyperbolc or exaggeration, litotes or understatement, antithesis or statement of contrasts, and irony. These are, however, to be considered as devices for making language emphatic and vivid rather than means of expressing sense through language, and therefore they will not be considered here.

## 4. Imagery

From the meaning and connotations of words it is but a step to the imagery of literature. Imagery is a general name for the functioning of the imagination in the formation of images; an image is a mental duplication of a sense impression. Suppose, for instance, we read the first stanza of Keats's The Eve of St. Agnes,

> St. Agnes' Eve-Ah, bitter chill it was!
> The owl, for all his feathers, was a-cold;
> The hare limp'd trembling through the frozen grass,
> And silent was the flock in woolly fold:
> Numb were the Beadsman's fingers, while he told

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> His rosary, and while his frosted breath, Like pious incense from a censer old, Seem'd taking flight for heaven, without a death, Past the sweet Virgin's picture, while his prayer he saith.

Not only do we understand the words and the meaning; we get a great many images; the owl hunched down in his feathers, the hare limping through the grass, the beadsman's numb fingers, the frosted breath, even the silence of the sheep. To some people these are almost like a real experience, and for everyone they have a certain vividness as they call to mind the sensations described.

Imagery is not the same as figurative language. A figure of speech usually calls up an image, and probably for this reason the word imagery is frequently limited to figures of speech. As defined here, an image has reference to the sense impression evoked, a figure of speech, to the method of statement by which a sense impression may be evoked or an idea clarified. Moreover, clear images may be aroused without figurative language. In the stanza just quoted from The Eve of St. Agnes, the first six lines contain no figures of speech, but the images are very clear.

Imagery is not to be confused with the connotations of a word, though normally a word's connotations help the imagery. The connotations of a word are the sum total of the impressions that go to make the meaning of the word. An innage is a duplication of a certain sense impression, such as the sight of the frosted breath rising to heaven. If, for instance, the word father is used, each one probably has an image of his own father, but the connotations are kindliness and wisdom.

The Kinds of Image. Since images are duplications of sense impressions, the kinds of image are determined by the kinds of sense impression we can receive. There are obviously the impressions from the five senses; sight, hearing, smell, taste, touch and, in addition, impressions of motion, heat and cold, pain, and organic sensations such as hunger and thirst, nausea, a sense of stuffiness or its opposite, and the general vague feelings of vigor, repletion, drowsiness, discomfort, fatigue, weakness, and the like. Each of these images has as many varieties as the sensations themselves. For convenience, the more important images may be summarized in this table:

1. Images of sight-visual images.
a. Line.
b. Value.
c. Color.
d. Texture.
e. Volume.
f. Perspective.
2. Images of hearing-auditory images.
a. Musical sounds.
b. Noises.
3. Images of motion-motor or kinesthetic images.
4. Images of touch-tactile images.
a. Contact.
b. Pressure.
5. Images of heat and cold-thermal images.
6. Images of taste-gustatory images.
7. Images of smell-olfactory images.

The images of pain and the images from organic sensations are not included in this list because they occur rarely.

Many images involve more than one sense. For example, roughness or smoothness, hardness or softness, and stickiness come from touch and pressure plus motion; sharpness and bluntness, from pressure and pain; clamminess and wetness, from pressure and temperature.

Almost all the kinds of image may be illustrated in The Eve of St. Agnes. The picture is primarily in line when Keats says:

The carved angels, ever eager-eyed,
Star'd, where upon their heads the cornice rests, With hair blown back, and wings put cross-wise on their breasts.

In the following stanza, it is in light and dark,
Out went the taper as she hurried in; Its little smoke, in pallid moonshine, died:

When he describes the moonlight coming through the window of Madeline's bedroom, he uses color,

> Full on this casement shone the wintry moon, And threw warm gules on Madeline's fair breast, As down she knelt for heaven's grace and boon; Rose-bloom fell on her hands, together prest, And on her silver cross soft amethyst, And on her hair a glory, like a saint: She seem'd a splendid angel, newly drest, Save wings, for heaven:-

Images of sound may be images of noise or of musical tone.

Images of Noise.
-and the thronged resort
Of whisperers in anger, or in sport;
He ventures in: let no buzzed whisper tell:
Shuffing along with ivory-headed wand,

## Musical Tone.

The boisterous, midnight, festive clarion, The kettle-drum, and far-heard clarinet,

The silver, snarling trumpets 'gan to chide.
In the end, we have the absence of sounds as the lovers escape from her home, except for the one sound at the end as the door turns on its hinges:

They glide, like phantoms, into the wide hall;
Like phantoms to the iron porch they glide;
Where lay the Porter, in uneasy sprawl,
With a huge empty flagon by his side:
The wakeful bloodhound rose, and shook his hide,
But his sagacious eye an inmate owns:
By one, and one, the bolts full easy slide:-
The chains lie silent on the footworn stones;-
The key turns, and the door upon its hinges groans.
Images of motion portray any kind of movement, whether it be the stealthy escape of the lovers from the hall or the rush and bustle of preparation for a party:

And so it chanced, for many a door was wide, From hurry to and fro.
Keats has fewer images of touch than of the other kinds. However, he does speak of Madeline
. . . trembling in her soft and chilly nest,
and of Porphyro
Brushing the cobwebs with his lofty plume;
and the beadsman,
Another way he went, and soon among
Rough ashes sat he for his soul's reprieve.
Images of heat and cold abound in all literature. The cold in The Eve of St. Agnes is very vividly expressed in the first stanza of the poem

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already quoted as well as in the little room to which Angela conducted Porphyro, where

He found him in a little moonlight room,
Pale, latticed, chill, and silent as a tomb,
or in the description of the bed of Madeline already quoted. This chilly bed is contrasted with the warmth as Madeline goes to sleep:
. . . the poppied warmth of sleep oppress'd
Her soothed limbs, and soul fatigued away.
Images of taste and smell are very close kin. The psychologists tell us that there are only four tastes that are separable from smell: sweet, sour, bitter, and salt, and some have claimed that there is no such thing as a definite image of smell in the sense in which we have clear and distinct visual images. However, one seems to get images of both taste and smell from such a stanza as this:

And still she slept an azure-lidded sleep, In blanched linen, smooth, and lavendered, While he from forth the closet brought a heap Of candied apple, quince, and plum, and gourd; With jellies soother than the creamy curd, And lucent syrops, tinct with cinnamon; Manna and dates, in argosy transferr'd From Fez; and spiced dainties, every one, From silken Samarcand to cedared Lebanon.

Even better images of smell are found in Keats's Ode to a Nightingale,

> I cannot see what flowers are at my feet,
> Nor what soft incense hangs upon the boughs,
> But, in embalmed darkness, guess each sweet
> Wherewith the seasonable month endows The grass, the thicket, and the fruit-tree wild;
> White hawthorn, and the pastoral eglantine;
> Fast-fading violets cover'd up in leaves;
> And mid-May's eldest child,
> The coming musk-rose, full of dewy wine, The murmurous haunt of flies on summer eves.

It is worth while, however, to notice that many images that are carelessly considered images of touch, taste, and smell, do not involve these sensations. With the jellies soother than the creamy curd Keats is conscious primarily of touch and motion, and in the syrops, of their transparent beauty.

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Variations in Images. Images differ in clearness, fidelity, and consistency.

Some images are almost as vivid as actual sense impressions; others are very vague. In literature the degree of vividness is determined largely by the kind and amount of detail given. The word jelly calls up images of color, taste, and touch, though no one image is especially vivid. But when Keats speaks of "jellies soother than the creamy curd" the tactile image is made very vivid, and the images of taste and color become negligible.

When Coleridge says:

> The water, like a witch's oils, Burnt green, and blue and white.

And every tongue, through utter drought, Was withered at the root; We could not speak, no more than if We had been choked with soot. -The Rime of the Ancient Mariner.
the images are very clear. But when Herrick says:
Gather ye rosebuds while ye may,

- Old Time is still a-flying;

And this same flower that smiles today,
Tomorrow will be dying.
-To the Virgins, to Make Much of Time.
the images are not vivid. And there is practically no image at all when he goes on to say, in the same poem:

That age is best which is the first, When youth and blood are warmer;

It is sometimes helpful to rank images according to their vividness by some scale such as this:
a. As clear as in reality.
b. Very clear.
c. Clear.
d. Indistinct.
e. Very vague.
$f$. No image at all.
Images have been listed in the order in which they are most commonly experienced; that is, the average person has visual images more readily than auditory and auditory images more readily than motor.

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This does not mean, however, that there are not very wide individual differences. To the musician, the auditory images are probably clearer than the visual, and some people are more conscious of motor images than of either auditory or visual. In everything that has to do with imagery, the individual must be reckoned with, and it must be recognized that no two persons will have exactly the same images.

The character of the image depends in every case on the person's previous experience. A person who is color-blind cannot have an image of color.

Images may be exact or inexact. An exact image is true or faithful to the original. Shakespeare is true when he speaks of

That time of year . . .
When yellow leaves, or none, or few, do hang
Upon those boughs which shake against the cold, —Sonnet 73.

Longfellow is not true in the next to the last line of this stanza from The Wreck of the Hesperus, ${ }^{1}$ because snow does not hiss as it touches the water, and billows in a heavy sea are not like yeast.

Colder and louder blew the wind, A gale from the Northeast, The snow fell hissing in the brine, And the billows frothed like yeast.

Joyce Kilmer is essentially untrue when he speaks of the tree
. . . whose hungry mouth is prest
Against the earth's sweet flowing breast.
-Trees. ${ }^{2}$
The roots of a tree do not press against the earth as do a child's lips against its mother's breast. The tree goes down into the earth; as soon as one tries to realize the image of a tree like a child, the tree begins to topple.

Errors in fidelity of images come primarily from inattention and haste. The author has not noticed some particular sense impression very carefully, or else he is in a hurry and does not take the time to find the exact word to express his idea. The lines about the tree should probably be ascribed to the first of these reasons; those about the billow and the sleet, to the second.

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Judgment of the fidelity of images depends primarily on experience regarding the sense impressions concerned. To judge the phrase cold as a bulterfly's wings we must know if butterffies' wings are cold. Moreover, we judge by the general truth, not by the particular truth of a specific time or occasion. Shakespeare's description is true to our knowledge of the way trees usually are. Joyce Kilmer's lines are not; it does not matter if this particular tree seemed to sit on top of the ground; most trces do not.

Consistency of imagery is closely akin to fidelity; in fact, it is a phase of fidelity and of vividness. If an author has truly realized an image, he will be consistent in his use of it. But if he uses an image without knowing it very thoroughly, he will not be consistent. As a result he will confuse his images.

Let us take the entire poem Trees, by Joyce Kilmer, from which we quoted two lines earlier: ${ }^{1}$

> I think that I shall never see
> A poem lovely as a tree.
> A tree whose hungry mouth is prest Against the earth's sweet flowing breast;
> A tree that looks at God all day, And lifts her leafy arms to pray;
> A tree that may in Summer wear A nest of robins in her hair;
> Upon whose bosom snow has lain;
> Who intimately lives with rain.
> Poems are made by fools like me, But only God can make a tree.

In this poem, Kilmer changes the image in every stanza without any warning or any explanation. First the root of the tree is a child with lips pressed against the earth; next the tree is like a person whose head is on top of the tree, and the branches are arms outstretched in prayer; in the following stanza these same branches, covered with leaves, are the hair of a woman's head; and in the one following that they become her bosom.

## ${ }^{1}$ Ibid.

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The poem runs along very smoothly, even beautifully, until one stops to look at the images carefully. Then one grows tired; the images shift too rapidly; and one gets the feeling that the author wrote it off without paying very close attention to the images he evoked.

The Content of Images. Images may be formed of experiences one has had or of experiences one has not had. Even the most unimaginative person has had images of himself doing what he has never done. In fact, we are interested in having new experiences largely because we have formed images of ourselves in those circumstances. Nor is this all; we form images of experiences that could not happen. We imagine ourselves flying with wings or being shot to the moon by long-distance guns, talking with birds, etc.

If the author has a vivid image of an experience it will seem as though it had happened, whether or not it did happen, whether or not it could happen. In Coleridge's Christabel, Geraldine casts a spell over the "lovely lady, Christabel," and Christabel cannot tell her father that Geraldine is a witch. Most of us who read the poem do not believe in witches or their spells; Coleridge did not when he wrote the poem, but as we read the poem it seems as though there were witches, and we believe in the spell. As Coleridge has himself said in another place, we put aside our disbelief for the time being.

We do not, however, put aside our normal disbelief easily. Coleridge has prepared us for the scene that is coming. There is the setting; it is the hour when supernatural beings are most in evidence, midnight; the owl is hooting, and the night is chilly; the moon, though at the full, shines dully through a gray cloud. The dog barks whenever the clock strikes, and there is just a touch of the supernatural, "Some say, she sees my lady's shroud." In short, it is a night for strange happenings, for romance. On this night Christabel goes alone to the forest to pray for her lover; there she hears a groaning and, following the direction of the sound, finds a beautiful lady in great distress. She takes this lady home with her, but almost at once we begin to get signs that all is not right. An evil spirit cannot cross the threshold of a Christian home; so Geraldine is not able to enter the door and must be helped by Christabel.

> The lady sank, belike through pain, And Christabel with might and main Lifted her up, a weary weight, Over the threshold of the gate:
> Then the lady rose again,
> And moved, as she were not in pain.

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As the two go to Christabel's chamber, there are other signs: the dog makes an angry moan in its sleep, and one brand in the fire blazes up as Geraldine passes. In the bedchamber the trouble grows greater; Christabel gives the lady some wine made by her mother, now dead. Geraldine starts to say she wishes the mother were there, but the mother's spirit rises to protect her daughter, and Geraldine has to force her away,
"Off, wandering mother! Peak and pine I have power to bid thee flee."
and again,

> "Off, woman, off! this hour is mineThough thou her guardian spirit be, Off, woman, off! 'tis given to me."

When Geraldine says she is going to pray, Christabel gets in bed, but she cannot sleep, she rises halfway in bed. Then she sees Geraldine in her true shape, and she knows who she is. Coleridge never tells us what Christabel saw; it was

> A sight to dream of, not to tell!
> Oh, shield her! shield sweet Christabel!

When Geraldine realizes that her secret is known, she takes Christabel in her arms and utters the spell:

> In the touch of this bosom there worketh a spell, Which is lord of thy utterance, Christabel!
> Thou knowest to-night, and wilt know tomorrow,
> This mark of my shame, this seal of my sorrow:
> But vainly thou warrest, For this is alone in
> Thy power to declare, That in the dim forest
> Thou heard'st a low moaning,
> And found'st a bright lady, surpassingly fair; And didst bring her home with thee in love and in charity, To shield her and shelter her from the damp air.

Because Coleridge has prepared us, we believe in the witch and in the power of her spell.

## Reperences

Boas, R. P.: The Study And Appreciation of Literature, Chap. II, 1931.
Fowler, H. W.: Articles on Simile and Metaphor, Technical Terms, Modern English Usage, 1926.

## THE HUMANITIES

Genung, J. F.: Practical Elements of Rhetoric, Part I, Chap. IlI, 1886. Hazlitt, Wm.: Lectures on English Poets, 1818, Lecture I, "On Poetry in General." McKnight, G. H.: English Words and Their Background, 1923. Perry, B.: A Study of Poetry, Chap. III, 1920. Untermeyer, L., and Davidson, C.: Poetry-Its Appreciation and Enjoyment, 1934.

## Questions

1. Analyze the sentence structure of fairly difficult prose or verse, such as Milton, Paradise Lost, Areopagitica, Sir Thomas Browne, Hydriotaphia, Walter Pater, The Child in the House, Aldous Huxley, Point Counterpoint, Swinburne, The Garden of Proserpene. Write out the simple subject and predicate of each sentence.
2. Of ten prose selections, characterize the choice of words.
3. Do the same for ten verse selections.
4. Do you find a certain choice of words characteristic of a magazine, an author?
5. From any list of ten clear images, how many are also figures of speech?
6. Study the heroic simile in Paradise Lost, Book I, or The Faerie Qreene, Book I.
7. In any poem, note the types of figure of speech used.
8. Study the imagery and the figures of speech in a newspaper article, a magazine story.
9. Rate your own ability to get images according to the scale on page 313. Do you find that you are more sensitive to certain types of imagery than to others?
10. Look back on any book you have read or any cinema you have seen. Do you recall more easily the imagery or the narrative?
11. The Eve of St. Agnes and The Rime of the Ancient Mariner are very rewarding for the study of imagery. Look for all the individual points named in the chapter.
12. Study the imagery of Dante in the Divine Comedy: Hell.

## PART IV <br> Organization

## XIII

## Organization_General Considerations

## 1. Definition

Plato, and after him, Aristotle, compared a discourse to a living organism, and the comparison has not been improved for any work of art. ${ }^{1}$ In any living organism there are various parts, and for purposes of analysis we can divide an organism into its parts, as, for instance, we divide the body into flesh, blood, bones, muscles, etc. Each part is essential to the life of the organism; the body would cease to live if blood or bone were entirely removed. The parts also have no life apart from the whole; flesh or bone may be taken from the body, but at once they cease to be living flesh and bone.

In the same way we can divide a work of art into its various elements: line, color, harmony, rhythm, imagery, tone color, etc. And, just as in the organism, each part is essential to the whole, and no part has any real significance apart from the whole. We have been studying the parts; now we are to study the arrangement of the parts in the whole, which is organization.

In order to show the special characteristics of organization, as distinguished from elements, we shall take a particular example. Grant Wood decides to make a painting of a typical Iowa farmer and his wife. He plans to put them before a house in the style called American Gothic and to use that as the title and the motif of his painting. He has decided on the people who are to pose for him. In other words, he has his idea, and he is an experienced painter; he knows how to get the effects he wishes. What are his special problems of organization?

There is first the problem of size. Is the painting to be large or small? This is called scale. There is also the arrangement of figures. Shall the farmer and his wife be on the same side of the picture, or

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Fig. 100.
Fig. 100.-Grant Wood, (1892


Fig. 101.
-). American Gothec (1930).

Oil on beaverboard. Size: $297 / \mathrm{s}$ by 25 inches. Chicago, Art Institute of Chicago. (Art Institute of Chicago.)

Fig. 101.-Drawing of American Gothic to show organization.
shall one be on one side and the other on the other? Shall they be looking at each other or straight ahead, or shall both be looking at the same thing? This is the plan.

To make the different parts of the picture hold together he repeats certain lines and shapes; the rounded oval of the woman's face is found in the cameo at her neck, the braid on her apron, the pattern of the window curtain and the apron, the farmer's spectacles, the button on his shirt, etc. This is coherence through repetition. But with it all he manages to keep the emphasis of the painting on the two faces. This is the center of interest.

These, then, are the major problems of organization. The artist does not plan them in any definite order; he would probably say that they come together; but they are essential factors in his organization. Whether he be a sculptor, an architect, a musician, a poet, or a dancer, he has these same problems of organization.

1. Scale. How big or how long is it?
2. Plan. What is the arrangement of the parts in the whole?
3. Repetition. Do the various parts belong together? How are details repeated to unify the plan?
4. Center of interest. Does any one part of the work receive major stress?


Fig. 102.-Watteau (1684-1721). Gilles (1716).

Oil on canvas. Height: 6 feet $1 / 2$ inch. Paris, Louvre.


Fig. 103.-Watteau (1684-1721). Le Mezzetin (1716-1718).
Oil on canvas. Size: $213 / 4$ by 17 inches. New York, Metropolitan Museum. (Metropolitan Muscum of Art.)

## 2. Scale

Scale is size or length: the length of a poem, the size of a picture, the number of minutes required for the playing of a symphony, the size of a building.

The scale of any work of art is so nearly obvious that it is taken for granted and often overlooked, especially in the visual arts, when one is forced to study copies instead of originals. The person who reads a poem or listens to a piece of music knows how long it is, but the person who has been studying pictures only in reproductions is frequently surprised when he sees the size of the originals. Take, for instance, two pictures by Watteau: the painting of the jester, Gilles, is about life size, the picture being six feet in height, but that of the guitar player, Le Mezzetin, is less than two feet in height. Again, no one looking only at copies of the paintings of Chardin would suspect them to be the diminutive things they are. The Still Life in the National Gallery in London is only fourteen inches in height, and the figure painting, called Kitchen Maid Returning from Market is the same size, about eighteen inches high. A great deal of the charm of the Erechtheum comes from the fact that it is a small building by the side of the


Fig. 104.-Jean Baptiste Chardin (1699-1779). Kitchen Maid Returning from Market (1739?). Oil on canvas. Height: $173 / 4$ inches. Paris, Rothschild Collection.

Parthenon. The contrast in size of the two buildings makes the Parthenon seem sturdy, dignified, even massive and the Erechtheum, slight and graceful.

Any art has certain natural limitations in scale. A building cannot be smaller than a certain size, nor can it be indefinitely large. A statue is not much over life size unless it is to be placed where it can be seen only from a distance. Music ordinarily is limited to what can be heard without fatigue at a single sitting. There are exceptions: Bach's St. Matthew Passion is nearly five hours in length and now is heard in two sittings. The four operas of The Ring of the Nibelung take a much longer time, but they are recognized as four different operas that constitute a greater whole, and are performed on four different nights. Literature has fewer natural limitations in scale than any of the other arts, since it may range from a single poem or aphorism of a line or two to a history or novel of a number of volumes.

Within its limitations there is all possible variety in any art. A building may be anything from a one-room cottage to an office building of a thousand rooms. A statue may be a tiny affair like the Snake Goddess, six and one-half inches high, or a colossal figure many times more than life size; a musical composition may vary from a minuet a half minute in length to the symphony of an hour or the opera of three hours.

The scale has great influence on the completed work, since it sets up certain limitations, and the finished work must be accomplished within those limitations. The influence of the scale is seen also in the amount of detail and the attention given it. The smaller the work the greater the attention given to minute detail. The large work obviously contains a greater number of details, but in the small work they are executed with more exquisite care. In a four-line poem, a single word that is poorly chosen will mar the whole, but in a novel of three hundred pages, there is not such care for each word. In a fresco that covers a large wall the details need not be so carefully done as in a small painting in tempera.

## 3. Plan

Plan is the order or design in which the elements are put together. In architecture, for example, plan tells how the windows and doors are placed, the height and the width of the completed structure. In music, plan states how the themes follow one another. In literature, plan shows the reason behind the ordering of the ideas. In this poem from $\Lambda$ Shropshire Lad ${ }^{1}$ Housman is following the order of time, since he is talking first of the past and then of the present:

> Oh, when I was in love with you, Then I was clean and brave, And miles around the wonder grew How well did I behave.
> And now the fancy passes by, And nothing will remain, And miles around they'll say that I Am quite myself again. -Oh, When I Was in Love with You.

Plan may be compared to the skeleton of the body or the blue print from which a house is made. It is the essential structure on which the

[^24]whole is built; therefore it is frequently identified with organization, and various critics, in speaking of organization, mean only what we mean by plan.

Each art has certain fundamental plans or systems of organization. Since these necessarily differ in the different arts, they will be discussed later. In a later chapter also will be discussed repetition, the way in which the various parts of a plan are held together. For the present we shall discuss only certain general aspects of plan in any art.

First we notice the basis on which the work is organized. Each art has a number of different elements; all are of importance in the finished work, but not all are of the same importance in the framework of the organization. To revert to the figure of the human body, flesh and blood are just as important as bone, but a man's body is constructed on a framework of bone, not of flesh or blood. So in organization all the elements are essential, but only a few are used as a basis for organization. Literature, for instance, has both sound and sense, but a poem or a story is very rarely put together as a sequence of sounds; almost universally it is organized on the basis of sense. In the poem from Housman quoted above, the sound fits the sense, but no one would ever say that the second stanza follows the first because Housman is building up sounds in that sequence. Music is most often organized on the basis of melody, and painting on the basis of line and shape; there are other bases for organization, but these are the most common.

Second, it is important that the plan be clear, whatever the basis of organization. The plan tells one where he is and where he is going. If one does not know where he is going he becomes confused and is apt to turn away in disgust. When, however, we say the plan must be clear we do not necessarily mean the casual critic must recognize the plan as such. The average person looking at art is not able to identify the plan any more than he is able to give the skeleton of the body, but he must feel that the parts fit together, and, as we said, he must know "what it is all about." He must feel that he is getting somewhere. He would be bored if called on to stop and analyze the reason why the first stanza of Housman's poem precedes the second, but he is definitely conscious that they make sense in that order.

In the visual arts the natural groupings are usually clear. The Sistine Madonna by Raphael, for example, is in the general shape of a pyramid, the Madonna in the center, the Pope on one side, and the saint on the other. At the bottom of the picture are cherubs, one on the right and one on the left. If the picture is divided into four dia-


Fig. 105.-Raphael (Raffacllo Sanzio) (1483-1520). Sistine Madonna (ca. 1515).
Oil on canvas. Height: 8 feet $81 / 4$ inches. Dresden, Gallery. (Metropolitan Museum of Art.)
monds by means of diagonal lines, the Madonna and child will be in the top diamond, the Pope and the saint in the two middle diamonds.

In the time arts the artist always gives certain natural indications of his arrangement. Any long work is divided into sections that are called books, chapters, paragraphs, parts, acts, episodes, or movements, which automatically and arbitrarily show the divisions in the artist's thought. Within any one section, also, the artist makes clear changes in his thought by means of transitions or transitional passages. In music the transition may be a series of chords, a scale, or even a rest. In literature the author cannot mark a rest, as in music, but he can indicate the transition in many other ways; he can introduce a new passage with some reference to the passage of time or to some change in circumstances. Even in the two-stanza poem by Housman just

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quoted we find two such indications: "Oh, when" to indicate the past; "And now" to call attention to the change. An author will sometimes


Fig. 106.-Drawing to show organization of lines and figures in Sistine Madonna. state in words a change of subject, as when Chaucer says, "Now I will leave off talking of Theseus and begin talking of Palamon and Arcite."

One of the most beautiful examples of a poet's calling attention to his plan is found in Shelley's Ode to the West Wind. In the first three stanzas, Shelley writes about the wind as its power is manifested in the three elements: earth, air, and water. It can be seen as it blows the leaves on earth, the clouds in the air, the waves of the water. In the fourth stanza he compares his own strength with the power of the wind, picking up the three earlier manifestations of that power.
If I were a dead leaf . . .
If I were a swift cloud . . .
A wave . . .
He repeats them again at the end of the stanza.
Oh, lift me as a wave, a leaf, a cloud!
In the last stanza, which is a prayer for the power of the wind, he leaves the wave and the cloud for his first and most characteristic evidence of the wind's power in the leaf:

Make me thy lyre, even as the forest is:
What if my leaves are falling like its own!
The tumult of thy mighty harmonies
Will take from both a deep, autumnal tone, Sweet though in sadness. Be thou, Spirit fierce, My spirit! Be thou me, impetuous one!

Drive my dead thoughts over the universe
Like withered leaves to quicken a new birth!
And, by the incantation of this verse,

# ORGANIZATION-GENERAL CONSIDERATIONS 

> Scatter, as from an unextinguished hearth Ashes and sparks, my words among mankind! Be through my lips to unawakened earth

> The trumpet of a prophecy! O, Wind, If Winter comes, can Spring be far behind?

Often a new type of art seems confused because people have not yet learned to understand the type. Beethoven's Fifth Symphony, which is now a favorite for popular concerts, was thought confusing when it was first played. Browning's work was found very abstruse at the start. There is, of course, the famous story of the person who read Sordello and said that he understood only two lines in the poem, the first and the last, and they were both lies:

> Who will, may hear Sordello's story told:
> Who would, has heard Sordello's story told.

The same kind of complaint is now being made of modern literature, modern music, and modern art, of the prose of Joyce, the music of Hindemith, and the paintings of Picasso: "What is it all about?" We do not know what the future judgment on these works will be. A plan that seems confused because it is a new form will in time be understood, and then it will be clear; but a plan that is itself confused will remain confused throughout all time. The Greek statue of the Farnese Bull will always be confused; and, in spite of its many excellent single figures and scenes, so will Michelangelo's Last Judgment.

This brings one to the question of work without plan and of the necessity for plan. Every good work has plan, and a detailed study of the plan serves only to bring out more clearly the beauty of the work. But we cannot say that logical organization is essential, and, oddly enough, the feeling of confusion we have just been talking about is not always synonymous with lack of plan. We may feel lost when we are going down the right road, and we may not feel lost on a road that gets nowhere.

The demand for plan varies according to the ease with which it is grasped. In the visual arts plan is easily grasped, and it is very nearly essential. Pictures, paintings, and sculpture without clear plan are rare. Music stands at the other end of the scale; the average person does not distinguish form in music very easily, and therefore he is not insistent that what he hears be in good form. The "formless form," the type of composition that has no definite form, is found only in music: the fantasy, the impromptu, and the étude.


Fig. 107.-Farnese Bull (ca. 150 в.c.).
Roman marble after bronze original. Height: 12 feet. Naples, Museum. (Alinari.)
In consciousness of form, literature stands halfway between music and the visual arts. Words make sense; and the casual critic demands that the various parts hold together and come to some kind of conclusion, but he does not demand form in literature with the insistency with which he demands clear balance and organization of parts in painting or architecture.

The conditions under which works of art are known also have something to do with our sensitiveness to form. For the ordinary layman, the performer comes between the composition and the listener in music; his personality and manner of playing give a certain cohesion and unity to the composition no matter how formless it may be. The visual arts appeal directly to the critic without any intermediary whatever, and they must stand or fall by themselves; hence our demand for form. Here, again, literature occupies a midway position. Originally all literature was known through an interpreter, as music is
today, but since literacy has become almost universal the writer appeals directly to his audience. In the theater and the lecture there is still the interpreter and hence the question of personality. Unquestionably, the personality of Emerson, his manner of speaking, the fact that he could create emphasis by his voice, served to give the members of his audience a sense of form in what he had to say that is lacking when one knows only the printed page. In the theater, also, the personality of the actor will often hold together a play that is otherwise quite formless. Even with these provisos, however, the fact remains that we are less sensitive to form in music and literature than in the visual arts.

The sensitiveness to plan or organization and the presence or absence of the interpreter probably account for the attitude of the public toward changes in the original. No artist of any standing would ever change a painting or statue when he is copying it. But in music and in literature, especially in the drama, such practices are common. The director alters and rearranges the play to suit his plans. The musician will change the instrumentation or alter the plan by leaving out certain parts or shortening others. He may even stop playing what the musician wrote and throw in a passage entirely his own.

Last is the question of originality of plan. Beginners frequently try to devise new plans in the hope thereby of avoiding the commonplace and acquiring merit, but many of the world's greatest masterpieces are built on simple and obvious plans. The Parthenon and Notre Dame are so simple and clear that any child can carry away their main outlines after seeing them a short time. The Sistine Madonna is built on the simplest scheme imaginable. Bach's chorale, O Sacred Head Now Wounded, follows the plan of any simple song. In Oedipus the King, each scene gives one additional clue toward solving the mystery of the king's identity until it stands clear that Oedipus is himself the unclean thing that has brought a curse on the land. Othello is planned just as simply. When the play opens Othello and Desdemona have just been married; their love for each other is perfect and whole. Othello begins to get suspicious of Desdemona, and his suspicions grow until in the end he is convinced that she is unfaithful, and he kills her. It is not true that the great work of art has an elaborate, intricate, or unusual plan.

Neither is it true that the better the plan the better the work. The plan is only the skeleton, and a good plan does not necessarily make a good work any more than a good skeleton makes a beautiful man.

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## 4. Center of Interest

The center of interest in a work of art is just what the name indicates, the center or focusing point of the composition. It may be defined as the dominance of those parts that demand attention. In the visual arts it is known as focus, and in the auditory arts, as emphasis or climax. There are, of course, many types of art that do not have a center of interest, especially among the applied arts. All the arts of indefinite scale belong to this class-as, for example, wallpaper and textiles. The pattern is repeated over and over without any emphasis on one yard more than on another; a single unit in the pattern may have a center of interest, but the material as such has none.

When, however, a work of art is contained within definite limits, there are usually certain points that are more interesting than others. If it is only the top of a box or the seat of a chair, some point is distinguished from the rest. We can hardly imagine a picture in which all parts are equally interesting. A speaker or a musician who has no climaxes soon becomes dull and tiresome. A factory building with hundreds of windows all just alike lacks a focus for the attention.

In each art there are certain natural ways of arousing interest, and the artist usually makes use of them. In the visual arts, for example, the eyes tend to follow lines, whatever their direction. A vertical or a diagonal line is more interesting than a horizontal. A triangle or a rectangle is more interesting than a square or a circle. A triangle is especially interesting because the eye goes inevitably to the apex; hence the pleasure in spires on buildings. The eye tends also to follow line that is imagined as well as that which is drawn. If a man is pointing or even looking in a certain direction, the eye of the spectator turns in that direction, and when two or more lines converge on a single spot it always becomes a focus of interest. This is one reason for the great interest in perspective and in distant views of all kinds; the perspective lines focus on a single point, and the eye tends to follow them. Distance is interesting, however, even without perspective lines, because of the natural attraction of the horizon. In a scene showing only aerial perspective the eye is attracted at once to the horizon. A cinema director will not usually allow a scene showing a distant view unless the view is of primary interest in the picture; when there are figures he cuts off the perspective so as not to divide the interest.

Light values are more interesting than dark values, for light is more interesting than shadow. The eye always tends to follow a bright


Fig. 108.-Giorgione (ca. 1480?-1510), also attributed to Titian (1477-1576). The Concert (ca. 1510).
Oil on canvas. Height: 3 feet $61 / 2$ inches. Florence, Palazzo Pitti.
light. In driving on the highway at night it is difficult to look away from the headlights of the approaching cars. And if a light appears in a dark room all eyes go to that spot. If the spot is moving it is almost impossible to take one's eyes from it. This principle is used a great deal in stage design as well as in painting. The director or the painter who finds his scene unbalanced may always get a balance by introducing a bright light or a light value on the opposite side. In The Concert, for example, Giorgione gets balance by the light sleeve of the man at the right. The sleeve is of no importance in itself, but it attracts attention because it is light. Bright colors are also more interesting than dull colors, and warm colors are more attractive than cool colors.

Certain parts of a picture also attract the eye. As a rule the most interesting spot is a point near the middle, slightly above the center. According to the experiments of the psychologists, the position of greatest interest is approximately the spot where the arms intersect the beam in the Latin cross. The cross in which the horizontal piece cuts the vertical in two equal segments is, in comparison, hard to look at.

Certain features also are of greater interest than others. In the exterior of a building it is the door or the towers; in an interior it is the fireplace or the windows or some one special article of furniture. In a man the face is most interesting and, next to the face, the hands.

In the auditory arts interest is aroused by loudness and speed. In general, also, high notes are more interesting than the low notes. A cry of distress is loud, fast, and high. A grunt of indifference is slow and low-pitched. If one hears a person talking fast, in a high-pitched, loud voice, one suspects an emergency. One shouts, "Fire!" in a loud, high tone, as fast as possible. Slow and deliberate speech in a low tone is not exciting.

The time arts have an advantage in that they can prepare for a climax, whereas in the visual arts the entire composition is scen at a glance, and there is no possibility for preparation in this sense. In the beautiful Easter Hymn of Palestrina, the "Alleluia" is repeated three times, each time higher in pitch. The Chopin Prelude No. 7 has a single phrase that is repeated over and over, with the climax on the highest pitch. Ravel's Bolero repeats a single theme that increases in tempo and in loudness until the effect is almost overpowering. It is said that when this piece was first played in Boston the usually staid audience shouted and cheered in their excitement. However, one can get interest in other ways; often a dramatic whisper is as exciting as a loud cry, and silence rightly used may be more thrilling than a loud noise.

In the time arts, also, suspense is a source of interest. Suspense in music is largely a matter of keys and cadences. We expect a certain chord, a certain ending of a phrase, and it does not come. In literature the suspense arises from the meaning or the outcome of a plot. In this little poem by Ridgely Torrence, called The Son, ${ }^{1}$ various hints arouse our suspicions, but we do not know the whole story until the end.

> I heard an old farm-wife, Selling some barley, Mingle her life with life And the name "Charley."

Saying: "The crop's all in, We're about through now;
Long nights will soon begin, We're just us two now.

[^25]> "Twelve bushel at sixty cents, It's all I carriedHe sickened making fence; He was to be married-
> "It feels like frost was nearHis hair was curly. The frost was late that year, But the harvest early."

Conflict is another way of getting emphasis. Wherever it is found, conflict is interesting; we pay no attention to two cocks or two birds until they get in a fight, then we are all eyes. In music it may be conflict of rhythms, of melodies, or of instruments. Conflicts come usually in melody. In the 1812 Overture, Tschaikovsky has a Russian anthem fighting the hymn of the conquerors, The Marseillaise. The French song keeps on coming up, but in the end it is drowned out by the Russian music. Counterpoint is the most exciting kind of music to listen to, because one melody is fighting against another. It is, however, in literature that we are most conscious of conflict as a source of interest. It has been said that there can be no plot without conflict. Certainly we get interest when there is a conflict. Take the beginning to King Lear. The old king is dividing his kingdom; he asks his eldest daughter how much she loves him; she tells him, and he gives her a part of his kingdom. He repeats the performance with the second daughter and expects to do it with the third. If all had gone smoothly with her the crowd would have gone home rather bored, and there would have been no play, but the third daughter Cordelia is not so docile. The conflict begins the moment she says, "Nothing, my lord," in answer to the king's question, "What can you say to win a part of the kingdom greater than either of your sisters?" and it is never resolved completely until we see King Lear fall dead on the corpse of Cordelia.

The artist may use just one of these devices, but ordinarily he employs several of them. He may have only one point that receives any stress. More often he has several points that are interesting, though only one is the real center. In the Mona Lisa, the face is the real center, but the hands are almost as interesting. In the Bolero, the great climax comes at the end, when Ravel changes key after innumerable repetitions of the theme in the same key, but each repetition of the theme has its own climax. In King Lear the major interest is the story of King Lear. The climax of Lear's story comes when the king is left to


Fro. 109.-William Blake (1757-1827). When the Morning Stars Sang Together (1825), from the Book of Job.
Water-color drawing on paper for the engraving. Height: 11 inches. New York, Morgan Library.
wander alone in the woods on a night of terrible storm, but there is the subordinate interest of the story of Gloucester and his sons.

There should, however, be a single major interest; otherwise the various centers make for confusion. This would be the case in King Lear if one were more interested in the story of Gloucester than in that of Lear. This is almost the case in Much Ado about Nothing, in which the hero and heroine of the subplot, Benedick and Beatrice, are brilliant and exciting, whereas Hero and Claudio, the chief characters of the main plot, are pale and stupid. Accordingly, this play, which has some of Shakespeare's most brilliant characterization, is but rarely played. Blake's engraving When the Morning Stars Sang Together is a great work that fails in the sense that it has not a sufficiently well pronounced center of interest. The picture is in three parts. At the bottom Job is seen on earth with his wife and his three counselors; in the center is God with outstretched arms; and at the top are the morning stars pictured as four maidens with outstretched wings and uplifted arms. There are, fundamentally, three pictures, not one.

## References

For references on form see the chapters on the different arts.

## Questions

1. Choose three examples each of painting, sculpture, and architecture from this text; study the scale by comparing them with objects that you know in the original. Is this statue larger than that? How large is this cathedral in comparison with the buildings you are familiar with? What is the size of this painting? Does the knowledge of the exact scale influence your judgment of the work?
2. Consider the following from the point of view of scale. Would they be better if they were longer or shorter? Do you find any parts that should be longer or shorter? Mitchell, Gone with the Wind.
Steinbeck, The Grapes of Wrath.
Thackeray, Vanity Fair.
Richardson, Clarissa Harlowe.
Beethoven, Symphony No. 3 in Efat major (the Eroica)
Brahms, Symphony No. 1 in C minor.
Rachmaninov, Symphony No. 2 in $E$ minor.
Tschaikovsky, Symphony No. 5 in $E$ minor.
3. Compare the cinema version of a novel with the original. What is gained or lost by the difference in scale in the case of Gone with the Wind, The Grapes of Wrath, Vanity Fair?
4. Study the acting version of a play together with the original. Have the deletions improved or hurt the scale?
5. Most musicians nowadays omit some of the repetitions in the works of the composers of the classic period. Play the music as written and as usually performed.
6. Study the effect of comparison on apparent scale in all the arts.

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7. Test in your experience the truth of the statement that we do not like art if it seems to us without plan. Study, in this connection, the essays of Emerson and Bacon, the poems of Walt Whitman, the music of Prokofiev and Honegger, the paintings of Klee and Kandinsky.
8. Test for yourself the statements about sensitiveness to form in the various arts.
9. Study early criticisms of some accepted masterpieces to see how often new work is bra ided "formless."
10. Study the centers of interest in
a. The decoration of a room.
b. A dress.
c. A person.
d. A building.
11. Check in the world around you the truth of the statements about interest in music and literature.
12. Chart your interest in a poem, a play, a cinema, or a symphony by means of lines showing high peaks of interest, low levels, etc.
13. What do you make of the criticism that Shakespeare has allowed the subplot to be more interesting than the main plot in Much Ado about Nothing?
14. Pick out a number of pictures showing both earth and heaven or angels and men on earth. Note the trouble the artist has taken to connect the two worlds. Has he been successful?

## XIV

## Plan in the Visual Arts

## 1. Distinguishing Factors of Plan in the Visual Arts

Plan in the visual arts is usually known as design or composition. By design is meant the arrangement of the parts, the placing of the objects in the composition. Thus, in the painting American Gothic, which was used as an example of organization in the previous chapter, the plan was defined as the arrangement of the two figures side by side, with the house in the background. The problems of design, however, are not quite so simple as this statement would indicate, because in a successful design a number of different factors are involved. First, of course, is the arrangement of the parts, which determines the type of design to be followed. And second is the shape of the frame, for a design is pleasing or not as it fits its frame. But both the arrangement of the parts and the shape of the frame must be determined in accordance with the laws of proportion and balance.

Proportion and balance are primarily concepts in the space arts; they are found in the time arts, but they are much less important in the time than in the space arts. The reason may be that one can never know at the same time the parts to be compared. One can look at a picture and say the frame is too long or the head is too near the top, but in a novel or a musical composition he can know only a fraction of one part at a time; the remainder either was or will be, and memories or anticipations cannot be judged as exactly as the present reality. Proportion is judged both in music and literature if it is said that some part is too long or too short. The slow movement of Beethoven's Eroica Symphony (No. 3), for example, is commonly admitted to be too long, and conductors usually omit some of the repetitions when they play it.

There is, however, no such thing as balance in music and literature comparable to balance in the visual arts. The word is used, but it has no meaning different from proportion. In music, again, if a program

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is made up of compositions of a single type, it is said that the program is not balanced, or if one part of a composition is too long the whole may be said to lack balance. In literature, if the subplot receives too much of the author's time or if a point is obscure because it is not told in sufficient detail, we say the piece lacks balance. But in our judgment of both literature and music the word proportion could be substituted for balance with no change in meaning.

In the visual arts, however, balance and proportion are not the same. A very large house with a door in the middle and one tiny window on each side is balanced, and yet it shows poor propertions. Most of the poor architecture we see shows perfect balance; it fails of beauty in its proportions.

## 2. Proportion

Proportion is a mathematical concept for relative length or size. It is never an absolute but always a relative matter. A picture is not too large or too small in itself, but it is too large for this space or too small for that. One side of a rectangle is not long or short except in proportion to the other. An inch is very little in computing the distance from New York City to Chicago, but it is a good deal on the end of a nose.

Proportion at its simplest can be seen in the arrangement of objects on an indefinite surface or field, such as wallpaper, carpets, and cloth. Simple examples of proportion are plaids and polka-dot patterns. A plaid is nothing but a number of straight lines crossing at right angles; the interest of the plaid depends on the arrangement of these lines in relation to one another. In a polka-dot pattern there are two elements, the size of the dot and the space between dots. Change the size of the dot or the space between them, i.e., change the proportions, and the pattern is changed radically.

Such patterns offer simple problems of proportion, because the elements are judged only by their relation one to the other. But problems in proportion are found wherever there is a question of relative size or length. In dress design proportion determines the length of the sleeve or the coat, the space to be left between buttons. In interior decoration it governs the length of the curtains, the height of the mantel, the size of the picture in relation to the space to be filled, and also the placing of the picture in that space. Printed books depend for their beauty largely on the proportions used in filling the page: the space at the top and the bottom, the width of the margins, the size of the


Fig. 110.-Cathedral of Notre-Dame (largely thirteenth century).
Stone. Height of towers: 267 feet; diameter of rose window about 40 feet. Reims.
type, and the space between the lines. Proportion determines also our judgments of the beauty of the human body in life and in art. Is the head too large or too small? Are the legs and arms too long? Are the hips too large? In painting, as we have said, proportion determines the shape of the frame, its height in comparison with its width; it determines also the placing of the subject in the frame, whether the center of interest be high or low.

In architecture, proportion is of primary importance, for much of the beauty of a building depends on the proportions chosen in the shape of the building; the number, the size, and the shape of the windows, the width of the cornice, etc. We sometimes find very poor and cheap houses beautiful because the shape is well chosen and the windows fill the space agreeably. It is interesting to study actual build-

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Fic. 111.-Cathedral (1220-1239). Stone. Width of facade: 147 feet. Wells. (Mansell.)
ings that have very nearly the same elements and compare the proportions, such as the façade of the cathedral of Reims and that of the cathedral of Wells, or the Hotel Shelton, New York, and the Tribune Tower, Chicago. The two buildings in each case are similar in general arrangement, but they differ in proportions.

What are good proportions, and what are bad? This is like asking when a steak is cooked enough or what is a long walk. People disagree. The ultimate answer is the eye; that is good which seems good; that is in good proportion which we find pleasing. This answer, however, is vague, and people have always wanted to know definite rules for getting good proportions. Accordingly various people have tried to make rules and formulas for pleasing proportions.

Polyclitus, a Greek sculptor of the fifth century b.c., wrote a treatise on the proportions for the ideal human figure, which he called The Canon or The Rule. Then he made a statue to illustrate his principles, called also The Canon. It is not certain just what this statue was; but it is supposed to have been the Doryphorus or Spear Bearer. Unfortunately, the original, probably in bronze, is lost, and the stone copy that is in the museum at Naples is not good; the copyist has had to make certain additions because of the extra weight of the stone-a tree stump to support the legs and a bar between the hips and the right arm. Nevertheless, one can see the general proportions of the original. Polyclitus had a mathematical formula for the figure, the head being


Fig. 112.-Arthur L. Harmon (1878--.) Hotel Shelton (1922-1923).
Gray brick, with granite and limestone base. Height: 387 feet; width of Lexington Avenue façade: $1401 / 2$ feet. New York.
one-seventh the height of the entire body, and all details were worked out in terms of a fixed ratio.

In the fourth century b.c., Lysippus introduced a new canon with a smaller head and a slimmer body, the head being only one-eighth the height of the body. His proportions can be seen in many statues; the one most commonly associated with it is the Apoxyomenus or Strigil Bearer, a figure of a young athlete holding the strigil, a curved scraper with which athletes used to remove oil and dust from the body after exercise.

The Greeks also had a rule regarding the proportions in architecture. It said there should be one unit, a module, and everything in the building should be in relation to its module. If the module was two, all measurements must be multiples of two. In the age of Augustus, Vitruvius, a Roman, compiled, largely from Greek sources, a com-


Fig. 114.—Polyclitus. Doryphorus: (ca. 440 в.c.).

Roman copy in marble of bronze original. Height: 7 feet. Naples, Museum. (Alinari.)


Fic. 115.-Lysippus. Apoxyomenus (second half of fourth century b.c.).
Roman marble after bronze original. Height: 6 feet $81 / 2$ inches. Rome, Vatican. (Alinari.)
pendium of rules and maxims designed to assist in the establishment of correct proportions, and his principles have been largely followed since that time.

The proportion that has received most attention is that known variously as the "section," the "divine section," the "golden section," "phi proportion" and "extreme and mean ratio." This ratio, which was probably known to Plato and was the basis of several propositions of Euclid, has been recognized through the ages as one creating a beautiful proportion. It more nearly reaches the goal of a perfect ratio than any that has been discovered, and works of art that are not made in that ratio approximate it.

Extreme and mean ratio divides a line so that the shorter segment is to the longer segment as the longer segment is to the entire line.
$\qquad$ B

In the line $A C$, the segment $A B$ bears the same relation to $B C$ as $B C$ does to $A C$. The figures 3,5 , and 8 or 5,8 , and 13 give approximately the proportion. Various measurements have been made to illustrate the universality of this ratio. In the Birth of Venus, for example, Botticelli has used extreme and mean proportion to mark both the top of the shell and the height of the horizon.

Discoveries of this kind always raise again the question of the artist and the rule. Did Botticelli consciously follow the rule; and is it good because it follows the rule? The answers here, as always, are in the negative. Botticelli probably knew the rule; he may have deliberately measured the distances; however, he used the proportion not because it was the rule but because he had found it a good proportion. And the result is good not because it is in that proportion but because we find it agreeable.

## 3. Balance

Proportion is a matter of position, of relative size, or length; balance is a matter of relative weight. The name balance is borrowed from the instrument for weighing; the word comes originally from two Latin words meaning "two scales"; a balance has two scales, the substance in one pan being measured or weighed against that in the other. When the substance put in one pan equals that in the other the two weights are said to balance, and thus we get an idea of balance as equipoise, or equilibrium. We say, for instance, a person has balance when he stands, and if he loses his balance he falls. It is not, however, just a question of whether the object will or will not fall; if it looks as though it might fall it is said not to balance. A picture hanging crooked on the wall seems to lack balance. The leaning tower of Pisa has been standing for centuries, but it looks as though it might fall, and to that extent it lacks balance. In the same way we talk of balance when there is a weight of interest on one side or the other. If all the furniture is placed on one side of the room, we say the two sides do not balance. Or if two small objects are placed on one side of the room and two large objects on the other, the two sides are said not to balance. It is in this sense of the equilibrium of interests that the word balance is used in art.

Theoretically, every detail is necessary in a well-balanced composition; if a balance is perfect, a change in a single detail would upset the balance of the whole. This principle is probably more theory than fact, but at the same time it is very interesting to try to determine the role played by some detail of a picture. In Jan van Eyck's painting


Fig, 116.-Jan Van Eyck (ca. 1382-1441). Jan Arnolfini and His Wife (1434). Oil on wood. Height: 2 feet $91 / 4$ inches. London, National Gallery. (Raymond and Raymond.)
of Jan Arnolfini and His Wife, for example, there are slippers near the front of the picture. If one may judge by the appearance of the gentleman and the lady, she was not the type of housekeeper who allowed slippers to be left on the floor, nor was he a man to put up with such carelessness; but the slippers are necessary to make the balance of the picture. A simple way of judging balance is to cover any part of a picture and see if the composition seems then to lack balance. In the Seated Woman of Gauguin, the hat in the lower left-hand corner of the picture is found to be necessary, as are the small objects in the lower right-hand corner.

The simplest type is balance on a vertical axis or right and left balance. A real or imaginary vertical line is drawn down the center, and that which is on the right balances that which is on the left. A chair on one side of the hall balances a chair on the other side; a
window on one side of the door balances a window on the other side. This type of balance is usually symmetrical; if the right side could be folded over on the left side the two sides would coincide in every respect. The hands outstretched are a perfect example of symmetry. In fact, if the sides are not symmetrical they do not seem to balance, as when the two thumbs point in the same direction. Architecture and the industrial arts are the great examples of purely symmetrical balance; what is on one side is exactly like what is on the other.

The word symmetrical is used also when two sides are almost alike, though the parts are not identical, as in the towers of the cathedral of Chartres. This is the only kind of symmetrical balance allowed in painting and sculpture, since in these arts a detail cannot be duplicated exactly.

Often, however, a painter will emphasize the symmetrical arrangement. The early paintings of the Madonna placed


Fig. 117.-Cathedral of Notre Dame (twelfth and thirteenth centuries).
Limestone. Width of façade: 156 feet; height of north tower: 378 feet. Chartres. (Houvet.) the Virgin in the exact center with the angels on either side in serried ranks. Leonardo placed the figure of Christ in the exact center in The Last Supper with six of the disciples on each side.

The other type of balance is known as asymmetrical, or occult. In it the objects of interest are felt to balance, though there is no formal symmetrical arrangement. For identical symmetrical balance we can give rules, since one side is exactly like the other. When, however, we leave this type, no rules can be given; it is entirely a question of feeling. Does the whole seem to be balanced, or does it not? The dress opens on the left. Does it need something on the right? A man puts a flower in


Fig. 118.-Edgar Degas (1834-1917). Dancers Practicing at the Bar (1877).
Oil on canvas. Size: about $291 / 2$ by $301 / 2$ inches. New York, H. O. Havemeyer Collection, Metropolitan Museum of Art. (Metropolitan Museum of Art.)
one buttonhole. Does he need something on the other side? It is this asymmetrical balance that is most exciting and interesting. Absolute symmetry is solid and satisfactory; we like the directness of American Gothic or the della Robbia Madonna. But its simplicity makes it a very austere, demanding type. It is too simple, too clear; hence the artist is constantly striving for ways of avoiding the purely symmetrical arrangement. He usually tries to put his figure off center and get balance in some other way. Even in a simple painting of a bust the head is not usually in the exact center, but balance is restored by the pose of the head or the direction of the eyes. In the Dancers Practicing at the Bar, Degas has balanced two young women with a watering pot. In the portrait of his mother, Whistler uses the curtain and the picture on the wall for balance. In the picture referred to earlier, Hunters in the Snow, Breughel used a favorite device in balancing a near object against a distant scene; the hunters and dogs in the foreground are balanced against the skaters and the hills farther off. Titian has made an interesting study of balance in his Bacchus and Ariadne, in


Fig. 119. -Titian (1480-1576). The Young Englishman (ca. 1540-1545).
Oil on canvas. Size: $431 / 2$ by $361 / 2$ inches. Florence, Palazzo Pitti. (Raymond and Raymond.)
which he balances the entire group of revelers against the girl who has turned back as she tries to escape them. Another instance of balance, in the same picture, is found in the right leg of the woman reveler; it is very large and white and solid. Titian has given it prominence in order to make the leg of Bacchus less prominent. He wants Bacchus to seem as though he were easily treading on air as he descends from the chariot. His leg would look heavy, and he would seem about to fall were it not balanced against the heavier leg of the woman. In The Young Englishman; Titian has used primarily a balance of values, the three light areas being subtly disposed so as to make the whole balance.

Sometimes balance is worked out primarily in terms of color, and hence the painting does not seem especially well balanced when it is seen in black and white. Ordinarily, however, balance of color is used along with balance of line and shape.

The obvious colors for balance are the complementaries, since one actually supplements or balances the other. Of the complementaries, red and green are a greater favorite than orange and blue, and orange
and blue, in turn, are much more frequently used than yellow and violet. The old masters very largely used the red-green combination. Next to the complementary, the most favored color combination is the triad or group of three colors equally spaced on the color chart, as yellow, blue, red, or orange, green, violet. The triad, like the complementary, has in it all the colors and hence forms a good balance. A third type of color organization may be mentioned, the use of different values and intensities of a single hue. In his "blue" period, for example, Picasso used almost entirely shades of blue. Here, however, we can hardly call it a balance of color, since the sense of balance comes almost entirely from the values.

In the balance of color, intensities as well as hues must be reckoned with. Ordinarily an artist will use all his colors in similar or the same intensities; all will be grayed, or all will be bright. Sometimes, however, he will balance a small amount of vivid color against a large mass of dull or neutral. A single brilliant red rose on a pale green dress, a bit of red lipstick on an otherwise dull face, are examples. In his landscapcs, Corot often balances the brilliant red of a woman's cap against an entire scene in gray-green. We must notice, however, that the opposite use of colors will not balance; a large amount of bright color is not balanced by a small amount of gray.

Theoretically, there should be balance in the use of each element, and we should expect balance in texture, solidity, and distance as well as in line, value, and color. The demands of balance in the elements of texture, distance, and solidity are, however, negative rather than positive. Balance, as equipoise or equilibrium of interests, demands that there be a unity or uniformity rather than a contrast in these respects. If one part of a picture is painted with strict attention to solidity or perspective, the entire picture must be painted in the same way. One solid object may, however, be balanced against another, or a distant view against one near at hand, as we have seen. Sometimes balance is worked out in terms of contrast, especially in texture; a rough tweed is contrasted with a smooth linen shirt, a heavy carpet on the table is contrasted with the shimmering satin of a dress, or a shiny silk is contrasted with a dull lace collar, a bright apple with a dull grape. Such contrasts are found chiefly in still-life paintings and in the Dutch and Flemish schools, as in the paintings of Metsu and Ter Borch, which are found on page 466. In general, however, balance in texture means uniformity. There would be lack of balance if one part of a picture emphasized texture and the remainder did not. Whistler's portrait of
his mother pays little attention to texture; pictures, clothes, floor, all are painted with almost complete disregard of texture. Holbein's portrait of Jane Seymour, on the other hand, is painted with every detail meticulously cared for.

## 4. The Frame

In the arrangement of parts consideration must be given the frame and the relation of the parts to the frame. Whether we look at the façade of a building, at statuary in the round or in relief, or at painting, we have a certain area or surface that is to be filled. Within the area set there should be an agreeable distribution of the spaces, and to be agreeably filled the space should seem neither crowded nor empty. The camera offers interesting possibilities for experimentation, for with the finder of his machine, the artist can try different types of content in different relationship to the frame. The stage is another obvious example; the proscenium arch offers a set frame, and the problem of the director is to fill that frame agreeably with stage set, characters, and lighting. Since the theater is an art of both time and space, the director deals with a content that is constantly changing; at any moment, however, the stage is supposed to show a scene in which the frame is filled agreeably. Dancing offers much the same problem, but, since the dance has not taken so much trouble with the stage set as has the theater, it stands more as an individual composition than does the theater and less as the artistic filling of a definite space.

Since the design must fill the shape, the choice of shape determines partly the design of the picture. Moreover, the lines of the enclosing shape strengthen or oppose the lines of the design. In a picture that is rectangular or square all the vertical or horizontal lines of the picture are strengthened by the lines of the frame. So powerful are these lines that an artist usually tries to cover them in some way, to fill in the corners by the use of trees or shrubbery, or in some other way to change the severe right angle to a more graceful curve. The square is difficult to work with because it is all center and corners; there is no neutral ground, as it were, and for this reason the rectangle has been found preferable. The rectangle has the advantage of being in straight lines, and yet it has much free space in the middle that is neither exact center nor corner, and in this central space the design is usually placed. Irregular shapes are not so easily filled. For the first doors of the Baptistery at Florence a strange shape was selected, and the artists Brunelleschi and Ghiberti had to fit their reliefs into this shape.


Fic. 120.-Competition for the Gates of the Baptistery, Florence. Filippo Brunelleschi (1377-1446). Sacrifice of Isaac (1402).

Bronze. Size: about $11 / 2$ feet square. Bargello, Florence. (New York University.)


Fic. 121.-Competition for the Gates of the Baptistery, Florence. Lorenzo Ghiberti (1378-1455). Sacrifice of Isaac (1402).

Bronze. Size: about $11 / 2$ feet square. Bargello, Florence. (New York University.)

The circle is another difficult shape. It is always the same; the eye tends to go around and around it without stopping, and there is a general tendency for a picture to seem to roll over if it is in a circular frame. But Raphael's Madonna of the Chair is firmly anchored by the straight lines of the chair itself. Many other examples may be obtained from Greek vase painting. The cylix, or drinking cup, was ordinarily ornamented on the inside; hence the Greek draftsman had many opportunities to try his hand at filling a circular shape, and he succeeded admirably. One of the favorite cylix paintings is that by Execias, Dionysus Sailing the Sea. Note how the artist has used the fish and the grapes to fill in the design.

One of the best examples of the skillful filling of an awkward shape is the decoration of the pediment of a Greek temple. Unfortunately none of these pediments is left intact, but enough is left of the temples at Aegina and Olympia and of the Parthenon to show the superb way the problem was met. In the older temples there is an exact balance of figure by figure; in the Parthenon there is a more subtle balance and rhythm. In the east pediment there are, on the left, two female figures seated together, probably Demeter and Persephone, with Dionysus seated beyond them and turned toward the corner. On the right, to balance these three figures, we have the so-called three Fates, of whom


Fig. 122.-Execias. Dionysus Sailing the Sea (550-525 в.c.).
Black on red pottery. Diameter: $141 / 2$ inches. Munich, Alte Pinakothek. (Metropolitan Muscum of Art.)

Fig. 123.-Figures from the west gable of Temple at Aegina (ca. 490-480 в.c.). Parian marble. Figures life size. Munich, Glyptothek.
the nearest to the middle is seated, the other two forming a group, one sitting and one reclining against her, so as to balance the figure of Dionysus at the other end.

The corners gave particular trouble; in the old temples these were filled with monsters with tails of fish or serpents, the advantage of the tail being that it could fit into the corner. In the Parthenon this space is filled by the horses of the sun and moon. In the left corner the sun god in his chariot is rising out of the sea; in the right, the horses of the moon are sinking into the west.


Fig. 124.-The Fates (ca. 447-432 b.c.), froin the east gable of the Parthenon. Pentelic marble. Height: about 4 feet 2 inches. London, British Museum.


Fig. 125.-Tritopator (?) pediment (first half of sixth century b.c.). Soft limestone. Height: 2 feet $61 / 2$ inches. Athens, Acropolis Muscum. (Alinari.)


Fig. 126.-Head of Horse (ca. 447-432 в.c.), from the east gable of the Parthenon.
Pentelic marble. Height: 1 foot $83 / 8$ inches. London, British Museum. (Metropolitan Museum of Art.)


Fig. 127.-Simone Martini (ca. 1284-1341). The saints on either side are probably the work of Lippo Memmi. Annunctation (1333).
Tempera on wood. Height: 5 feet $11^{1} \frac{1}{4}$ inches. Florence, Uffizi. (New York University.)
No matter what the design, it should fit comfortably into the shape of the frame; and the more difficult the shape the greater is the artist's skill in overcoming its disadvantages. This, however, does not mean that the artist who overcomes the disadvantages of a difficult shape is a greater artist than the one who has not so difficult a shape. The work is to be judged as a finished whole and not by the difficulties to be overcome in filling the frame.

## 5. Types of Design in Painting

Paintings are nearly always organized on the basis of their lines and shapes. There are other plans, but they are very few in comparison with the number organized on the basis of line and shape. In painting, there are no definite names for different arrangements such as we have in music-rondo, sonata, fugue, etc. Names of this kind are primarily for the purpose of easy identification. One cannot tell by glancing at a piece of music what form it is in, nor can one always tell from the title; therefore, the name is added. In painting, however, the


Fig. 128.-Giorgione (ca. 1477-1510). Castelfranco Madonna (1504). Oil on wood. Height: 7 feet 6 inches. Castelfranco Veneto, Cathedral. (Alinari.)
arrangement is obvious at a glance; one does not need a name to tell what is the organization of a picture, and probably it is for this reason that type names have never been universally accepted. There are, however, certain patterns that have been generally followed, though they have no widely recognized trade names.

Symmetrical Composition. The simplest type of composition is the symmetrical balance of two. The Fra Angelico Annunciation is an example of symmetrical composition; the angel on the left balances the Madonna on the right. The Annunciation by Simone Martini repeats the same type in its balance of one figure against another. This is a general plan for all paintings of the Annunciation; it is the favorite type, also, for all pictures of two figures, as American Gothic or Fan Arnolfini and His Wife. Sometimes the symmetrical balance is worked out with strangely disparate figures in the scales. The Chancellor Rolin, for example, in the painting that he ordered van Eyck to do as a tribute to the Virgin, thought a little tribute to himself


Fig. 129.-Thomas Eakins (1844-1916). The Thinker (1900).
Oil on canvas. Height: 6 feet 10 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)
not out of place, and so the Madonna with the child is placed on one side, and, on the other side, in a position of equal prominence, is the Chancellor.

Pyramidal Composition. The triangle is a universal favorite; the broad base gives a sense of solidity and the pointed apex gives the emphasis needed. A single figure, if only the head and shoulders are presented, fits into this pattern, as, for instance, the Mona Lisa or Maria Luisa of Parma. The pyramid also lends itself admirably to a grouping of figures. Pyramidal construction is found in Giorgione's Castelfranco Madonna, with St. Francis and St. George. The Madonna, who is enthroned on high, is, as usual, at the apex of the triangle.

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Pyramidal compositions are usually symmetrical, but they are not necessarily so. As work grows more sophisticated the balance is less rigidly symmetrical.

The Silhouette. The type of the silhouette is a single standing figure, such as Eakins' The Thinker, or Gainsborough's The Blue Boy.

Circle. The circle is illustrated in Tintoretto's Marriage of Bacchus and Ariadne, in which the bodies of the principal figures make a perfect circle. In religious pictures the circle and the ellipse are often used for rings of angels.

Perspective. Often a painting is designed primarily to show perspective. The essential plan is a V, or crossed diagonal lines. In Hobbema's Middelharnis Avenue the lines meet almost in the center of the picture. Claude Lorraine uses the form for a combination of ships and houses and distant sea; a typical composition will show ships on one side, a building on the other, and between the two one looks out to the point of focus on the water. Claude Lorraine, like Hobbema, puts his focal point near the center; Ruisdacl makes the vanishing point at one side or out of the picture.

Radir. A variant of the crossed lines, as in perspective, is found when a number of lines converge as radii to a center. One of the most conspicuous examples of this type is Leonardo's Last Supper, in which all the lines of the ceiling and walls and of the hands and eyes of the disciples point to the head of Christ. Another is Raphael's Dispute of the Sacrament.

Tunnel. Tunnel composition gets its name from the fact that one looks through some opening as through a tunnel. An example is Velásquez's Maids of Honor or The Tapestry Weavers. This is a favorite type also in Dutch interiors.

S Curve. In another type of composition the main lines of the picture follow an $S$ curve. This line, known as the line of beauty, from Hogarth's designation, is a favorite of Rubens and is seen in his Descent from the Cross and The Adoration of the Magi. It was also a favorite of Michelangelo, who likened it to a flame. This line can be traced in many of Michelangelo's figures, as in the Libyan sibyl from the Sistine ceiling.

Diagonal Composition. In diagonal composition, if a line is drawn diagonally from one corner of the picture to the other, the interest of the picture will be found concentrated in one of the halves thus formed. Usually the diagonal slants to the right. This is a favorite method of the Dutch painters, who often emphasize the diagonal line by the light from a high window, as in Vermeer's Young Woman with a


Fig. 130.-Hobbema (1638-1709). The Avenue, Middelharnis (1689). Oil on canvas. Height: 3 feet $4 \frac{1}{2}$ inches. London, National Gallery.


Fro. 131.-Diego Velásquez (1599-1660). Maids of Honor (Las Mer̂inas) (1656). Oil on canvas. Height: 10 feet 5 inches. Madrid, Prado. (New York University.)

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Fig. 132.-Jacopo Tintoretto (1518-1594). Marriage of Bacchus and Arıadne (1578). Oil on canvas. Figures slightly above life size. Venice, Ducal Palace. (Alinari.)


Fic. 133.-Leonardo da Vinci (1452-1519). Last Supper (1495-1498).
Tempera on plaster. Figures above life size. Milan, Santa Maria delle Grazie.

## PLAN IN THE VISUAL ARTS



Fig. 134.-Michelangelo (1475-1564). Libyan Sibyl (1508-1512). Fresco. Size: about 12 feet high. Rome, Sistine Chapel Ceiling. (Alinari.)


Fro. 135.-Diagram of perspective in Last Supper.


Fig. 136.-Jan Vermeer '(1632-1675). Young Woman with a Water Jug.
Oil on canvas. Height: 18 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)

Water Jug. Diagonal composition is found also in Degas' Dancers Practicing at the Bar.

Light and Dark. Another type of composition has no linear foundation but is built entirely of contrast of light and dark. This type is characteristic of Rembrandt, whose concentration of a little light in a few places dominates the picture, as in the Old Woman Cutting Her Nails, the Man with the Helmet, or The Presentation in the Temple.

Although the main outlines of a painting will fall into one of these types, it is not uncommon to find two or three arrangements used in the same picture. The paintings of Pieter de Hooch show interiors in perspective of the tunnel type, yet the figures are in diagonal composition. Tintoretto's Marriage of Bacchus and Ariadne is also an example of radiating lines, for the hands of the three figures radiate to a center. Moreover, many pictures can be interpreted differently. One person, for instance, will say that Titian's Young Englishman is a pyramidal


Fig. 137.-Rembrandt Harmensz van Rijn (1606-1669). Old Woman Cutting Her Nails (1658).

Oil on canvas. Size: $495 / 8$ by $401 / 8$ inches. New York, Metropolitan Museum. (Metropolitan Museum of Art.)
composition, with the lines of the triangle understood rather than expressed; another will say it is a composition in light and dark. One person calls Raphael's Sistine Madonna a triangle; another calls it a diamond. The important point is to see that there is plan, not to give a name to any individual plan.

## 6. Plan in Sculpture

Both sculpture and architecture are always and necessarily threedimensional. Sometimes, however, they are planned on a twodimensional and sometimes on a three-dimensional basis. In sculpture some works are thought of primarily as flat surfaces, to be seen in length and breadth but not in thickness, whereas others are conceived as solids and must be viewed from all sides to be grasped. The difference can be seen at a glance by comparing two modern statues, Dancer and Gazelles by Paul Manship, and Torso by Aristide Maillol.


Fig. 138.-Paul Manship (1885-_). Dancer and Gazelles (1916).
Bronze. Height of dancer: 2 feet 5 inches. Chicago, Art Institute.
Manship's work is designed to be seen from a single point of view, the front. It is like a picture in this respect, and we do not wonder how it would look from the back or the side or from above. But these are just the questions raised by Maillol's work; we want to walk around it, to look at it from every side, from above and below. In this respect, Manship's work is judged essentially as a two-dimensional composition.

The same difference can be seen in the two works by Michelangelo, the Pietà and David. The Pietà is to be judged primarily as a twodimensional work from a single point of view, and the David as a solid from various angles. The Pietà, as a seated figure, is placed in a special setting, and the spectator is not supposed to walk around it. This is true of most architectural sculpture, which from necessity is judged from one side only. On the other hand, the fact that one can go all around a figure does not necessarily mean that it is conceived as a three-dimensional figure; neither does the fact that it is in an architectural framework mean that it is two-dimensional. The Discus Thrower is essentially two-dimensional, though it stands free, and the statue of the King of $\mathcal{F u d a h}$, at Chartres, is in the round in spite of its location.

Statues conceived in three dimensions are usually some form of the silhouette or the bust. Statues conceived in two dimensions and reliefs
may show almost all the types to be found in painting. The Manship Dancer and Gazelles is a pyramid, as are the Medici Tombs. The Discus Thrower makes a circle. In the relief that represents the birth of Venus we have as nearly exact symmetry as may be obtained in representation. This relief was discovered in Rome in 1887, when the old Villa Ludovisi was torn down. The sculpture consists of a single block of marble, with reliefs on three sides, as though it were intended for a throne or seat. Therefore, it is known as the Ludovisi Throne. The figures on the right and on the left are almost identical; the arms of the one on the right balance the arms of the one on the left; the knees are bent at almost the same angle, and only the face of Venus breaks the exact balance.

Two other plans may be named, though they are by no means common. One is the arrangement that depends for its effects on effects of light and shade. Saint-Gaudens' Adams Memorial is an example.


Fig. 139.-Aristide Maillol (1861$\longrightarrow$ - Torso (1910).
Bronze. Height: 43 inches. New York, Museum of Modern Art. (Museum of Modern Art.) This statue, erected by Henry Adams as a memorial to his wife, shows a seated figure, Grief, whose face is shrouded under the voluminous draperies that cover her head and figure.

The other plan is that used by Rodin in the Burghers of Calais. In this Rodin represents the seven men who volunteered to give up their lives in order that the siege of the city might be lifted. Rodin has shown them standing as they came, one after the other. All members of the group can be seen only in perspective; hence the plan of organization, if there is one, is perspective. But there is no way of seeing them all at once; in other words, the composition lacks plan.

Some people object to these plans of Rodin and Saint-Gaudens on the ground that they are not natural to the medium, and it is because they are not grateful to the medium that they are used very


Fig. 140.-Michelangelo (1475-1564). Pietà (1498-1502).
Marble. Height: about 6 feet 3 inches. Rome, St. Peter's. (Alinari.)
little. But, as we have said before, the artist may do anything he can do, and he should not be held back by theories as to what is fitting to his medium.

## 7. Plan in Architegture

In architecture, as in sculpture, the essential element in organization depends on whether the building is conceived in two or in three dimensions. Some buildings are conceived as solids; in other buildings, one side, usually the front, is conceived as a two-dimensional area, without any reference to the rest of the building. The Parthenon, the Colosseum, and the Santa Sophia are conceived in terms of length, breadth, and thickness. On the other hand, the façade of St. Paul's Cathedral, in London, is just as clearly planned as a façade; i.e., in terms of length and breadth only. The dome over the center has no


Fig. 141.-Ludovisi Throne, ca. 460 в.c.
Marble. Height at center: 3 feet $41 / 2$ inches. Rome, Terme Museum. (Alinari.)
relation to the front; in fact, the dome appearing between the towers seems out of place, like an unwelcome guest. The façade of St. Peter's in Rome is also planned as a façade. The apse has an essential unity with the dome, but the façade does not. In a building such as the Pantheon in Rome, the façade of the Greek temple, which in Greece was one side of a three-dimensional solid, is used as an ornamental entrance; in other words, as a two-dimensional ornament. During the Renaissance, buildings were all too often just ornamental façades rather than three-dimensional structures. The so-called modern architecture has brought architecture back to its place as design in three dimensions.

In these modern buildings we find an interesting hunt after proportions and patterns. The earlier examples, such as the New York Telephone Building (1926) or the Hotel Shelton (1922-1923), stick to symmetrical organization, but more recent structures are balanced purely as organizations of solids.

In architectural façades there are asymmetrical designs, as we have said in the section on Balance, but, by and large, symmetry is the rule. Here we may recognize several types, depending on the center of interest.

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Fig. 142.-Sir Christopher Wren (1632-1723). St. Paul's Cathedral (1675-1710). Stone. Width of façade: 180 feet; height of dome: 364 feet; height of towers: 222 feet. London. (Mansell.)
a. No Center of Interest. The building shows a rectangular form with no accent or emphasis on any part. It is hard to find an example of this in a good building, though there are plenty of examples in ugly buildings. The porch on Washington's home, Mount Vernon, however, is an example.
b. Center of Interest at Each End. The ends are accented. The medieval cathedral with its twin towers is a conspicuous example. It is found also in buildings with less conspicuous corners, such as the Vendramin Palace in Venice.
c. Center Accented. Another type is found when the center is accented. This type is found in residences in which the gable and the door emphasize the center and in churches in which a single spire rises over the main entrance. This type is so common that no specific examples are needed.

## PLAN IN THE VISUAL ARTS



Fic. 143.-Façade by Maderna (1603-1626). St. Peter's. Stone. Width: 370 feet. Rome. (New York University.)


Fic. 144.-Apse and dome by Michelangelo (1547-1564). St. Peter's. Stone. Height of dome: 435 feet. Rome. (Metropolitan Museum of Art.)

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Fig. 145.-Robert de Luzarches. Cathedral of Notre Dame (begun 1220; towers from 1288).

Stone. Height of north tower: 224 feet. Amiens. (New York University.)
d. Center and Ends Accented. The type that remains is that in which both center and ends are accented. This type is a favorite in large buildings such as the Capitol in Washington.

## References

Bulley, M. H.: Art and Counterfeit, 1925.
Gardner, H.: Understanding the Arts, 1932.
Hamlin, A. D. F.: A History of Ornament, 1916.
Hamlin, T. F.: The Enjoyment of Architecture, 1921.
Lutz, E. G.: Practical Pictorial Composition, 1926.
McMahon, A. P.: The Art of Enjoying Art, 1938.
Wölfflin, H.: Principles of Art History, 1932.

## Proportion:

Caskey, L. D.: Geometry of Greek Vases, 1922.
Colman, S.: Nature's Harmonic Unity, 1912.
Cook, T. A.: The Curves of Life, 1914.
Hambidge, J.: Dynamic Symmetry: The Greek Vase, 1920.
--: The Parthenon and other Greek Temples: Their Dynamic Symmetry, 1924.
Langfeld, H. S.: The Aesthetic Attitude, 1920.
Valentine, C. W.: Introduction to the Experimental Psychology of Beauty, 1919.
Design and Composition:
Dow, A. W.: Composition, 13th ed., 1931.
Friend, L., and Hefter, J.: Graphic Design, 1936.
Pearson, R. M.: How to See Modern Pictures, 1925.
Pope, A.: An Introduction to the Language of Drawing and Paintıng, 2 vols., Vol. I, The
Painter's Terms, 1929; Vol. II, The Painter's Modes of Expression, 1931.
Ross, D. W.: On Drawing and Paınting, 1912.
-_: A Theory of Pure Design, 1907.
Wallace, C. E.: Commercial Art, 2 ed., 1939.

## Questions

1. Construct six polka dot patterns for cloth; do not vary the size of the dot.
2. In any all-over pattern note the fundamental pattern; see where it is repeated.
3. Experiment with the common problems of proportion named in the second section; e.g., the length of the curtains or the sides of a picture frame.
4. Measure the bodies of your friends for their conformance to the ideal proportions of Polyclitus or Lysippus.
5. Select any door, picture, or other object that seems to you to have good proportions. Measure it; how nearly does it conform to the extreme and mean ratio?
6. Put your hand over some detail in a picture to determine if it is necessary for the balance of the whole.
7. Study carefully any painting for balance of color, value, and texture.
8. Experiment with designs filling a certain shape. Do you find the square and the circle more difficult than the rectangle?
9. Study the façade of a building you like for its balance, proportion, and the way the space is filled. Find examples of houses that show good examples of one or two of these points but not of the threc.
10. Pick out ten paintings at random, and determine the plan of organization in each.
11. Pick out any ten statues at random; are they planned as compositions in two or three dimensions?
12. Do the same for ten buildings.

## Form in Vocal and Contrapuntal

## Music

## 1. Prefatory Note

The problem of form in music is in its simplest terms the problem of making the music last. If, having played a melody four bars long, one could do nothing but repeat it forever, music would be a trivial and easily exhausted art. The same problem confronts the dancer or the lecturer or the playwright. It is a much more real problem than the listener or the audience may suppose, and in music the answers to it have been a long time being formulated. In music that has a text the form of the music is primarily dictated by the words, but where there are no words to lean on the music must make its way through its own coherence. Thus, although in preclassic music there are vocal works such as Masses and psalms of fairly large dimensions, preclassic music without voices is on a very small scale and consists mainly of a multiplicity of tiny pieces. Even in Bach's day, musical form had succeeded in producing unified structures able to last at the most only fifteen or possibly twenty minutes. When Beethoven wrote his third symphony, its first movement was the longest instrumental movement that had been composed on an organic plan up to that time, and Beethoven's time scale was in turn vastly overshadowed by the colossal one of Wagner, whose musical system-and not, as might be supposed, his text-enabled him to write a continuous piece of music lasting some three hours.

There are two main aspects of music. The first is the music as we hear it from second to second and sound to sound; for want of a better word this may be called its fabric. The second is the sum or total of the music considered as a whole; this is called its form or design. In other words, fabric is like a square inch of tapestry, and form like the whole
tapestry. From the square inch we can discern the colors and the kind of thread and the weaving, but only the entire tapestry can give us the complete picture. Solutions for the problems of fabric were reached long before those for form; in fact, the art of counterpoint reached one of its highest stages of development at a time when form independent of words was still only tentative, consisting of scarcely more than transcriptions and arrangements of vocal pieces. Furthermore, the aspect of fabric may at any time take precedence over that of form, for it is the one that more immediately forces itself on our attention. Some composers of considerable importance have placed fabric before design; Chopin, for instance, is perhaps the greatest master of phrase in instrumental music, but he seldom goes beyond the simplest forms. On the other hand, some composers lean more on design than on fabric, and in the works of Bcethoven, for instance, the demands of his form sometimes call for passages that are in themselves bare or of small interest in fabric.

Since form is the problem of how to make music last, any good answer will do. The forms that we shall consider in this chapter are some of the best answers, those most used and most successfully used. But the great composers do not agree in all the answers, and some composers, even very great ones, do not use them at all. The form of Wagner's writing, for instance, cannot be described by any of the methods that we are going to consider, and the symphonies of Sibelius, which are generally conceded to be some of the most important symphonic writing of our time, depend little, if at all, upon the forms of the classical symphony. For in art the rules follow individual works of art, and each masterpiece makes its own rules. If it defies those already in existence, we must set about changing our rules. Some forms are achieved through combination, such as the rondo, and some are achieved through organization, such as first-movement form. Minor composers and minor compositions lean on the first, but mastery of the second is the exclusive province of the great musical architects.

Finally, we may add a word of caution that musical terminology is anything but an exact science, and there is by no means an agreement of authority about all the terms and forms that we discuss. Many of them are only vaguely delineated or collapse into each other, and others have various meanings according to the historical period in which they are found. In the face of such ambiguities, we can only refer the reader to the passage from Aristotle quoted at the beginning of this book.

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Form in vocal music follows the words. Vocal music reached maturity in its treatment of fabric and form long before instrumental music. At the same time, however, music takes a very strange precedence over its words; in fact, we permit it without any hesitation continually to distort the accent and sense of the text. Who, in saying, "My country 'tis of thee," would accent it as the music does, "My country 'tis of thee?" Nevertheless, the first requisite for understanding vocal music is the common-sense one of understanding the words, which brings us to the vexatious problem of the vernacular. An English critic has observed that it is a sign of an immature musical culture when a public that does not understand the languages prefers to hear works sung in the original. It is a very silly state of affairs that a country as little given to the study of foreign languages as the United States should consistently have its opera in Italian, German, French, and even Spanish and Russian. In European countries where opera is an old and firm institution-Italy, Germany, and France-no such thing happens, and the operas are sung in the language of the country. The legitimate question to be raised with regard to performances in the vernacular is that of how much the text suffers by being translated, and it is hard to be consistent in any answer. On the one hand, operas with a text that is anything but doggerel are few and far between, and almost no one would seriously maintain that the librettos of many operas are of such excellence as to forbid their translation. Songs and Latin church music, on the other hand-songs perhaps through the intimacy of their writing and church music perhaps through tradition-do not seem to lend themselves so well to performance in translation.

## 2. Secular Forms

Song. Song is so immediate a manifestation of mankind as to be almost indefinable. We have never heard of a race or country without song, and in many languages the word for poem is the same as the word for song. A dictionary definition, however, would be "a musical setting of a lyric poem or ballad." We may classify song into folk song, art song, and aria.

The folk song, or carol, which is a folk hymn, is a song of undetermined authorship, in its authentic state usually unharmonized and often not amenable to harmonization, often modal and older than notation. It is orally preserved, and sometimes corrupt both in words and music, according as either has been changed in the oral transmis-
sion of the song. These are technical characteristics, but within them folk songs are as various and variable as the flowers in the field. The body of folk song, furthermore, is not a closed one, as is that of Gregorian chant, for instance; new folk songs are constantly being discovered and even, one might say, being created. There are also songs that we might consider pseudo folk songs; songs of known authorship but of a simplicity or directness that has made a people take them to its breast. Such are many of the songs of Schubert and Foster, who were able to write as the spirit of the people and have their curious reward in the songs' being known everywhere, but known anonymously.

The art song is consciously composed, is lyric and suggestive, although it may tell a story. With the exception of the English lutenist school, song in this sense is recent and appears first in Western music in the writings of Schubert. Songs are as varied as their texts and differ as widely in quality as the genius of their composers.

Songs dictate their own form, and there are no recipes. We may, however, distinguish two general types, the strophic and the continuous or composed-throughout form. In strophic songs there is only tune enough for one verse of the poem, and for the other verses one repeats the same melody, even though the emotional or narrative import of the words may have entirely changed. Folk songs are, of course, strophic, and so are many art songs. The continuous or throughcomposed song (through-composed being a translation of the German technical term durchkomponiert) is one in which the music is composed for the whole of the text and varied to suit its movement and meaning. The great song writers are the English John Dowland, so unaccountably neglected, Schubert, Schumann, Brahms, Wolf, Franz, Foster, Grieg, Strauss, and Moussorgsky.

The aria is a set piece or excerpt from an opera, oratorio, or cantata, and usually has the association of technical difficulty, although this is not essential, and in many respects the aria is only a song.

To enjoy songs it is best to sing them ourselves, but, failing that, we should at least know the words, even though, as we observed in the beginning, the music sometimes contradicts the words. We should notice, also, the suitability of the melody to the words and the accompaniment to the melody, whether it is an integral part of the song or only a decoration.

The madrigal is a song for several voices, secular, unaccompanied, and usually polyphonic. The term is usually, though not necessarily,
circumscribed historically to mean such compositions in the English and continental schools of the sixteenth and seventeenth centuries. The English madrigal school-Byrd, Morley, Gibbons, Weelkes, Wilbyeis the glory of English music, and, indeed, one of the peaks in the whole history of the art. Madrigals, like songs, are intimate music, and the best way to enjoy them is to sing them.

Opera. Opera is drama set to music, sung instead of spoken, employing the resources of acting, costuming, and staging. Grand opera has a serious subject, usually tragic, and is composed throughout with no spoken interludes. Comic opera is technically opera that has some spoken portions, but the term is also applied to opera light in subject. Operetta is opera of light musical and dramatic substance, with spoken dialogue.

Opera is on the face of it a paradox almost impossible to account for. It professes to be a synthesis of music, drama, and spectacle, yet it constantly outrages the demands of each of them. The musician finds the action getting in the way of the music; the dramatist finds the drama spoiled by the delays of the music; the spectator finds the spectacle ruined by corpulent singers or stereotyped action. Opera can be irrefutably attacked on any of these grounds and is constantly so attacked. There is no explaining the reason for its survival; there is only describing the fact.

But opera, despite the efforts of reformers from Gluck to Wagner, is primarily regarded as a form of music, and it is by their music that operas are known and for their music that they are kept alive. Once the initial musical convention is accepted, the other operatic conventions follow without great difficulty. The musical convention is only the dramatic convention several degrees removed.

The dramatic convention is that we believe, for the time being, that what is happening on the stage is real, at the same time that we know that it is not real. It is a convention so familiar that we are amused when children or inexperienced persons mistake what is happening on the stage for reality. It is a further step in the convention to believe the characters on the stage even though they are talking in blank verse, as in the plays of Shakespeare. And, if the characters can talk in poetry, it is only a step further to let them sing-and we have the operatic convention. It is a matter of degree; it is not by nature more silly that a woman on the stage is singing while dying than that she is pretending to die at all, while perfectly healthy and paid to do it.

Once granted the musical convention, two powerful tendencies spring to buttress it. The first is that song is a near and immediate thing to everybody, and opera is glorified song; great music in opera is necessarily music that can be sung, and music that can be sung makes a first claim on our attention and memory. The second tendency is that the heightening of drama by music is, for whatever mysterious reason, an almost inevitable device in all literature, from ancient times onward. In fact, it is the strange power of music to triumph over literature; which of us does not habitually sing songs and love them even when we know the words to be doggerel or nonsense? Music speaks so directly to the emotions that it can dispense with any intelligibility save its own. Translated into terms of opera, this means that we can still be powerfully moved by music whose words we do not understand, sung in an unconvincing situation by a singer who does not look like the character.

But although opera is primarily a form of music, the dramatic and spectacular elements cannot be ignored. Dramatic effectiveness is not synonymous with rationality or even intelligibility. An opera may be dramatically effective even though, like Alice with the Jabberwock, we understand only that somebody killed something. In Il Trovatore, for instance, only considerable study can make sense of the plot, but we might know nothing and still be swept along in the torrent of its swift-moving events. All that is required is an obviously tense, dramatic situation. How it is arrived at is of small import. Spectacle is circumscribed by fashion and by mechanical ingenuity and must be constantly refreshed, but the triumphal scenes in Aïda or the flaming mountain in The Valkyrie have an essential magnificence.

Of the great music, more is written in the form of the opera, the Mass, and the symphony than in any other. But in the form of opera also has been written more rubbish, more irrevocably forgotten music than in almost any other. This is because there have always been all degrees of seriousness among opera composers, and for one Wagner designing especial theaters and inviting especial audiences to hear especially composed festival-operas, there have been a half dozen Rossinis, Donizettis, and Offenbachs, turning out operas good and bad but as frankly commercial entertainment as the New York musical comedy.

Two further reasons contribute to the general oblivion of the numberless operas written before the time of Mozart. The first is that the principal roles were written for artificial male sopranos and are not

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only of prodigious difficulty but almost impossible to arrange practicably for modern performance. The second is that very great liberties were customarily taken by the singers, and what the composer actually wrote was sometimes little more than a sketch of what was actually performed. One of the principal innovations of Rossini, and a bitterly contested one, was the complete prescribing of what the singer was to sing.

One might make three classifications in the method of writing opera. The first is the obsolete seventeenth- and eighteenth-century type-a string of arias, during which the dramatic action was totally suspended, and semispoken portions, called recitative, accompanied by chords on the harpsichord, with very little ensemble or concerted singing. The second is the usual Italian type of Bellini, Donizetti, and most of Verdi-more ensemble, the recitative accompanied by the orchestra, the arias and set numbers still detachable, and the action not continuous. In these two types, the opera has no musical form as a whole. The action is a kind of matrix to hold together a number of pieces, each in a small and separate form, and it is the separate airs that are familiar rather than the whole act or opera.

The problem of making the opera a single continuous form was solved by Wagner, and in so doing he created the third type of opera, together with a new method and a time scale that can also be applied to nonoperatic music. In its broadest definition, Wagner's method is to make the whole opera an enormous assemblage of continuous variations on a number of small, arbitrarily devised themes. More specifically, his method is to have a small, recognizable melody or harmony or rhythm, called a leitmotiv, which is to mean each person or thing or even emotion that will be concerned in the action. Thus, in The Ring of the Nibelung, not only do the principal characters and many minor ones have their proper motives, but things as well, such as the sword, the rainbow, the river Rhine, and even abstractions such as Fate and Pity. Wagner then gives to his orchestra a gigantic commentary on the stage action, reflecting it in terms of these themes or leitmotivs. The entrance or presence of a character is expressed by the sounding of his theme in the orchestra; sometimes the orchestra even tells us things that the characters on the stage do not know. The movement of the music is not arrested for set arias or ensembles by the singers; the vocal line is treated as one of the orchestral lines, and, in fact, the voices are frequently subordinate to the orchestra. The action, too, is continuous: there is no pause from the beginning of
the opera until the fall of the curtain-in The Rhinegold, not until the end of the whole opera. His operas, therefore, have an unparalleled musical coherence; it is possible to dispense with the stage altogether and give them in concert form and have a unified work of music.

## 3. Sacred Forms

The Hymn. Like the song, the hymn as a form is very old and hard to define; we may call it a sacred strophic song, most often of four related phrases and usually several stanzas in length, intended for community singing. Hymns have been written continuously throughout the history of music. The hymns of the German Lutheran church, especially those dating from the period between the Reformation and the time of Bach, have the especial name of chorals or chorales. Carols are folk hymns, most of which are Christmas hymns, but there are many for other occasions, and some are quite secular in feeling or in words. Hymns can be noble and devout and deeply felt, such as the tunes called Dundee, Picardy, Emmanuel, St. Anne. It is the more to be regretted, therefore, that many hymns-and those often the most popular-are of the most dreadful sentimentality or vulgarity. The highest level of hymn tunes (we are not here speaking of texts) is that to be found in the German chorals, particularly in their incomparable harmonizations by Bach; Sleepers Wake, A Mighty Fortress, How Brightly Shines the Morning Star, the tune called Innsbruck, and the Passion Chorale, which is often sung in English to the words "O sacred head now wounded."

The Motet and Anthem. The motet may be most simply defined as a sacred song for unaccompanied voices; it is polyphonic and has no fixed place in the liturgy. The anthem is the particular English counterpart of the motet. But the name is loosely used, for the anthem may be accompanied, need not be polyphonic, and sometimes, as in the Chandos anthems of Handel, attains to the dimensions and style of a cantata. Anthems are being composed in modern times, but the motet, like the madrigal, is generally considered to be a product of the fifteenth, sixteenth, and seventeenth centuries, when, together with the madrigal and Mass, it constituted music's principal literature. The themes of motets were often used as the foundation for a setting of the Mass; Mass and motet were performed on the same occasion, and the church service thus attained a musical unity paralleled later only by the church cantatas of Bach, which were often founded on a choral familiar to the congregation.

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The Mass, Requiem, and Communion Service. The Mass is a musical setting of certain unchanging portions appointed to be sung by the choir in the Roman Catholic celebration of the Eucharist. The words are given elsewhere. The Requiem is a special variation of the Mass; it is celebrated for the repose of the souls of the dead and receives its name from the first words in the text Requiem aeternam dona eis, Domine. The communion service consists of such parts of the Roman Catholic Mass as are retained in translation in the ritual of the English church. The texts of the Mass and the Requiem are sometimes used as a basis for musical compositions not intended for actual liturgical use.

Although there is no specifically musical formula for the writing of a Mass, more great music has been written in the form of the Mass than in any other, with the exception of opera and symphony. The composers of the fifteenth, sixteenth, and early seventeenth centuries devoted their finest efforts to it, and the names of Josquin, Lassus, Palestrina, and Victoria are those of giants in music. But later composers, too, have devoted their efforts to the composing of the Mass, and the Masses of Bach and Beethoven would be named by many as their supreme works. The Requiem as well has attracted more recent composers-Mozart, Berlioz, and Verdi. The writing of the Mass offers the triple problem of combining liturgical suitability, musical interest, and an intelligible setting of the words.

From the standpoint of liturgical suitability, there can be no doubt that the Masses of Gregorian chant must take first place. Disembodied, aspiring, and unworldly, these Masses are absolutely cut off from any secular considerations and are the most appropriate devotional music that exists. The second place belongs to the polyphonic Masses of the sixteenth century-perhaps their religious atmosphere is stronger for us than for their contemporaries, for the secular themes around which many of them were composed have completely lost for us their unreligious or irreligious associations. Much of the church music of the eighteenth and nineteenth centuries is secular in tone; the worldly and brilliant Masses of the Viennese school of Haydn and Mozart are almost completely unsuitable for church use; their idiom is that of comic opera and shocks us by its levity, even though, considered merely as music, they have great charm and sparkle.

Of the five divisions in the text of the Mass, two are long, and three are very short. These parts with the fewest words, the Kyrie, Sanctus,
and Agnus Dei, do not offer much of a problem in the clear setting of the text and have, in fact, usually been subjected to purely musical treatment; even the Masses of Gregorian chant often set them in such long and florid phrases as to render the words quite unintelligible. Polyphonic composers, going further in the emancipation of the musical line, sometimes did not even trouble to set the actual text but merely wrote the music as music and left the copyist or the singer to fit the words to it. The long movements, on the other hand, the Gloria and Credo, demand a closer attention to their text if they are not to be both confused and inordinately long. In the Gregorian chant and polyphonic Masses these movements are usually in a straightforward and simple style. The Viennese school treated them as a kind of rondo, with a final fugue, and Bach and Beethoven, writing Masses on the hugest scale, set each clause of the text as a separate movement.

Oratorio, Passion, and Cantata. The oratorio, which derives its name from the fact that such performances were first associated with the oratory of St. Philip Neri in Rome, is an extended composition on sacred or Biblical subject, nondramatic, employing the resources of chorus, soloists, and orchestra. The passion is a special form of oratorio that was developed in the Lutheran church in the seventeenth and eighteenth centuries, consisting of one of the Bible narratives, interspersed with meditations and with chorals to be sung by the congregation. The cantata is a small oratorio and may also be secular. The word itself means merely something sung (as opposed to the sonata, something sounded, and the toccata, something played). Historically speaking, the cantata may also be for solo voice, as are many of the seventeenth-century Italian cantatas, and some of those in the works of Bach.

The composition and the performance of oratorio have always flourished in England, where the great initial impetus was given by the works of Handel. His oratorios are usually regarded as the greatest single body of works in the form. Passions are not numerous; the Passion music of Schütz and the predecessors of Bach, Bach's own St. John Passion and, above all, his St. Matthew Passion are the principal examples. Cantatas are numerous. The two great bodies of cantatas are the seventeenth-century Italian, which are mostly secular, and a large number written by Bach for the special liturgy in the Lutheran church of his time.

The oratorio style can easily lapse into the dull or pompous, particularly its often bare recitative and florid arias. but, at its best,
oratorio can have a grandeur of scale and a nobility of expression peculiar to itself.

## 4. Forms That Are both Vocal and Instrumental: Contrapuntal Forms

Most of the forms of music are differentiated by being either vocal or instrumental; a symphony is always instrumental, an opera is always vocal. Only the contrapuntal forms, and in particular the fugue, may be either. The reason for this may be found in the fact that contrapuntal technique in composition for voices had reached a very high point of development before instruments were in general sufficiently perfect to support a distinctive literature of their own. Consequently the first instrumental music contented itself with trying to play what had been written to be sung and only gradually evolved characteristically instrumental styles. Accustomed as we are to instrumental music, we often find it hard to realize this. Counterpoint was the natural method of writing for voices. The voices came first; instruments came later; instruments imitated vocal music, and certain contrapuntal forms became appropriate for either voices or instruments. These are the forms based on the use of a cantus firmus, and the fugue.

Forms Based on the Cantus Firmus. The idea that a composer should invent every note of his music is a fairly new one; it is only within the last one hundred and fifty years that we have put a high value on originality. Before that time the composer regarded himself somewhat as a builder, who expects not to provide his own bricks and mortar but to build according to his excellence with the materials provided him. During the polyphonic period composers utilized their contrapuntal technique in basing their Masses, psalms, and motets upon already extant melodies, which they proceeded to treat with all their ingenuity. To a melody so used the name cantus firmus was given. Often these themes were taken from Gregorian chants, sometimes from the works of other composers, and often, somewhat surprisingly, the theme was some old song or popular tune. Masses so founded were titled by the name of the theme on which they were based: The Westron Wynde, The Armed Man.

In the Lutheran church of Bach's time, composers took the cantus firmus principally from the body of chorals. But not entirely; in the $B$ minor Mass of Bach, for instance, two choruses, the Credo and the Confiteor, are based on Gregorian themes. A special way of treating
these chorals on the organ gives us the choral prelude, an organ piece with a choral as cantus firmus, usually treated in one of three ways. The first gives the hymn in long notes and writes contrapuntal accompaniments; the second ornaments and embellishes the hymn to make a florid arabesque, and the third breaks up the hymn and treats it in imitation, line by line. By far the greatest body of choral preludes is to be found in the works of Bach. An example by Bach of the first type would be I call upon Thee, Jesus Christ; of the second, Now comes the gentiles' Savior; and of the third, We all believe in one God.

Later composers have written choral preludes, but the basing of compositions on a cantus firmus has in general become obsolete, save for academic exercise.

Fugue. Compositions based on the use of a cantus firmus are perhaps a little special and not frequently to be met with by the ordinary listener. But this is by no means true of fugue, which is one of the most successful and dominant forms in music, and, indeed, the prime form for choral music since the seventeenth century. It is a contrapuntal discussion by a number of voices or parts of one or more compact melodic ideas, introduced by the voices separately in turn according to certain fixed conventions, and reintroduced from time to time throughout the piece. This definition is rather vague and difficult, but, since fugue, as we have said of counterpoint in general, is primarily a fabric, a way of treating music rather than a thing, such a definition is the only kind that can be given without numerous revisions and specifications. We shall attempt to clarify it, however, by describing the conventions, some of which are present in most fugues, though not all are likely to be found in any single fugue. The subject of the fugue is the melody on which it is founded. The exposition of the fugue is the opening section wherein the subject is announced in turn by all of the voices participating, according to a convention very clearly derived from the natural compass of voices. That is to say, if we ask a bass and a tenor voice to sing a given melody, it will be easier for the tenor to sing if it is a fifth higher. An alto would conveniently sing it an octave above the bass; a soprano, an octave above the tenor. All fugal expositions behave as though they were written for voices, and therefore some of the entries of the subject are higher or lower. Two examples of a fugal exposition are quoted in the section on counterpoint, in the chapter on The Elements of Music. The continuation of the melody by the first voice while the second is announcing the subject, if designed for systematic use in the fugue, is

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called the countersubject. There may be more than one subject in a fugue, in which case the fugue is called double or triple, etc., as the case may be. A fugue with two subjects may declare them both at the outset or may display them separately and then make a dramatic or rhetorical effect by combining them later on. Episode refers to those sections of the fugue in which the subject is not being discussed, although the episode may consist of references to it or fragments of it. Stretto is the overlapping in entries of the subject, one voice taking it up before the last has finished. Often the composer will plan for the cumulative effect of several stretti at successively closer intervals. The stretto, to be called such properly, should consist of reasonably complete entries of the subject. The pedal-point is a device named from the organ and its literature, where the performer may hold a note on the pedal keyboard while the manual keyboards go on with the movement of the music. Toward the close of a fugue the composer can increase excitement by having one of the voices hold for a long time a tone, usually the dominant er tonic, while the other voices pursue the fugue.

The devices of augmentation, diminution, and inversion and their effectiveness have been spoken of in the section on Counterpoint. Fugato ("fugued") refers to a passage written more or less in fugue. Fughetta is a diminutive term referring simply to a little fuguc.

At this point we should perhaps clarify the difference between canon and fugue. As a matter of fact, it is possible to have a fugue that is canonic throughout, but such a thing rarely occurs. To put the difference in conversational terms, canon is an exact game of follow-the-leader, no matter where he goes or what he does. Fugue, on the other hand, means, "Let's all try jumping over the ditch; you go first; we'll follow, and then we'll all try it in various ways." The element common to both canon and fugue is imitation. Canon prescribes that the imitation shall be continuous and exact; fugue prescribes only that there shall be imitation, not necessarily exact, at the outset, and thereafter at least a periodic return to the subject.

A great deal of nonsense has been said and written about the fugue. The difficulty of composing it and performing it has deceived people into thinking that it is difficult to hear, which is quite false, for, although the fugue demands close attention on the part of the listener, attention that rewards it with a rich revelation of musical interest, it does not depend on the memory, which it constantly refreshes by references to its subject. The fugue is not even more difficult to perform, if it is for chorus or an ensemble of instruments, than any round
is. But the simplest round might be fearfully hard for one person to play. The other great prevalent fallacy is that fugues are dry and unemotional. This, too, is false; in fact, the contrary is true. The fugue is the most inherently exciting of all musical forms, because it is the most cumulative in its musical interest. The oak expands from the acorn before our very eyes. The emotional content of the fuguc is no more limited than that of the sonata or any other form, and in The Well-tempered Clavier of Bach alone can be found almost every emotion. We have already remarked twice that counterpoint is fabric and not form. This is partly true in the case of the fugue, for, although the writing of a fugue prescribes many things about the style of the composition, it says nothing of its larger outlines. In the works of Bach, which are, or ought to be, the authority for any pronouncements we make about fugue, there is a progression from tonic through various keys and back to tonic. The fact that fugue is fabric and not form becomes more apparent in the works of Handel, who is likely to use any form merely as a scaffolding in the construction of splendid but hasty edifices. When we are accustomed to the architectonics of Bach, we are hesitant to speak of Handel's loosely effective movements as fugues and are more likely to speak of them as being fugal movements.

The fugue occurs throughout classical and preclassical music and, to a lesser extent, throughout music since the classical period. The contemporary Czechoslovakian composer, Weinberger, has a brilliant fugue in his opera Schwanda the Bagpipe Player. Beethoven, in his last period, turned increasingly to fugue for the expression of his musical thought. Both Mozart and Haydn were skilled masters in its use, and it was the normal means of expression, other than the dance rhythms in binary form, of Bach and Handel. But there is no doubt that it is to the works of Bach that we must look for the greatest fugues and, together with the symphonies and sonatas of Beethoven, one of the supreme displays of musical architectonics.

## Questions

1. Recite the words of five familiar songs, and then sing them. Does the music ever contradict the natural accentuation of the words?
2. Compare two translations of a song or air from a foreign language. Which is closer to the sense of the original? Which goes better with the music?
3. Do you know any folk songs characteristic of your part of the country? Compare the songs of your friends from the Southwest with those of friends from Missouri and Kentucky.

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4. Take some current or old story, and consider how you would set about making an opera out of it. To what kinds of voice would you assign the main roles? At what points would you have the music interrupt the action? What episodes would you omit as being unsuitable for operatic treatment?
5. Examine the hymns commonly sung in your church. Which ones have music that is really beautiful or devout in itself? Which ones are sung only because their words are familiar?
6. Compare the nature and order of the music at a Protestant and a Roman Catholic church service. What languages do they use? How much does the clergyman participate? How much does the congregation participate?
7. If possible, attend a Requiem Mass at a Roman Catholic church that employs Gregorian chant.
8. Invent words or tags to fit the subjects of these fugues by Bach, and see how readily you can detect their subsequent entries in the fugue:
a. Organ fugue in $G$ minor, the "little."
b. Organ fugue in $G$ minor, the "great."
c. Organ fugue in $F$ minor.
d. Fugue in $C$ minor from The Well-tempered Clavier.

## Form in Instrumental Music

## 1. Variation Forms

Variations are found to be an early and prevailing form in music, for there are basically only two things to do with a tune, to repeat it or to vary it. The power of variation in its broadest aspect is the power of composition. The Masses of the polyphonic period and the operas of Wagner might be called continuously interwoven variations on numbers of small themes. Here, however, we are speaking less of such subtle and continuous variations than of variations as a set form. That is to say, restatements, in an altered form, of a theme complete in itself.

Preclassic Variation Forms. A simple and effective early variation form is the air with doubles. It is particularly prevalent in French and English music of the seventeenth and eighteenth centuries but is practically limited to keyboard music. The name is derived from the character of the movement; each successive variation is written in faster notes. The air with doubles almost never has emotional or formal profundity; cumulative brilliance is usually its aim, as is well demonstrated in the most famous example, the air with doubles in the Harpsichord Suite in E major of Handel, which is usually called The Harmonious Blacksmith. Other early variation forms are the ground bass, chaconne, and passacaglia, which consist of the reiteration of a melody or a set of harmonies, usually four or eight bars long, with variations. The ground bass is usually quite clearly what its name implies; the ground remains in and is the bass, as in the air "When I am laid in earth" from Purcell's Dido and Aeneas or the last of Brahms' Variations on a Theme of Haydn. The chaconne and passacaglia, however, are less clearly defined; the terms are often loosely used and merge into each other. But Bach's use of a form is likely to be its most clearly defined one, and in the great chaconne for violin, unaccompanied, and in the passacaglia for organ, the distinctions are very clear. In the first it is

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the harmonic background that remains unchanged, though the melodies of two successive variations may be only remotely alike, whereas in the second it is the melody that is all-pervasive, though its harmonization varies in its successive statements.

Classical Variations. The distinguishing mark of classical variations is their respect for the dimensions and structure and even the key of their theme. The variations have the same phrases and periods as the theme; the total variation is just as long as the theme, and the effect of the whole is obtained through the momentum thereby acquired. Hence there are classical variations in which we cannot point our finger anywhere at the theme, and yet we very convincingly feel its presence.

Thus the slow movement of Beethoven's Sonata for violin and pianoforte, op. 47, usually called the Kreutzer Sonata, is a theme with four variations. The theme itself is quite an extended piece in ternary form. The first variation gives the piano rapid triplet figures that the violin merely accompanies; the second gives the violin rapidly repeated notes; the third is in minor; the fourth is heavily decorated in both parts and leads to a free conclusion.

The classical variation form suffers from being choppy. Its essential limitation is its punctuation. Many little paragraphs destroy the feeling of flow and, on the other hand, give us, while listening, an unhappy feeling that the variations might go on forever. The ground bass, chaconne, and passacaglia are continuous, and the air with doubles, by reason of its increasing animation, has a cumulative interest, but it is difficult to bring formal variations to a natural and effective conclusion. The problem of the classical variation was sometimes solved by ending the variations with a fugue, which, being the most unified and coherent of musical forms, ended the piece with a properly impressive and spacious movement.

Although the classical composers devoted considerable attention to the writing of variations, it must be confessed that the resulting pieces are of very unequal interest. On the one hand, there are such monumental works as the Goldberg variations of Bach, the Diabelli variations of Beethoven, and the three great sets by Brahms on themes by Handel, Haydn, and Paganini. On the other hand, there are countless sets that possess at best merely a slight and decorative charm and at worst only wearisome embellishment of an already trivial theme. Even Beethoven is reported to have said regarding one of his early sets of variations, "Beethoven, what an ass you were!"

The explanation of this is double; these composers practiced the writing of variations as a valuable technical discipline, much the way that Brahms is supposed to have written a contrapuntal exercise every day of the year, and at the same time, they did not always regard them as an art form worthy of serious attention.

Postclassical Variations. Postclassical and romantic variations are distinguished chiefly by the fact that they do not retain the structure of their theme. Schumann's Symphonic Studies, for example, are a set of small piano pieces held more or less together by references to the theme, usually the first phrase of its melody. His Carnival, also a set of piano pieces, is based on certain symbolically selected notes that are variously made up into melodies. César Franck's Symphonic Variations are an interwoven set of variations on two themes. Elgar's Enigma l'ariations attempt to portray his friends. In short, postclassical variations treat each work separately, and there is no agreed method of treatment.

## 2. Dance Rhythms

Dance rhythms logically belong under the discussion of the element of rhythm in music, for strictly they do not determine the form of music but only one aspect of its fabric. We generally think of them in connection with form, however, and it will be most convenient to discuss them here.

The range of dance music is very wide. It starts with music actually intended for dancing, such as the waltzes of Schubert and Strauss; then there are idealizations, such as the waltzes of Chopin; then preservations of the rhythms of obsolete dances, as the classical suite; and finally there are pieces in which all that the composer retains is the general notion of a rhythmic emphasis connotative of physical movement. Sometimes not even that; Debussy ends his Suite bergamasque with a passepied in $4 / 4$ time, whereas one of the few things we know about the passepied is that it was in triple time, and Ravel has written the most famous bolero in the world on an intricate rhythm only remotely resembling the lightness and gaiety of the true bolero. These last examples are, of course, reprehensible; the dance should be at least a frame of reference. Chopin's waltzes, for instance, though not really suitable for dancing, should at least be played so that they might conceivably be danced. And further, though any given dance piece may vary from its characteristic rhythm, if that rhythm appears nowhere in it, the title of the piece becomes meaningless. The characteristic

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## Chart of Dances

Pavane
The Earl of Salisbury His Pavane
Byrd


Galiard
The Earl of Salisbury His Galiard


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## Allemande

French Suite in E major Allemande Bach


Courante
(a) Italian type

French Suite in E major
Courante
Bach


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Sarabande<br>Harpsichord Suite in D minor<br>Sarabande



Gigue
French Suite in G major


Bourree
Suite in $E$ minor (Lute Suite)
Bourree


$$
\begin{gathered}
\text { Minuet } \\
\text { Serenade }
\end{gathered}
$$

Eine Kleine Nachtmusik
8.

Minuet


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English Suite in G minor


Polonaise
11.

Polonaise in $G$ minor
Bach (a)


Maestoso
Polonaise Op. 53
(b) (rhythm $\sqrt{d} \sqrt{d d})$

Chopin


## Waltz

Symphony No. 5 in Eminor
12.

Third movement
Allegro moderato


Mazurka Mazurka Op. 7, No. 1

Chopir

rhythm of the polonaise, for example, need not and does not appear in every bar of the polonaises of Chopin, and yet in most of them the piece as a whole is clearly thought of with the polonaise rhythm in mind. In this connection, it is very strange that Bach, whose use of most musical forms leaves them more exactly defined than they were before, often uses the saraband to mean scarcely more than a slow piece in triple time, with the characteristic saraband rhythm appearing nowhere in it.

Examples of the rhythms of various dances are given on the chart. We need mention here only their organization into the classical suite and comment briefly on their character. The suite, like the sonata, is a group of smaller compositions. As used by the seventeenth- and eighteenth-century composers, it is a collection of dances all in the
same key. There were conventionally four of these: allemande, courante, saraband, and gigue. Between the saraband and the gigue, and elsewhere, the composer was at liberty to insert as many as he chose of lighter dances; the minuet, gavotte, polonaise, bourree, and various others. Pieces not in dance form could also be added-preludes, airs, fugues. The classical suite is a loose form and varies a great deal in dimension and content from the tiny and enchanting suites of Purcell to the grandiose and pretentious English Suites of Bach. And whereas Bach almost invariably employs the four conventional dances, Handel reduces them to three or two, and, in one of his finest suites, that in F major, from the Book I, uses no dance movements whatever.

The two preclassic dances exemplified on the chart, the pavan and galliard (both spelled variously) retain scarcely more than the connotations of gravity for the first and a rather sober gayety for the second. Thomas Morley, writing in 1597, describes the pavan as "a kind of staide musicke, ordained for grave dauncing." The pavan is ordinarily in duple time, and the galliard in triple. Of the four main dances of the classical suite, the allemande, in 4/4 time, is serious and flowing, usually with long phrases. It is graceful but not gay. The courante, in $3 / 4$ or $3 / 2$, always sprightly, has two types; the Italian, brilliant and running, and the French, characterized by tricks of cross accents. The saraband, in $3 / 2$ time, is grave and measured; it moves
. . . with unhurrying chase And unperturbed pace, Deliberate speed, majestic instancy.

The gigue is merry and boisterous; it is usually written in a compound rhythm- $6 / 8,9 / 8,12 / 8$, and its theme is often treated by inversion in the second half.

Of the optional dances of the classical suite, the bourrée, in $2 / 2$ or $4 / 4$, is lively and energetic and firmly accented. The minuet, in $3 / 4$, and gavotte, in $4 / 4$ or $2 / 2$, have gracious gaiety. The minuet should begin on the measure, the gavotte, on the half measure. Sometimes the gavotte alternates with the more rustic musette, which has a drone in the bass, like that of bagpipes. The polonaise of the eighteenth century is a light dance in triple time, not yet the stately processional that it becomes in the music of Chopin in the nineteenth century.

The waltz, in 3/4, traces its ancestry back into the German dances of Schubert and Mozart; in the nineteenth century, particu-
larly in Vienna at the hands of Strauss, it assumes its typical blend of elegance and infectiousness and that especial hesitation on the second beat that is the Viennese hallmark. The mazurka is a Polish variant of the waltz, made familiar to us through the mazurkas of Chopin. Its characteristic dotted rhythm is energetic, but Chopin also makes it giddy or melancholy or languid.

## 3. The Basic Forms

Four phrase Folk-song Form. The largest designs in music, the symphony, opera, oratorio, are in general well defined and easily recognizable within their definitions, and usage agrees in the names by which to call them. With the smallest designs, unfortunately, such is not the case, and there is neither clarity nor unanimity in their definition. What we are going to call four-phrase folk-song form would be variously named by different authorities. The above name, however, is the simplest and most clearly descriptive of this simplest and most universal form. It consists of four phrases, of which the first, second, and fourth are very similar or identical-aaba. It is the pattern of a vast number of familiar songs and folk songs, and an analysis of the structure of Drink to Me Only with Thine Eyes which is quoted and analyzed as an example of phrase, or of a few of the songs listed below will make it very clear:

```
My Old Kentucky Home
Swanee River
Old Dog Tray
Uncle Ned
Massa's in de Cold, Cold Ground
Carry Me Back to Old Virginny
Long, Long Ago
Believe Me if All Those Endearing Young Charms
The Minstrel Boy
Rocked in the Cradle of the Deep
Au Clair de la lune
Lorelei
Solomon Levi
```

Unitary Form. There are numerous small pieces of music, well exemplified by the first prelude in the Well-tempered Clavier of Bach and the Prelude No. 1 in $C$ major of Chopin, which are written with no discernible break from beginning to end. There has hitherto been no name for the form of such pieces. Following the suggestion of the

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English writer, Percy Scholes, we shall use the term unitary form to designate compositions in a single movement without any subdivisions in their structure.

Binary Form. Binary form, as its name implies, is a form in two sections, of which the first, being incomplete, is balanced by completion in the second. It is a form that is simple and satisfying to the ear but easier to hear than to define, for it calls for nothing in addition to its two sections save some balance of dimension and community of material. Binary form, considered historically, however, has a few more formal characteristics. There is usually a progression of key from tonic to dominant in the first half, and, in the second half, back again from dominant, through various keys, if the composer likes, to the tonic. Furthermore, the second half often begins much like the first half except that it is in the dominant. Binary form was the usual form in which the rhythms of the classical suite were composed, and the eighteenth-century dances and the almost innumerable sonatas of Scarlatti are all in binary form.

As an example, we quote the theme from the air with doubles in the Harpsichord Suite in $E$ major of Handel. The minuet from Eine kleine Nachtmusik of Mozart, quoted under dance rhythms, is also an example of binary form.

$$
\text { Harpsichord } \underset{\text { Air }}{\text { Suite in }} \text { E major }
$$

Handel


Ternary and Rondo Forms. The ternary and rondo forms, which are also rather confusingly called dance forms and song forms, are based on symmetry rather than organization and consist of a series of sections arranged in a satisfying order, much the way that one might make various satisfying arrangements on a mantel with candlesticks and vases of flowers. The arrangement would please the eye because it is balanced symmetrically, but at the same time there is no essential

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relationship between the candlesticks and flowers, and the arrangement is an arbitrary one.

The essence of ternary form consists in the stating of a section or a period, followed by another section, which is followed by a return to the first section. As an instance we may examine the minuet from Mozart's Eine kleine Nachtmusik. The first section, which is itself in binary form, has been quoted under dance rhythms. It is followed by this passage, which, it may be noted, is itself in four-phrase folk-song form: and then we are directed to go back and play the first section over again. The first section is $a$, the second $b$; the form of the piece is $a b a$. In the case of a minuet or scherzo, the middle section, for obscure reasons, is called a trio.


The rondo is an extension of this design; the main theme is alternated with more than one other section-abaca, or abacaba. But the rondo is not an exactly defined form; on the one hand, the term is rarely applied to any movements except finales, even though slow movements are frequently in the form, and, on the other hand, finales are not infrequently called rondos, even though analysis easily proves them not to be such. Furthermore, it is an open question

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whether movements of only two alternating members, ababa, such as the Scherzo of Beethoven's Seventh Symphony, should be called rondos or not. They strike the ear as being extensions or repetitions of a ternary structure rather than a rondo. The answer is perhaps to be found in consideration of the scale of the music; the typical rondo revolves around a complete but fairly small theme, whereas the individual members of Beethoven's scherzos are quite sizable.

Since the rondo is a symmetrical form, not necessarily implying any development or variation in its members, it will suffice by way of illustration if we merely indicate the themes of an example. Our example is the Slow Movement of Mozart's Eine kleine Nachtmusik.

## Serenade

## Eine Kleine Nachtmusik

Slow movement
Mozart

after which theme $A$ is repeated, leading to the Coda


The incidence of the ternary and rondo forms in music is enormous, for not only is ternary form the usual form for the minuet or scherzo in the classical symphony, and the rondo the characteristic form of the last movement, but they are the almost universal forms used in lesser compositions and by lesser composers. Even so great a composer as Chopin made comparatively little use of any otherform than ternary. The explanation of the frequent occurrence of these forms is very simple: they are bound to be satisfying as any perfect symmetry is bound to be, and, at the same time, they tax neither the composer's power of organization nor the listener's power of concentration.

## 4. Sonata and Symphonic Forms

First-movement Form. First-movement form has been more generally called sonata form or, sometimes, sonata-allegro form. But so vexatious to the general reader then becomes the matter of distinguishing between sonata form and the sonata that we are arbitrarily, though not without precedent, using the term first-movement form, deriving the name from what is by far its most typical use.

First-movement form is regarded as the form par excellence for instrumental music, and its development as the triumphant achievement of the mid-eighteenth century, after which it dominated instrumental music for the next century. The essential elements of first-movement form are the exposition, which asserts one theme, or a group of themes, in the tonic and follows it by the assertion of another theme in another key, usually the dominant; the development, in which the themes are realigned, broken up, and displayed in various lights; and the recapitulation, which presents over again the material of the exposition but adheres to the tonic key; and, if this is not enough to give a sense of finality, a peroration called a coda. This definition says nothing about the numbers or kinds of theme but, clearly, since the sonata form is melodic and dramatic, there must be sufficient contrast to engender some action for the development.

First-movement form is organic rather than symmetrical; it would be misleading to exemplify it by merely quoting the themes. We shall, therefore, quote, on short score, the whole of a diminutive but complete movement in first-movement form-the First Movement of Mozart's Eine kleine Nachtmusik (pages 403 to 407).

The various elements that the eighteenth-century composers welded into first-movement form were not themselves new; precedents for a contrast of keys may be found in binary form, for contrast of

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themes in the concerto, for the largely homophonic and dramatic style in the writing of Couperin and Scarlatti. But, appearing all together for the first time, they made a form quite new. The reason for the respect accorded the first-movement form and the vast amount of music written in it may be that of all instrumental forms it gives the greatest possibility for variation in scale and content and at the same time is the most organic. Certainly, from the mere standpoint of statistics, more great instrumental music has been written in sonata form than in any other.

The Sonata. The word sonata has various historical significances. It means merely a "sounded" piece as opposed to the cantata and the toccata. In the seventeenth and early eighteenth centuries the word had no special formal significance; the sonata da camera (chamber sonata) and sonata da chiesa (church sonata) were groups of contrasted movements rather like suites, and the numerous sonatas of Scarlatti were single movements in binary form. But usage from the time of Mozart implies by a sonata a composition typically in three or four movements, of which the first is in first-movement form. The second movement is usually a slow movement. This may be in any form but is usually ternary, though sometimes in abridged first-movement form. The third is a minuet and trio, or, later, a scherzo in ternary form; and the finale, a rondo. There are numerous exceptions to this plan. Mozart's sonatas seldom have more than three movements, omitting the minuet, although his symphonies have four. The order of the movements may be inverted, or movements may be inserted of quite extraneous form, such as variations and fugues. Beethoven not infrequently inverted the order of the movements, as in the Sonata in $C$ sharp minor, op. 27, No. 2; the so-called Moonlight Sonata, which begins with a meditative, slow movement in no very classifiable form, then a minuet and trio, and finally a powerful movement in sonata form.

The four-movement sonata scheme was the normal form of extended expression for the classical composers. The thought of Haydn, Mozart, and Beethoven falls as naturally into sonatas as the thought of Bach into fugue or Milton into blank verse. Their keyboard works are preponderantly and almost exclusively sonatas; Beethoven's pianoforte sonatas are regarded as one of the two most important single achievements in the keyboard literature, the other being the $\cdot$ Well-tempered Clavier of Bach. During the nineteenth century the pianoforte sonata, under the impetus of Beethoven's last huge works, tended

FORM IN INSTRUMENTAL MUSIC
Serenade
Eine Kleine Nachtmusik
First-Movement Form Allegro First movement EXPOSITION: first group, in tonic

the dominant


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repetition of second half of second group



DEVELOPMENT. 1st theme of 1st group in D major modulating to

modulating variously and


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to become grandiose, for the normal vehicle of the romantic composers was the smaller lyric forms, and their sonatas, though lofty in conception and formidable in execution, are not altogether successful. In chamber music, however, the sonata has never lost its supremacy, and even to modern composers the four-movement sonata is the typical form for the string quartet and other chamber combinations.

By that peculiar and unsatisfactory vagueness in musical terminology of which the reader has been warned, the name sonata is not given to compositions for more than two instruments, and chamber music is named from the number of players it calls for-trios, quartets, quintets, etc.-but these are simply sonatas for the specified number of players or range of instruments.

The Symphony and Concerto. A symphony is a sonata for orchestra. It is on a large scale, lasting anywhere from the twenty minutes of Haydn and Mozart through the hour or more of Beethoven's larger works. The movements are typically four, although there are numerous exceptions. The symphony is rightly regarded as the supreme test in instrumental composition of a composer's powers, for it calls for mastery of all the elements of music and for ability to construct on a large scale. The foremost masters of the symphony are Haydn and Mozart, Beethoven preeminently, Brahms, and Sibelius, who is by many held to be the foremost symphonist since Beethoven. In the second rank of symphonic composers, but second by only a short distance, may be placed Schubert and Tschaikovsky, then Mendelssohn, Dvor̊ák, Franck, Schumann, Bruckner, and Mahler.

Like various other terms that we find it necessary to use in divergent ways, the term symphony means different things at different times. The principal alternative meaning to the one we have discussed is that of a prelude or interlude in a cantata or opera. This preclassical usage is likely to be spelled sinfonia.

The concerto is a symphony that displays a solo instrument against the orchestra. The pianoforte and violin are the favored solo instruments, although the literature contains examples for numerous other instruments. The concerto has connotations of tremendous technical difficulty, but such are a feature of its style and not of its form. The word also has various historical meanings, most of which are easily derivable from its essential definition as a piece of concerted music.

The Overture. The term overture is a historical term with various meanings, of which we may distinguish three. First, the French over-
ture, which may be the prelude to an opera or may be a separate concert piece, consists of the alternation of several movements, usually adagio, allegro, the same adagio again or a different one, and a fugal finale. Between the second adagio and the fugue or rise of the curtain, dance movements may be inserted; hence the French overture can be coterminous with the classical suite, as when Bach calls the B minor harpsichord partita Overture in the French Style.

Second, the operatic overture may be most broadly defined as whatever happens before the rise of the curtain. This may be either a setting of the mood of the opera or the play or an introduction or potpourri of the airs in the opera or an organized movement in sonata form, or all three.

Third, the symphonic overture is a large-scale single detached movement in sonata form, a classical counterpart to the continuous movement of large dimension that, in the romantic period, was presented as a symphonic poem.

Symphonic Poem or Tone Poem. The symphonic poem, also called the tone poem, was the outcome, in the nineteenth century, of applying Wagner's method and time scale to symphonic composition. It is generally regarded as being an invention of Liszt and, after him, was attempted by most nineteenth-century composers-most successfully by Richard Strauss in Don Juan and The Merry Pranks of Till Eulenspiegel.

The symphonic poem may be in any form; the name does not prescribe anything further than continuity of movement and the avoidance of conventional forms. It usually has a literary program or conception and, therefore, possesses the advantages and suffers from the disadvantages of program music, which we will consider next.

## 5. Program Music

Program music is by definition music that seeks to illustrate or convey something nonmusical: an image, theme, or story. It varies, of course, from music in which the program is only the initial impetus, the sense in which Beethoven's Eroica and Pastoral symphonies are program music, to music attempting to illustrate the exact steps of a detailed story, as the naïve Bible sonatas of Kuhnau or Bach's delightful Caprice on the Departure of a Beloved Brother. In the chapters on Subject, reference has already been made to the powers of music in illustrating subject and the kinds of subject that lend themselves to musical treatment; only a few further comments need be made here.

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First, some programs are in themselves essentially musical; one might say that a composer seeks out in literature illustrations for the kind of musical idea he wishes to convey. The familiar Les Préludes of Liszt, for instance, takes its program from a meditation by Lamartine, which begins:

> What is our life but a series of preludes to that unknown song, the first solemn note of which is sounded by Death?

The literary idea at once suggests a purely musical treatment: the theme and variations.

Second, certain musical effects sound very much like natural effects and can easily imitate them; for example, chromatic scales sound like wind. But just because chromatic scales can remind us of wind we do a great wrong to music and the composer if we think of all chromatic scales as illustrations of the wind, and it is well known that nothing so infuriates the composer as having a gratuitous program read into his music. Yet we must make a reservation with regard to this practice of giving the music an a posteriori program, such as calling Rachmaninov's Prelude in $C$ sharp minor the Bells of Moscow and Chopin's D flat prelude the Raindrop Prelude. Taken too scriously, these names, of coursc, do much harm, for we should be content to let the music speak to us as music without extraneous props. But, considered merely as helpful labels among various pieces of the samc name, they do no great damage.

Third, an inevitable disability of program music is that it cannot dictate the pace at which the listeners will apply the story to the music they are hearing. So, in the Heldenleben of Strauss, since the program tells us that we are to meet in turn the hero and his critics and his helpmate, some of us may be far ahead of the story and may be detecting in the music dreadful qualities of the hero's helpmate, whereas Strauss is devoting his venom to the depiction of his critics.

And, when all is said and done, the last word on what program music is and what it should be is Beethoven's inscription of his Pastoral Symphony, "Mehr Ausdruck der Empfindung als Malerei"("rather expression of feeling than representation").

## 6. Miscellaneous Forms

Since music goes on in time and it is never possible to see it or compare its members all at once, there can exist formless forms, music that simply wanders from one thing to another with no real purpose
or design other than accumulation of pleasant effects. A familiar example of such a piece is the Rêve Angélique or Kamennoi-Ostrow of Rubinstein. But further than that, there are numerous names for musical forms that determine nothing with regard to the form, or, in many cases, even of the fabric-names that indicate only the mood, if, indeed, they do that.

The prelude originally meant something designed to be played before something elsc, as the Preludes and Fugues of Bach, the Prelude to Lohengrin. But the word has become detached; the twenty-four Preludes of Chopin are not preludes to anything; they are pieces in themselves. The word now enjoys both meanings: piece to be played before something and just piece.

Fantasy is a free play of imagination. The word is widely used in preclassical times as a name for instrumental compositions not in dance form. Since classical times the name implies violent changes of mood.

The ballade is an extended piece professing to be narrative. The only formal characteristic that can be discerned is that the ballades of Chopin are all in compound time.

The impromptu is a contradiction in terms, for it purports to be an extemporary piece, which it obviously cannot be, being written down and published. But it retains its connotations of spontaneity and of rather slight organization.

The nocturne professes that its atmosphere is suggested by the connotations of night. The nocturnes of Chopin are usually meditative or elegiac.

The capriccio is a capricious piece, and the intermezzo should be an interval in some larger whole. Brahms uses these two titles in his piano works for his more lively and more reflective pieces, respectively.

The suite is a collection of pieces professing to be bound together in some way, whether they are dances, as Tschaikovsky's Nutcracker Suite, or programmatic, as Rimski-Korsakov's Scheherazade, or excerpts from an opera, as Bizet's Carmen Suite.

Certain forms determine the technical treatment. They are the étude and the toccata. The étude, a technical study, became important in music at the time of Chopin and Liszt. The toccata is earlier and means a display of keyboard skill.

## References

Gehrkens, K. W.: The Fundamentals of Music, 1924.
Goetschius, P.: Masters of the Symphony, 1929.

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——: Lessons in Music Form, 1904.
Mason, D. G.: From Song to Symphony, 1924.
Moore, D.: Listening to Music, 1932.
Pauer, E.: Musical Forms, 1878.
Scholes, P. A.: Listener's Guide to Music, 1919.
-: Music Appreciation, 1935.
Stokowski, O. Samaroff: The Layman's Music Book, 1935.
Surette, T. W., and Mason, D. G.: The Appreciation of Music, 1907.
Welch, R. D.: The Appreciation of Music, 1927.

## Questions

1. Suppose that you were going to write a set of variations on Swanee River? How many ways of changing the theme can you think of?
2. What are the characteristic rhythms of the usual dances? Of the fox trot, tango, rhumba, polka?
3. If you have friends who are dancers, ask them to show you the pavan and the minuet.
4. Listen to some pieces in binary form, such as the French Suites of Bach. Would you be contented if the piece ended at the first half? If not, why not?
5. Take two small pieces, such as two waltzes by Schubert, and put them together to make $a b a$ form. Take three or four, and construct a rondo.
6. Compare the First Movement of Tschaikovsky's Fifth Symphony with the First Movement of his Sixth Symphony. In the Sixth the second theme is unmistakable but does not occur in the development. In the Fifth there are four distinct themes, apart from the Introduction. Are they all used in the development?
7. Compare Mozart's Symphony in $G$ minor with César Franck's Symphony in $D$ minor. Does Mozart carry the same themes over from movement to movement? Does Franck? Which themes?
8. Listen to Tschaikovsky's Fifth Symphony, and observe how the theme of the Introduction occurs in all the movements. How does the composer alter it in each case?
9. Listen to some piano pieces without knowing their titles. What type names would you give them?
10. Listen to the last movements of these sonatas and symphonies to see whether you can tell their form:

Haydn, Surprise Symphony.
Haydn, Clock Symphony.
Mozart, Symphony in $G$ minor.
Mozart, Haffner Symphony.
Beethoven, Pathétique Sonata, op. 13.
Beethoven, Waldstein Sonata, op. 53.
Beethoven, Appassionata Sonata, op. 57.
Beethoven, Symphony No. 1 in $C$ major.
Beethoven, Symphony No. 2 in D major.

## XVII

## Plan in 'Literature

## 1. The Basis of Plan in Thought

Plan in literature is based only on the succession of ideas, the organization of thought. Poems or prose writings are never organized as arrangements of tone color or imagery, and very rarely are they organized on the basis of rhythm. Any one of these may be the most important thing in the poem, that which gives it life and value; but the basic arrangement depends on the thought. In this little poem by Walter de la Mare, ${ }^{1}$ the imagery is most important; there would be nothing to the poem if it were not for the images, but the images are held together by the narrative.
> "Is there anybody there?" said the Traveler, Knocking on the moonlit door;
> And his horse in the silence champed the grasses Of the forest's ferny floor.
> And a bird flew up out of the turret, Above the Traveler's head:
> And he smote upon the door again a second time;
> "Is there anybody there?" he said.
> But no one descended to the Traveler;
> No head from the leaf-fringed sill
> Leaned over and looked into his gray eyes,
> Where he stood perplexed and still.
> But only a host of phantom listeners
> That dwelt in the lone house then
> Stood listening in the quiet of the moonlight
> To that voice from the world of men:
> Stood thronging the faint moonbeams on the dark stair That goes down to the empty hall,
> Hearkening in an air stirred and shaken
> By the lonely Traveler's call.
> And he felt in his heart their strangeness,

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> Their stillness answering his cry, While his horse moved, cropping the dark turf, 'Neath the starred and leafy sky; For he suddenly smote on the door, even Louder, and lifted his head:-
> "Tell them I came, and no one answered, That I kept my word," he said.
> Never the least stir made the listeners, Though every word he spake Fell echoing through the shadowiness of the still house From the one man left awake: Aye, they heard his foot upon the stirrup, And the sound of iron on stone, And how the silence surged softly backward, When the plunging hoofs were gone.
-The Listeners.
Since literature is organized as thought, the units of organization are the units of thought; the sentence, the paragraph, and the chapter. Lines and stanzas are units of rhythm, not units of thought, and hence they have in themselves nothing to do with the thought organization. In stanzaic verse the thought pattern and the stanza pattern may be, and very often are, the same. The first stanza of The Eve of St. Agnes, already quoted, is a sentence and makes a unit of thought. Each of the first four stanzas of Annabel Lee is a sentence, and the last two stanzas make one sentence, so that in this poem the two patterns may be said to be identical. But thought and stanzaic form are not necessarily the same.

## 2. The Sonnet and the Limerick

The two verse forms in which the thought and the verse form are most nearly the same are the sonnet and the limerick. The limerick is a light poem of five lines. It is supposed to have got its name from an Irish song telling of the adventures of the various inhabitants of a village, with the chorus, "Won't you come up to Limerick?" The limerick became a set form from its use by Edward Lear. ${ }^{1}$

> There was an Old Man who said, "How
> Shall I flee from this horrible Cow?
> I will sit on this stile,
> And continue to smile,
> Which may soften the heart of that Cow."

[^27]Since Lear's time the chief change has been in the last line, which has become the focus of the poem.

> There was a young lady of Niger
> Who smiled as she rode on a Tiger;
> They came back from the ride With the lady inside, And the smile on the face of the Tiger.
> -Anon.

There was a young lady of Lynn
Who was so exceedingly thin
That when she essayed
To drink lemonade,
She slipped through the straw and fell in.
-Anon.
There was an old man of the Cape,
Who made himself garments of crêpe.
When asked, "Do they tear?"
He replied, "Here and there,
But they're perfectly splendid for shape!"
-Robert Louis Stevenson, Wear and Tear. ${ }^{1}$
The sonnet, especially the Italian sonnet, has a distinct break in the thought at the end of the octave. There are many different types of thought relationship between the octave and the sestet, the essential being that the two parts are balanced one against the other. Frequently they progress from the general to the detailed or from the abstract to the concrete. The octave may ask a question, it may state a problem, or it may give the first half of a comparison; then the sestet will answer the question, solve the problem, or finish the comparison. In this sonnet, for example, Keats tells in the octave of his vague ideas of Homer before he met Chapman's translation, and in the sestet of the feelings aroused by that poem.

Much have I travell'd in the realms of gold,
And many goodly states and kingdoms seen;
Round many western islands have I been
Which bards in fealty to Apollo hold.
Oft of one wide expanse had I been told
That deep-brow'd Homer ruled as his demesne;
Yet did I never breathe its pure serene
Till I heard Chapman speak out loud and bold:
Then felt I like some watcher of the skies
When a new planet swims into his ken;
${ }^{1}$ Reprinted by permission of Charles.Scribner's Sons, publishers.

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Or like stout Cortez when with eagle eyes
He star'd at the Pacific-and all his men
Look'd at each other with a wild surmise-
Silent, upon a peak in Darien.
-On First Looking into Chapman's Homer.
Octave and sestet often are divided within themselves according to the thought. In this poem the first quatrain tells in a general way that Keats had read a great deal of poetry; the second tells that he had heard of Homer. The sestet likewise is divided, the division in thought agreeing, though less closely, with the verse division; in the first two lines (rhyme $c d$ ) he compares himself to a man who discovers a new planet and in the last four, to the man who discovered the Pacific.

The Shakespearean sonnet consists technically of three quatrains and a couplet, but usually the distinction between octave and sestet is kept. In the twenty-ninth sonnet, the octave tells of the poet's desolation and the sestet, of his comfort:

> When, in disgrace with Fortune and men's eyes, I all alone beweep my outcast state, And trouble deaf heaven with my bootless cries, And look upon myself and curse my fate, Wishing me like to one more rich in hope, Featur'd like him, like him with friends possess'd, Desiring this man's art, and that man's scope, With what I most enjoy contented least; Yet in these thoughts myself almost despising, Haply I think on thee; and then my state, Like to the lark at break of day arising From sullen earth, sings hymns at heaven's gate;

> For thy sweet love rememb'red such wealth brings
> That then I scorn to change my state with kings.

Here, too, the divisions within octave and sestet are kept. The first quatrain in the octave gives a general statement of his grief and the second, his envy of other people. The first quatrain in the sestet tells the reversal of his feelings when he thinks of his love, and the couplet, as is usual in Shakespeare's sonnets, sums up the entire poem.

Even when a sonnet does not end a thought with the eighth line there is usually a distinct break at about that point. In Milton's Sonnet on His Blindness the break comes in the middle instead of at the end of the eighth line, the octave giving Milton's question and the sestet, Patience's reply. In Shelley's sonnet Ozymandias the octave gives

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the description of the statue, the first tercet of the sestet, the motto on the base of the statue, and the concluding tercet, the surroundings.

## 3. Logical Organization of Literature

But whether there is a strict relation between the verse form and the organization of content, as in the limerick and the sonnet, or whether the prose or verse is organized on content alone, there is a strict logic in the organization of content; there is definite order in the arrangement of the thought.

In the first paragraph of Paradise Lost (pages 295-296), for example, Milton asks for guidance in writing his poem. This paragraph is divided into two sentences. In the first he calls on the Heavenly Muse; in the second, on the Spirit of God. In the invocation to the Heavenly Muse Milton identifies her, first, as the one who inspired Moses and, second, as the one who loved Sion Hill and Siloa's brook, i.e., Jerusalem. In the address to the Spirit, which constitutes the second sentence, there are three divisions: in the first Milton asks that the Spirit instruct him; in the second he gives the reason why the Spirit is able to instruct him, it has been present since the creation of the world; and in the third Milton asks for the particular kind of help he wants. "What in me is dark. . . "

These points may be seen more easily in an outline:

> Milton's Prayer for Guidance

1. Invocation to the Heavenly Muse
a. The muse that inspired Moses.
b. The muse that loves Jerusalem.
2. Invocation to the Spirit of God.
a. General prayer for help.
b. Reason for prayer.
c. Specific prayer.

Equally clear relationships may be seen in any good prose or poetry. Take a paragraph from a short story by James Stephens, Darling. ${ }^{1}$

He had a long-haired thin-grown moustache. He had a large badly cut nose. He had dull blue eyes which stared, as tho' he were listening with them instead of with his ears. He had as little chin as could be without having no chin at all. His ears swung slightly outwards. The ends of his trousers flopped about his ankles, and from the flop and waggle of these garments one knew that his legs were as skinny as matches.
${ }^{1}$ Reprinted from Etched in Moonlight, by permission of The Macmillan Company, publishers.

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One divined that his elbows were sharp enough to wear a hole through his coat, and that his feet were longish and flattish and that his toes mounted energetically on top of each other.

This is obviously a description of a man, with attention to mustache, nose, eyes, chin, ears, legs, elbows, and feet. But why are elbows, feet, and toes put in one sentence when each other item of description receives a sentence to itself? The answer is in the word divined, which leads us to reexamine the earlier sentences; then we notice that Stephens talks first of those items that can be seen, mustache, nose, eyes, chin, and ears. Then he takes those that cannot be seen but that can be clearly deduced from the evidence of the trousers, the thin legs. And last are those that can only be guessed or divined, the sharpness of the elbow and the shape and size of the feet and toes. Stephens is following a definite order as he proceeds from the known to the unknown. If an outline were made, it would appear as follows:

Description of a Man

1. What can be seen.
a. Mustache.
b. Nose.
c. Eyes.
d. Chin.
e. Ears.
2. What can be inferred: legs.
3. What can be guessed.
a. Elbows.
b. Feet.
c. Toes.

Or let us take this little poem by Wordsworth:
She dwelt among the untrodden ways
Beside the springs of Dove,
A Maid whom there were none to praise
And very few to love:
A violet by a mossy stone
Half hidden from the eye!
-Fair as a star, when only one Is shining in the sky.

She lived unknown, and few could know
When Lucy ceased to be;
But she is in her grave, and, oh,
The difference to me!

There are but two sentences in the poem: the first, which comprises the first two stanzas, tells of the life of Lucy; the second, of her death. In the first sentence there is a clear differentiation between the first and the second stanzas, for the first stanza tells of her home, the second makes comparisons to ker. Each of these stanzas is further divided into two parts of two lines each. The first stanza tells of the place where she lived and of her friends; the second compares her to a violet and a star. The second sentence, which is the third stanza, is likewise divided into two parts: the influence of her death on her friends and the influence of her death on the poct. The absolute regularity of the poem appears even more clearly when put in outline form.

1. Description of Lucy.
a. Her home.
i. Where she lived.
ii. Friends.
b. Comparisons.
$i$. Violet.
ii. Star.
2. Death of Lucy.
a. Effect on friends.
i. Paucity of friends.
ii. Slight effect of her death.
b. Effect on poet.
i. Death.
ii. Poct's loss.

The three stanzas of Arnold's Philomela are divided with equal clearness. The first calls attention to the nightingale; the second asks if her sorrow can ever be assuaged; and the third recalls the scenes that caused her sorrow.

Hark, ah, the Nightingale-
The tawny-throated!
Hark, from that moonlit cedar what a burst!
What triumph! hark!-what pain!
O Wanderer from a Grecian shore,
Still, after many years, in distant lands,
Still nourishing in thy bewilder'd brain
That wild, unquench'd, deep-sunken, old-world pain-
Say, will it never heal?
And can this fragrant lawn
With its cool trees, and night,

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And the sweet, tranquil Thames,
And moonshine, and the dew,
To thy rack'd heart and brain
Afford no balm?
Dost thou tonight behold,
Here, through the moonlight on this English grass,
The unfriendly palace in the Thracian wild?
Dost thou again peruse
With hot cheeks and sear'd eyes
The too clear web, and thy dumb Sister's shame?
Dost thou once more assay
Thy flight, and feel come over thee,
Poor Fugitive, the feathery change
Once more, and once more seem to make resound
With love and hate, triumph and agony,
Lone Daulis, and the high Cephissian vale?
Listen, Eugenia -
How thick the bursts come crowding through the leaves!
Again-thou hearest?
Eternal passion!
Eternal pain!
The examples given have all been short, for obvious reasons, but the arrangement is equally clear in a long composition. We gave an analysis of the first paragraph of Paradise Lost; the entire first book has an organization equally clear and equally simple. After the introduction, in which he states the purpose of the poem, Milton devotes the first half of the book to Satan and Beelzebub and the last half to the other angels, ending with the building of Pandemonium. Or, in outline form:

1. Introduction: Milton gives the subject of the entire poem.
2. Satan and Beelzebub leave the fiery pool.
3. Satan arouses the other members of his company.
4. The building of Pandemonium.

Order is frequently found in writings that seem at first without order. The essays of Bacon, for instance, seem like heaps of brilliant gems, without logical development of idea, but most of them show a definite sequence of thought if they are studied.

Studies serve for delight, for ornament, and for ability. Their chief use for delight is in privateness and retiring; for ornament is in discourse; and for ability is in the judgment and disposition of business. For expert men can execute, and perhaps judge of particulars, one by one; but the general counsels and the plots and marshalling of
affairs come best from those that are learned. To spend too much time in studies is sloth; to use them too much for ornament is affectation; to make judgment wholly by their rules is the humor of a scholar. They perfect nature, and are perfected by experience. For natural abilities are like natural plants, that need pruning by study; and studies themselves do give forth directions too much at large, except they be bounded in by experience. Crafty men contemn studies, simple men admire them, and wise men use them. For they teach not their own use; but that is a wisdom without them, and above them, won by observation. Read not to contradict and confute; nor to believe and take for granted; nor to find talk and discourse; but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested-that is, some books are to be read only in parts, others to be read, but not curiously, and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others; but that would be only in the less important arguments and the meaner sort of books; else distilled books are like common distilled water, flashy things. Reading maketh a full man, conference a ready man, and writing an exact man. And therefore if a man write little he had need have a great memory; if he confer little he had need have a present wit; and if he read little he had need have much cunning to seem to know that he doth not. Histories make men wise, poets witty, the mathematics subtle, natural philosophy deep, moral grave, logic and rhetoric able to contend. Abeunt studia in mores (Studies develop into habits). Nay, there is no stone or impediment in the wit but may be wrought out by fit studies, like as diseases of the body may have appropriate exercises. Bowling is good for the stone and reins, shooting for the lungs and breast, gentle walking for the stomach, riding for the head, and the like. So if a man's wit be wandering, let him study the mathematics, for in demonstrations, if his wit be called away never so little, he must begin again; if his wit be not apt to distinguish or find differences, let him study the schoolmen, for they are cymini sectores (hair-splitters); if he be not apt to beat over matters and to call up one thing to prove and illustrate another, let him study the lawyer's cases. So every defect of the mind may have a special receipt.
-Of Studies.
Here Bacon begins with the use of studies, goes on to the manner of reading, and ends with the results of reading.

With some works, however, we can find no logical growth of thought; the poems of Whitman and the essays of Emerson are the two examples of great authors of whom this statement is frequently made.

Ordinarily an author follows a logical order and the reason for the order may easily be found. In the paragraph from Paradise Lost, for instance, Milton calls on the Heavenly Muse before he calls on the spirit of God, because she is less important, and he wants to work to a climax. In the paragraph from Darling, James Stephens goes from the known to the unknown. Wordsworth follows the order of time in telling of Lucy's life and then of her death. Milton also follows the
order of time in Paradise Lost, Book I. This is also the order of increasing importance. Arnold goes from the general to the particular. Shelley, in Ozymandias, follows the eye as it looks at the thing close at hand and goes on to the distant sands that stretch far away.

These are the more common orders used in organization-importance, known to unknown, time, general to particular. Sometimes the author goes from the simple to the more complex; sometimes he begins with cause and then states effect; or he may reverse Arnold's order and go from the particular to the general. Here, as in the plans of painting, it is not essential that one name an order. Time is often the same as cause and effect; either of these may be the same as importance. Development from the universal to the particular and from the particular to the universal are the accepted types of deductive and inductive reasoning.

All these orders are used often; essays, editorials, articles in magazines will probably be in one of the orders other than time. In so far as they explain they are said to belong to the type of exposition; in so far as they are trying to persuade they are said to be argumentation or persuasion. The lyric, another type name, is just an outcry, the expression of an emotion; it may follow any order.

## 4. Argumentation and Exposition

Argumentation includes all forms of writing that are made with the express purpose of influencing others to do or say or think as the writer wishes. In older times arguments were usually spoken, and the sermon, the oration, and the debate were the usual forms. Since the spread of printing, editorials and articles in newspapers and magazines have largely superseded the spoken word, but the address is still a vital way of reaching people and, with the perfecting of the radio, is rapidly regaining its lost prestige. .

Argumentation must move people; otherwise it has no reason for being. It is, therefore, one of the most vital and interesting forms of writing, as we see in the ending of one of Garibaldi's speeches to his soldiers.

I am going out from Rome. . . . I offer neither pay, nor quarters, nor provisions; I offer hunger, thirst, forced marches, battles and death. Let him who loves his country in his heart and not with his lips only, follow me.

Exposition exposes, or explains. As such it is the fundamental form for all scientific writing. In pure literature it is found chiefly in the
treatise and the essay. The treatise is a longer, more thorough, and more finished study than the essay.

The word essay was first used by Montaigne, who called his writings essais, or trials. An essay is an incomplete or partial treatment of a subject. Essays are classified according to the subject as familiar, historical, literary, philosophical, etc. The familiar essay is the only one that calls for any discussion. It was made popular by Lamb and has kept to this day many of the characteristics he gave it. It is always short and always personal. It is frequently humorous, sometimes sad or pathetic. The subjects chosen are often trivial or fantastic; the interest lies in the presentation of a point of view that is not the usual common-sense, commonplace one. Cowper, for instance, tells of the characteristics of the card table that had grown old in the service of his house; Lamb writes of the children he never had; and Stevenson makes a defense of idlers. Always the writer takes a philosophic point of view; he is calm and enjoys the pleasures of the moment; or, if there are pains, his attitude toward them is one of acceptance and calm, not of protest.

Many books do not fit in the category of either essay or treatise, though they are usually expository in nature. Among them are books of political ideas such as the Republic of Plato or The Prince of Machiavelli; statements of philosophy such as the noble truths of Buddha or the Dialogues of Plato or statements of practical wisdom, as the Meditations of Marcus Aurelius and the sayings of Epictetus. To this class also belong books of devotion such as the Confessions of St. Augustine or The Imitation of Christ by Thomas à Kempis.

## 5. The Lyrig

The lyric is even shorter and more personal than the essay. The word lyric comes from lyre, for the lyric was usually sung to an accompaniment on a musical instrument. Palgrave, whose collection of lyrics has become the standard collection in English, defines a lyric as a poem which turns on a single thought, feeling, or situation. Within these limits there is great variety in form, length, subject, content, and style. Lyrics are usually in verse, but they may be in prose. A lyric may have only a few lines, such as Landor's four-line poem On Death.

> Death stands above me, whispering low
> I know not what into my ear:
> Of his strange language all I know
> Is, there is not a word of fear.

Or it may be a poem of several pages like Lowell's Ode Recited at the Harvard Commemoration or Wordsworth's Ode on Intimations of Immortality.

Sometimes the emotional quality is preserved in what is only a fragment, not a complete poem at all, such as in Sappho's

> Before the lovely queen each night
> The stars in shyness hide their face
> As all the earth swims soft and bright
> And the full moon rides in her place.

Or Shelley's To the Moon:
Art thou pale for weariness
Of climbing heaven, and gazing on the earth,
Wandering companionless
Among the stars that have a different birth, And ever-changing, like a joyless eye That finds no object worth its constancy?

The style may be very formal and dignified, as in Landor's poems, or it may be jocular and even full of slang, as in Dorothy Parker's poems.

Since a lyric is an expression of emotion, a lyric may be written on any subject on which one has an emotion. In other words, the subjects are limitless; and limitless, also, are the ideas that may be expressed about the subjects.

## 6. Narrative

Narrative probably comprises more examples of pure literature than all the other types put together, and with good reason. All the world loves a lover, and it is equally true that all the world loves a story. The formula "once upon a time" has enough magic to lure us all, young and old. The essentials of a narrative are the essentials of every story. The first is plot; something must happen. The second is characters; it must happen to certain people. The third is setting; it must happen in a definite place at a definite time. These three-plot, characters, setting-are essential to every narrative. A fourth, idea, is usually found, also; the story is told to present a certain idea, or a certain idea is gained through the story.

The setting may be any place at any time. Jules Verne writes of what happens twenty thousand leagues under the sea; Butler, in Erewhon, tells of the lives of people who are living in a land that is

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logical as this land is illogical. Writers from Aristophanes to Lord Dunsany and Molnár have told of what happens in the land of the dead. The characters of a narrative usually are human beings, because they are the only animals whom we understand well enough to be very much interested in. When the characters are animals, as the hen and the rooster in Chaucer's Tale of the Nun's Priest, the animal names are fundamentally disguises for human beings, for the hen and the rooster, although essentially true to what we know of the character of fowls, nevertheless talk and act and think as do women and men.

The organization of a narrative depends primarily on the plot, and, since it is narrative, the plot is built primarily on the order of time. This order is at the same time the sequence of cause and effect: in other words, $b$ happens after $a$, but it would not have happened had it not been for $a$. Essentially, however, the organization of narrative is that of time. Ordinarily a narrative starts at the beginning and goes through to the end.

There have been, of course, many variants of strict time order. An author may present a scene and then show the events that led up to that scene, as Wilder does in The Bridge of San Luis Rey. The bridge collapses, killing five people; the narrator then gives the events in the life of each of the five to show why it was just right for that person to die at that time; how he had just then finished his life. Another device is to present the story as it was known to different people. This method is used by Browning in The Ring and the Book. An old count is tried for the murder of his young wife who just before the birth of her son had fled to the home of her foster parents in company with a young priest. In the twelve books of the poem Browning tells the story as it appears to many different people-the casual bystander, the girl wife, the priest who helped her escape, the husband when he appears in court for the trial, the husband just before he is executed for the murder, the pope before whom the case is tried, etc. Virginia Woolf follows essentially the same scheme in Mrs. Dalloway and The Waves. These are, however, the unusual instances.

Ordinarily a narrative starts at the beginning and goes through to the end. The only well-established change, if it be a change, occurs when the author has two or more plots that he is telling at the same time. He tells some of the first, then some of the second, and the story is advanced on parallel tracks, as it were. In King Lear, Shakespeare begins with the story of Lear and his three daughters, then he tells something of the story of Gloucester and his two sons, and the story
continues, alternating from one plot to the other; at times the two plots meet, but the essentials of each plot remain separate to the end.

## 7. Types of Narrative

Epic. Of the types of narrative, the epic is one of the most distinct as well as the rarest. An epic is a long, dignified poem in lofty style; its hero is of more than ordinary strength, and his deeds are of consequence to the entire nation. The authentic or natural epic is the product of an age of heroes, of a people just emerging from barbarism, when the individual, as an individual, did deeds that were or seemed to be superhuman. In the Iliad, Achilles and Hector fight side by side with the gods and are by no means inferior to them. Beowulf, in a foreign country, hears of the damage being done by the monster Grendel, and he goes across the sea to fight him.

The authentic epic probably originated as a series of songs in praise of the hero or heroes, which were later joined into one poem. The author, or authors, therefore, are not known, or, if a name such as Homer is given, it is merely a name, for the poctry does not reflect the personality of the poet in any way. Because it reflects a very definite stage of civilization that lasted for only a short time the authentic epic is extremely rare. The Iliad, the Odyssey, Beownlf, the Song of Roland, The Cid, and the Nibelungenlied almost complete the list for Western literature.

The literary or artificial epic is the work of a single, conscious literary artist. It should be more common than the authentic epic, but it is not, though it has frequently been attempted. The Aeneid of Virgil and the Paradise Lost of Milton are two that are given the title without dispute.

Ballad. The ballad is a story told in song. The folk ballad is the story of some hero told dramatically for popular singing. The exploits of Robin Hood and Jesse James are both subjects for ballads. But ballads are written about any conspicuous event, the death of a suitor, the betrayal of a sister, the hunting of the cheviot. The important thing in a ballad is that the story be told clearly and that it may be sung. Usually there is a great deal of repetition to make the singing easier. As in all folk songs, the author is of no importance, and hence he is not usually known. The ballad is traditionally, though not always, in ballad meter. This type of story is also told by literary artists, and it approximates the folk song more or less closely. Coleridge's The Ancient Mariner is an example.

Romance. The medieval romance is, as the name implies, a product of the Middle Ages, being, par excellence, the literary expression of chivalry. It has been defined as a story of love and adventure or of adventure for the sake of love. Spenser chooses a typical romance subject for The Faerie Queene. A lady appears at the court of Arthur asking redress for the great wrongs done to her father and mother; a knight springs up, volunteering for the expedition. He and the lady have many adventures, and in the end the parents are released, and the knight and the lady are married. The medieval romance is usually in verse, though it is sometimes in prose. The fifteenth-century collection made by Malory is in prose.

In the age of romanticism the romance was revived, and many authors-Keats, Byron, Swinburne, Tennyson, and others-began to write romantic tales of knights and ladies or other faraway, strange, and unknöwn people. The term romance, as distinguished from the medieval romance or its modern revival, is used for any work of fiction in which the emphasis is on plot, such as Treasure Island. A romance may be either in prose or in verse.

Novel. The word novel is sometimes used for those works in which the interest is primarily in characterization, and in this sense we speak of the novels of Galsworthy or Gcorge Eliot in contrast to the romances of Scott and Stevenson. The word novel, however, is not restricted to this use, and it has come to be practically synonymous with prose fiction.

Allegory. The allegory, the fable, and the parable are all especial forms of narrative designed to teach a lesson. In the allegory each character means something other than what he seems to mean-thus in The Faerie Queene the lady who asks for help represents Truth, and her parents are the World: the Knight who rescues the World from Sin, is Holiness. The parable is a short allegory, and the fable is a parable in which the characters are animals, as in the fable of the sour grapes, the dog in the manger, or the fox and the cock.

## 8. Drama

Drama differs from other forms of narrative neither in contents nor in organization but in manner of presentation. All information must be conveyed to the audience through dialogue, except for what can be told through the stage set and the movements and gestures of the actors.

The story is further limited by time of performance and by the greater necessity for clearness. The actors cannot repeat what the audience did not get on the first hearing, and hence the sense must be clear enough for the audience to grasp it the first time. The length of a play is determined by the capacity of the audience to enjoy without tiring. The critic may be reading a book for two weeks, but he sees a play through at one time. With these considerations, any type of narrative subject may be presented in dramatic form. Paolo ana Francesca is a medieval romance. Peer Gynt is a fantasy. The Doll's House emphasizes character, and a detective play emphasizes action. The serious drama of the present day tends to emphasize characterization at the expense of action, and in this it is in contrast to the drama of Shakespeare's time and to the cinema of today. In Ibsen's The Doll's House, for example, Nora once is found playing with her children and another time she practices for a dance. Otherwise there is no stage action. All the interest is in the dialogue. In a Shakespearean play something is happening all the time, and the groundling is entertained by the action on the stage. In the cinema the medium is movement; the actors talk, but the real medium is motion. The radio drama, on the other hand, is dependent entirely on dialogue and what effects can be gained through sound alone. It is like the cinema, however, in depending largely on action.

The drama may be either in prose or in verse. Modern drama is predominantly prose, but the drama of the three great periods of the theater-the Greek, the Elizabethan English, and the classical French -was in verse. Drama may be further classified as classic, romantic, or social. The classic drama is the type defined by the Greeks. In form it is distinguished by the chorus and by its observance of the three unities. The chorus is a group of people, men or women, whose function it is to comment on the action or supply details not given by the actors. The three unities are time, space, and action. The unity of time demands that the action of the play should not take more than twentyfour hours; the unity of space, that it take place in a single place; and the unity of action, that there be but one plot. The three outstanding writers of Greek tragedy are Aeschylus, Sophocles, and Euripides. The foremost writer of Greek comedy is Aristophanes. The three unities, without the chorus, were followed in the French drama of the great, or classic, period, the drama of Racine, Corneille, and Molière.

The romantic drama, as typified by the plays of Shakespeare, follows none of the unities. The time of the play may extend over a series of years, the scene is moved from one place to another, and there is usually more than one plot. The social drama of the nineteenth century and after is not distinguished by its form but by its content. It treats of some social condition or situation with a view to its improvement. Ibsen, for instance, writes of problems of heredity in Ghosts and of woman's position in society in The Doll's House.

## 9. History

The name history is reserved for those narratives in which the events are recorded as they actually happened. Memoirs, biographies, autobiographies, reminiscences are all types of history. Since the author is limited in his choice of events to those happenings that have actually occurred, the action is described simply as "events" and is not known as "plot." The main business of the historian is to find just what events did take place and to select from all the known events those that have a direct relation to the main action. Histories are written with different aims. One may attempt only a simple statement of fact; another may give clear pictures; and a third may attempt to show the course of events and the motives that prompted the actors in them. Bede may be taken as an example of the first type; Carlyle and Macaulay, of the second; and Thucydides, of the third.

Legend and myth are classed as pseudo histories. Legend may be true, but it cannot be proved. Myth was formerly believed to be true but is now accepted as false. The stories of King Arthur and the accounts of the war of Troy are legend. The stories of the Greek gods are myth.

There is also a difference between history and historical fiction. The historian, strictly speaking, can not deviate at all from what he knows is the actual course of events. In pictorial history such as that of Macaulay or Carlyle, he may put words in the mouths of his characters when he merely knows that a conversation took place, or he may supply the cries of the multitude at a time like the storming of the Bastille, but even this is a concession to the author's desire to make his story graphic. Strictly speaking, the historian is not supposed to state anything for which he has not authentic evidence. If he gives a conversation the words should be the exact words used; a letter should be the exact written letter. The writer of a historical novel or play,

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however, may invent as he pleases. He should and does try to stay true to historical fact in the main happenings he presents and in the spirit of his hero, but otherwise he can fabricate to suit his demands. A typical example is found in Drinkwater's Abraham Lincoln. The family servant is an English maid such as could not have been found in the home of Abraham Lincoln. In the introduction to the play Mr. Drinkwater states that he does this on purpose; he knows what is to be expected of an English maid of all work; he does not know the type of Negro servant that Lincoln had. The function is only that of a servant, and therefore he desires to be true to the type he knows rather than risk drawing a type he does not know.

## References

Abercrombie, L.: The Epic, 1914.
Blair, W., and Chandler, W. K.: Approaches to Poetry, 1935.
Boas, R. P.: The Study and Appreciation of Literature, 1931.
Boas, R. P., and Smith, E.: An Introduction to the Study of Literature, 1925.
Drew, E.: The Enjoyment of Literature, 1935.
Erskine, J. The Kinds of Poetry, Chap. I, 1920.
Hamilton, C. M.: Materials and Methods of Fiction, 1908.
Houston, P. H., and Smith, R. M.: Types of Woוld Literature, 1910.
Linn, J. W., and Taylor, H. W.: A Foreword to Fiction, 1935.
Matthews, B.: A Study of the Drama, 1910.
Millett, F. B., and Bentlcy, G. E.: The Art of the Drama, 1935.

## Questions

1. Outline these sonnets by Shakespeare: $15,18,30,55,60,71,73,106,116$.
2. Do the same for a selected group of the sonnets of Milton, Wordsworth, and Keats.
3. Determine the logical organization of a short story, a poem, an article in a magazine. In any of these do you find the imagery more important than the logical structure? Is it the basis for the organization?
4. Study the organization of a group of great orations.
5. Do you find any connection between the perfection of exposition and the growth of science since the industrial revolution?
6. Examine two magazines for the distribution of literary forms contained in them.
7. Examine your reading of the past three years for the same purpose.
8. Write a familiar essay on the subject of your desk.
9. From a newspaper select some event of interest. Sketch it as the subject for a lyric, an epic, a ballad, a romance, a novel, an allegory, a play.
10. Compare a medieval romance, a modern romance, and a modern version of a medieval romance for length, emphasis on imagery, plot.

## XVIII

## Repetition

## 1. The Law of Repetition

In the small town where I lived as a child, we first became conscious of color schemes when someone came back from a visit to the White House with storics of the Blue Room, the Red Room, etc. Before that time rooms had only been rooms: the parlor, the sitting room, the bedroom with the new furniture, the bedroom with the old walnut set, or the bedroom with the yellow oak. At once color schemes became the vogue, and so when Mary announced one morning that her room was in green we went promptly to see it. The furniture was brown, for she had the old walnut set; the paper was a light blue, the curtains were white, and the carpet an indefinite tan. "But we thought your room was in green." "It is," said Mary, pointing proudly to a small bit of green ribbon tied around the perfume bottle.

That green ribbon was important enough in her mind to give color to the entire room, but it was not so important to the rest of us. If the color of the ribbon had been repeated in the curtains, the paper, and the rugs, it would have been to everyone, as it was to Mary, the dominant tone in the room.

Repetition is just what the name implies, the repeating of the same thing over and over; and the reason for repetition is that implied in the story of the perfume bottle; it gives unity. Repetition is the first requirement for unity.

Examples of repetition can be found everywhere. If we find a certain pattern on the spoons we expect the same pattern on the knives and forks. All the windows in a room will be draped with the same material, and the colors of the drapes will be repeated in the paper and the rugs. When we read in a novel about Mary and John Thomas we know that those characters will be introduced throughout the book. In life we meet people every day whom we never expect to
see again, but in a book we know that we will meet those same characters often. When Beethoven plays four tones in a knocking rhythm, in his Fifth Symphony, we would forget the rhythm if he used it only once; to make us notice it he must repeat it many times. Anything, whether it be a tone, a gesture, a rhythm, a capital of a column, or an idea, must be repeated if it is to have any importance in the finished work; and if nothing is repeated the result is chaos.

The next question asks how much repetition there should be. If everything in Mary's room had been green-walls, floor, ceiling, furniture, there would have been no doubt as to the color of the room, but the effect would have been bad. In the Fifth Symphony Beethoven wants us to hear the knocking motive, and he repeats it. But suppose he did nothing but knock! In The Emperor Fones, Eugene O'Neill keeps up the regular beating of the tom-tom throughout the play, sometimes louder, sometimes softer, and with no other change, until the Emperor Jones goes mad. But O'Neill cannot allow the audience to go mad or to leave in disgust. The beating must be repeated so much that the audience can understand its effect on the emperor but not enough to produce that effect in the audience. There must be repetition, but there must also be variety or change from the repetition. There should always be enough repetition to make the whole stand together, and enough variety to keep the repetition from becoming stupid or monotonous. One should know the room is green, and the knocking should be easily discernible; but there should not be enough of either to be fatiguing.

Failure may arise from too little repetition or too much repetition. Too much repetition produces a work that is clear and definite but monotonous. The effects are too easily gained; one tires of it. Herein lies one explanation of the so-called popular or short-lived art. The repetitions are obvious; but because they have no variety or because the variations are not subtly made one tires of them easily. Many a popular song has a single theme that is hardly varied at all. The meters of poor poems pound along with assurance but no variety, and hence they do not live. The savage can listen to the same melody, and the child can listen to the same story over and over with no change, no variety. But as we grow older in years and more discriminating in our taste we demand variety.

Too little repetition, on the other hand, produces a work that is esoteric or abstruse. The themes and motives may be interesting; one would like them if he knew what they are and how they fit together.

After hearing some difficult music, one critic said, "It seems always about to break into tune." But unless it does break into tune, that is, unless one can hear the repetitions, the music is lost.

Between the two limits of too much and too little repetition there is obviously room for great variations in taste or sensitiveness.

A unit that is repeated is known as a theme or motive. The theme must, of course, be stated in terms of one or two elements, and variety is produced through the introduction of other elements or through a change in the theme. Let us suppose we have a theme in music that is essentially melody; variety may be gained through playing that melody at different tempos, with different harmonies, on different instruments, in different degrees of loudness. In the visual arts a theme may be varied through being produced in different sizes, different values, different colors, different textures, different degrees of distance and solidity, or through the introduction of a different shape.

In general, the theme or the motive that is very interesting in itself is not so useful in a great work of art as one that is not so interesting. It is like the man who is always sure to say something clever; he does not fit into daily conversation so well as a less brilliant talker. The greatest works are often made of very simple materials: the arch of Chartres, the simple cones, cubes, or cylinders of Cézanne, the straightforward themes of Bach.

## 2. Industrial Arts

Repetition can be seen most easily in the industrial arts of indefinite boundaries such as wallpaper, dress goods, laces, and border patterns of all kinds. In them the same pattern is repeated over and over with no change: the press begins to print, or the loom begins to turn, and it produces exactly the same pattern until the ink or the thread is consumed. In studying examples of these arts the first thing is to discover the pattern that is repeated. The second is to notice the repetitions of motive within the pattern. The accompanying plate shows one student's experiments with a single motive. A textile may have a flower design, but the repeated flower is placed in various positions, colors, and sizes, a new motive is alternated with the old one, and sometimes the new motive is combined with the old to make a different shape. The acanthus pattern from the Erechtheum is justly one of the world's most famous borders. In it the acanthus is used in two different forms, each having just enough relation to the other to give the feeling of unity without exact repetition.

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Fig. 146.-Student's work.
(Tom Binford.)
Designs that are definitely limited, such as are found in furniture, rases, or rugs, show the same kinds of repetition. The curve of a bowl on one side will be repeated exactly in the curve of the other side. tutomobiles in recent years have shown interesting examples of epetition, the same shape being repeated in various parts of the car: ights, dashboard fittings, and hood.

## 3. Architecture

Repetition in architecture is just what it is in silk or textile except hat we identify the objects repeated as windows, doors, gables, etc., ather than as elements of a pattern. In the Colosseum, for example, he arches are the same one after the other, one story above the other.


Fig. 147. - Colosseum (72-82 A.d.). Travertine exterior.
Restorations in brick. Length: 620 feet; width: 513 feet; height: 157 feet. Rome. (Alinari.)


Fig. 148.-Pietro Lombardo (ca. 1435-1515). Palazzo Vendramin-Calergi (1481-1509). Marble. Length: about 80 feet; height: about 65 feet. Venice. (Alinari.)

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Fig. 149.-Anthemius of Tralles and Isidorus of Miletus. Santa Sophia (532-537) (restored 558, 975). Minarets added in fifteenth and sixteenth centuries. Brick and cement. Length: 247 feet; width: 231 feet; height: 184 feet. Constantinople. (New York University.)

Moreover, the arches are separated one from the other by engaged columns. Variety is introduced in the entablature, where there are no arches and where rectangular pilasters replace the round engaged columns. Variety enters also in the kind of column, the lowest being Doric, the second, Ionic, and the third and fourth, Corinthian.

The Vendramin Palace at Venice is an interesting study in repetition and variety. The famous old palace on the Grand Canal in Venice was built by the Vendramin family at the end of the fifteenth century; to this palace Wagner retired in 1882, and there he died in 1883. One is impressed first by the repetition; the façade of the building shows a single grouping of windows repeated many times. There is, however, no lack of variety; the doorway takes the place of the central window on the first floor, and on the same story the place of the two end windows is left blank except for small openings. The first and second stories are separated by a balustrade; the third and fourth, by a cornice. Moreover, the columns separating the windows are varied; those on the first floor are pilasters, undecorated except


Fig. 150.-Interior, Santa Sophia.
Width of nave: 108 feet; height of central dome: 180 feet. (New York University.)
for a molding at the side, those of the second story are round and grooved, and those of the third story are round, without grooves. The most important device for securing variety, however, is in the arrangement of the windows. The three central windows are grouped together, but the end window is set off by a narrow panel with two engaged columns. This motive, repeated at the corner of the building, gives a distinct relief in the long line of windows; it is a breathing space, as it were, that makes the façade seem easy and comfortable.

The Santa Sophia at Constantinople shows a repetition of domes and half domes that vary in size but remain constant to the same general shape. This trick of keeping the same general shape while the size and only minor details of the shape are changed is found in all styles. A Gothic cathedral repeats the pointed arch in many different sizes and groupings, both in the exterior and the interior of the building. The Medici Palace in Florence repeats the round arch on each of its three stories. On the first floor a single window with a pediment over


Fig. 151.-Antonio da Sangallo (1485-1546), Michelangelo (1475-1564), and Giacomo della Porta (1541-1604). Farnese Palace (1530-1580).
Stone. Height: $961 / 2$ feet; length: 185 feet. Rome. (Alinari.)
it fills the arch. On the second and third the windows are grouped under the arch. Further variety is found in the walls of this building. The first story is of heavy rusticated stone; the stone of the second and third stories grows progressively smoother.

Sometimes variety is gained by the introduction of a contrasting shape. The Farnese Palace at Rome has two types of pediment over the windows of the second story, the circular and the pedimented shapes alternate with each other. The windows of the third floor use only the pedimented shapes, and those of the first floor are of a different kind, a section of an architrave on brackets. This building keeps unity in spite of the changes in shape. In the Pantheon of Rome, however, the change in shape is too great for the unity of the building. The doorway with its pediment and columns does not fit the circular building and dome.

This fault of too great variety is not uncommon. Dreading the monotony of too great repetition, the architect introduces too much variety. The stairway to the Laurentian Library in Florence, done by no less a person than Michelangelo, is a case in point. The effect


Fig. 152.-Michelangelo (1475-1564) and Giorgio Vasari (1512-1574). Laurentian Library (1525-1571), vestibule and stairway. Stone. Vestibule about 32 fect square. Florence. (Alinari.)
is very rich and magnificent, but there is too much of it. The result is confusing and disquieting. Another source of difficulty is the repetition of an element too small or too obscure to be seen clearly. In the cathedral at Milan the many small spires leave only an impression of vagueness; it is like the icing on a wedding cake. The criticism of too great variety may also be made of Moorish architecture.

So far we have been talking of fairly obvious ways of producing variety. Romanesque and Gothic capitals are more subtle: the general shape stays the same, but the decoration on each is different.

Even more subtle is the way of getting variety in a building like the Parthenon. At first glance the building seems to show nothing but repetition, no variety except in the alternation of triglyphs and metopes of the frieze. In the Parthenon, however, are many subtle variations that do not strike the observer at once. The columns are smaller at the top than at the bottom; about one-third up the shaft of the column is a slight swell or convex curve known as the entasis of the column. Moreover, the columns incline inward at a very slight angle; it has been calculated that the columns on the two sides of the


Fig. 153.-Cathedral at Milan (mostly 1386-1522; west façade seventeenth-nineteenth centuries; most of the pinnacles nineteenth century).
White marble. Length: about 490 feet; width: about 200 feet; height of spire of dome: 354 feet. Milan. (Alinari.)

Parthenon, if extended, would meet more than a mile and a half above the pavement. Again, the corner columns are slightly larger than the others and are closer together. The steps and the entablature both rise in a very slight convex curve.

The idea has been expressed that in such refinements the Greeks were attempting to counteract certain optical illusions. Two long parallel lines tend to look hollow or to approach each other in a concave curve; hence the slight curve outward (entasis) was introduced. A column seen against the sky looks slighter than one seen against the background of a building; hence the corner columns were larger and nearer together. It cannot be determined, nor does it matter, whether the architects introduced these changes to correct optical illusions or whether they introduced them merely as a means of giving variety to the building and so of improving its appearance. It is certain, however, that these changes were intentional. Similar refinements have been introduced in many buildings-St. Mark's in Venice and the old


Fig. 154.-Ictinus and Callicrates. Parthenon (447-432 в.c.).
Pentelic marble. Height of columns: 34 feet. Athens. (Metropolitan Museum of Art.)
library of Columbia University in New York City, to name only two examples. And it is certain that much of the beauty of the buildings is due to the lack of stiffness, the sense of a unified, almost breathing whole, resulting from these slight variations from the exact rule.

## 4. Sculpture and Painting

Repetition in sculpture and painting can never be the exact repetition that is characteristic of the industrial arts and architecture. In architecture, one half of a building may be, and usually is, just like the other half, but in a picture or a statue the two sides cannot be the same. If, for instance, the artist wants to repeat the line of a woman's hair, he must repeat it, not as hair, but as cloud or tree or scarf. This kind of repetition, therefore, is not easy to see. We see the cloud as cloud and the tree as tree, and we do not see that they are repeating the line of the woman's hair. In the painting Bacchus and Ariadne Titian does just this thing; the outlines of the two main characters are repeated in the clouds and the trees above them. In the Annunciation Fra Angelico repeats the lines of the angel's wings in the arches of the vault above until the whole picture seems alive with the whir of wings. In Dancer and Gazelles Paul Manship repeats the curves of the dancer's body and dress in the bodies of the two animals. In the


Fig. 155.-Fra Angelico (1387-1455). Annunciatıon (ca. 1440). Fresco. Figures three-fourths life size. Florence, San Marco Dormitory.


Fig. 156.-Drawing of Annunciation to illustrate repetition.

## REPETITION



Fig. 157.-Jean François Millet (1814-1875). The Gleaners (1857). Oil on canvas. Height: 2 feet 9 inches. Paris, Louvre.


Fig 158.-Drawing of The Gleaners to illustrate repetition.

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Discus Thrower Myron makes a complete half circle in the long, curved line that begins in the right hand, which holds the discus, and goes on through the right arm and the body to the left foot. Michelangelo does the same thing in the head of Night from the tomb of Giuliano de' Medici, in which the arm and the head make a complete half circle. This curve, moreover, is repeated many times in the curves of the body. In The Gleaners Millet repeats the same shapes in the women's bodies, and these three shapes are repeated in inverse order in the haystacks and the wagon on the horizon. Grant Wood ties torether his painting American Gothic by the repetition of two motives, the oval and the pitchfork.

Repetitions in color offer infinite possibilities and are not usually difficult to see, though they are always interesting to study. A subtle but easily studied repetition of color can be found in a woodcut, such as a Japanese print, in which the artist is limited to three or four basic colors and the combinations that can be made by printing one over the other.

## 5. Repetition in Music

In music, as in all the other arts, repetition is essential to intelligibility of design. Since, however, the repetition of large sections results in certain musical forms-ternary form and rondo, to name two examples-that we have already studied, we shall concern ourselves here with repetition of elements and of phrases. This we can perhaps best study by examining in some detail three familiar little pieces by Chopin, the Preludes in $A$ major, $C$ minor, and $E$ minor.

The Prelude in A major consists of eight similar phrases, each two bars long. They all have the same rhythm $\frac{3}{4} d, \sqrt{\circ} d d d, d$, and in each one a note or chord occurs three times in succession,

and the figure in the left hand is the same throughout.


The harmony is mostly in the chord of the tonic (A) and the chord of the dominant (E). It is dominant in measures one and two, five and
REPETITION

Prelude in A major, No. 7
Chopin, Op. 28


## Prelude in C minor, No. 20


six, and nine and ten, and tonic in measures three and four, seven and eight, and fifteen and sixteen. In this little piece sixteen bars long we have repetition of phrase, rhythm, accompaniment, figure, and harmony.

The Prelude in $C$ minor is thirtcen bars long, and in all but the last bar, which is a chord, there is this rhythm c d d $\sqrt{.} \mathrm{d}$. In most of the twelve occurrences of this rhythm, it takes a melodic line which goes up from the first to the second beat and falls on the third and fourth beats. The line of the left-hand part in the first four measures is an inversion of the right hand; it goes down from the first to the second beat and up on the third and fourth. Measures five to eight consist' of an irregular descent, which is then repeated in entirety in measures nine to twelve. In this prelude we see repetition of phrase, rhythm, melodic and bass pattern, and a repetition of a whole section, since the third period, bars nine to twelve, is the same as the second period, bars five to eight.

The Prelude in E minor is based on constant repetition within a very narrow range. In the first place, the accompaniment consists of repeated chords, which are usually altered only a note or two at a time.


In the sccond place, the melody is made up for the most part of the alternation of just two notes, which appear in this rhythm d.d/d.d/d.d, and in seventeen out of the twenty-five bars of the piece the melody moves only by the adjacent note, or the third.


In this piece the harmony and rhythm are repeated in the chords, and the melody repeats its own rhythm while confining itself largely to two notes.

From this little examination we see that music can no more avoid repetition of its elements than language can avoid repeating its nouns and pronouns. But although repetition is essential and unavoidable in the construction of any coherent music, there is also music that makes repetition into a salient feature. It is possible that a person might hear these Chopin preludes and be unaware of the repetition they display. But no one could hear, say, the Bolero of Ravel and not

Prelude in E minor, No. 4


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be conscious of the obstinate rhythm and the repetition of the tune over and over. Furthermore, some composers have characteristics and mannerisms that they repeat. Weber likes an accompaniment of repeated chords; Wagner decorates his melodies with turns; Brahms breaks duple rhythms into threes by using triplets; Franck's melodies hover around the mediant of the scale.

## 6. Repetition and Variety in Meter of Literature

In literature the device of repetition is employed no less than in music and the visual arts, and, as in them, it promotes unity of construction. Repetition in literature may be primarily a matter of sound or of sense. We begin with meter.

In bound verse, as we have seen, repetition is the foundation, since meter depends on the regular recurrence of accent. The problem of bound verse, therefore, is like that of the Greek temple, not how to get repetition but how to introduce varicty while keeping the effect of regularity. Poetry, in general, allows of much more complicated effects of variety in rhythm than does music, but, owing to the exactness of musical notation, these effects can be stated clearly in music, whereas in poetry they are left to the discretion of the reader. There are, however, certain standard ways of securing variety in poetry.

Substitution. A foot of one kind may be substituted for one of another. In fulius Caesar, Antony concludes his speech over the dead Brutus with these words,

> . . . the elements
> So mix'd in him that Nature might stand up And say to all the world, "This was a man!"

The lines gain greatly in emphasis through the substitution of a trochee in the next-to-the-last foot. Milton uses spondees in Paradise Lost to stress the enormous size of Satan.

So stretched out huge in length the Arch-Fiend lay.
And Tennyson emphasizes the slow passage of time in Ulysses ${ }^{1}$ by substituting spondees for iambs.

The long day wanes; the slow moon climbs; the deep Moans round with many voices.
In triple meters, iambs and trochees are frequently substituted for anapests and dactyls.
${ }^{1}$ From Tennyson's Complete Poetical Works, Cambridge Edition, reprinted by permission of Houghton Mifflin Company, publishers.

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O Rose, thou art sick!
The invisible worm,
That flies in the night, In the howling storm,

Has found out thy bed
Of crimson joy, And his dark secret love

Does thy life destroy.
-William Blake, The Sick Rose.
Omission. Omission is another device for securing variety in poetry. The omission of a syllable or of syllables in a line has the same effect as a rest in music. In these lines from Milton's Lycidas the short line gets all the time that would ordinarily be given a regular pentameter line.

Ay me! I fondly dream
"Had ye been there," . . . for what could that have done?
Difference in the Importance of the Accent. In almost any line certain accented syllables receive greater stress than others. In Sonnet 29 , from Shakespeare, the fourth line is accented regularly.

And look upon myself and curse my fate,
In the second foot the last syllable of upon receives greater stress than the first, but the accent is much lighter than in the other feet of the line. When there is a spondee in a line there is often such a light foot in the same line. In this line from Tennyson's In Memoriam the first, second, and fourth feet are spondees, and the third foot receives almost no accent.
-Ring out, wild bells, to the wild sky.
Change in Meter. Sometimes the poet leaves one meter that he has definitely established and begins on a new meter because of a change in the sense.

## 7. Tone Color:

The repetition of letters is called alliteration, assonance, or consonance, according to the position of the letters repeated.

Alliteration. Alliteration is the repetition of letters that begin words or syllables: Peter Piper picked a peck of pickled peppers. When used in extremes, as in the Peter Piper rhyme, it is exceedingly obnoxious, but when well used it is pleasing. The use of alliteration is
almost universal. Shakespeare ridicules the abuse of the device in the mechanic's play in A Midsummer-night's Dream.

> Whereat, with blade, with bloody blameful blade, He bravely broach'd his boiling bloody breast;

But he uses alliteration in all his plays; many of the greatest passages show it.

> Duncan is in his grave; After life's $f$ itful fever he sleeps well.
'Thus conscience does make cowards of us all.
Assonance. Assonance is the effect obtained from the repetition of vowels surrounded by different consonants, as foolish, crooning; or race, make. Assonance is more difficult to detect because the eye cannot help the ear very much, since different vowels have the same sound and one vowel may have many different sounds. However, the ear can be trained to listen for effects of repeated vowel sounds, and often much of the richness of a passage depends on these effects.

Attention has already been called to the general effect of wailing in the second line of Break, Break, Break,' which Tennyson secured by the repetition of the sound $o$.

On thy cold gray stones, $O$ Sea!
In the third stanza of the same poem Tennyson alternates a long $a$ ( $\overline{\mathbf{a}})$ with a short $i$ (i).

And the stately ships go on
To their haven under the hill;
Shakespeare uses assonance in the line quoted from Macbeth when he repeats the long $e$ in fever and sleeps. Notice the difference in effect if we repeat the short $e$ of well by substituting rests for sleeps.

After life's fitful fever he rests well.
Consonance. Consonance is the effect produced by the repetition of consonants surrounded by different vowels, as in tale and pull or stir and flare. Masefield uses $l$ 's and $r$ 's in Sea-Fever. ${ }^{2}$

And all I ask is a merry yarn from a laughing fellow-rover.

[^28]Onomatopoeia. Onomatopoeia is the term used to describe the effect gained when the sound of the verse definitely approximates the sense. The effects of onomatopoeia can always be traced to some of the means already discussed. One of the best and most famous examples is the description of the house of Morpheus from Spenser's The Faerie Queene, in which a drowsy effect is produced by the repetition of the humming sound of the nasals (streame, tumbling, downe, murmuring, winde, sowne, noyse) and the buzzing sound of the $s$ 's and $z$ 's (slumber, streame, soft, drizling, sowne, swarming, Bees, swoune) mixed with the smooth and melodious liquids.

And more to lulle him in his slumber soft, A trickling streame from high rock tumbling downe, And ever-drizling raine upon the loft, Mixt with a murmuring winde, much like the sowne
Of swarming Bees, did cast him in a swowne.
No other noyse, nor peoples troublous cryes, As still are wont t'annoy the walled towne, Might there be heard; but carelesse Quiet lyes Wrapt in eternall silence farre from enimyes.

In the first book of Paradise Lost Milton uses a similar combination of nasals with $s-z$ sounds to prolong the fall of Vulcan from heaven, but he brings the fall to an abrupt end in the word dropt, which, with its stops emphasizes the hard impact of the body on the earth.

> To noon he fell, from noon to dewy eve, A summer's day, and with the setting sun Dropt from the zenith, like a falling star, On Lemnos, the Aegaean isle.

## 8. Refrain

A refrain is a phrase or a sentence that is repeated exactly or in almost the same words.

Sigh no more, ladies, sigh no more,
Men were deceivers ever,
One foot in sea and one on shore,
To one thing constant never.
Then sigh not so, but let them go,
And be you blithe and bonny,
Converting all your sounds of woe
Into Hey nonny nonny.

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> Sing no more ditties, sing no moe, Of dumps so dull and heavy; The fraud of men was ever so, Since summer first was leafy. Then sigh not so, but let them go, And be you blithe and bonny, Converting all your sounds of woe Into Hey nonny nonny.
> -Shakespeare, Much Ado about Nothing.

Spenser uses a refrain in each of his magnificent wedding songs. In the Prothalamion, the refrain is the same each time:

Sweet 'Themmes, runne softly, till I end my song.
In the Epithalamion, which he wrote for his own wedding, the refrain is changed slightly from time to time, as in these lines:

The woods shall to me answer, and my eccho ring.
That all the woods may answer, and your eccho ring.
To which the woods shal answer, and theyr eccho ring.
The woods no more shal answere, nor your echo ring.
'The woods no more us answer, nor our eccho ring.
'The old ballads, which were meant to be sung, have a formula that gives to the reader or narrator the story of the ballad and gives the audience a refrain with which to join in at the end of each stanza. Sometimes the refrain is primarily a group of nonsense words for singing. Sometimes the repetition advances the plot.
"O where ha'e ye been, Lord Randal, my son?
O where ha'e ye been, my handsome young man?"
"I ha'e been to the wildwood; mother, make my bed soon, For I'm weary wi' hunting, and fain would lie down."
"Where gat ye your dinner, Lord Randal, my son? Where gat ye your dinner, my handsome young man?" "I dined wi' my true-love; mother, make my bed soon, For I'm weary wi' hunting, and fain would lie down."
> "What gat ye to your dinner, Lord Randal, my son? What gat ye to your dinner, my handsome young man?" "I gat eels boiled in brew; mother, make my bed soon, For I'm weary wi' hunting, and fain would lie down."

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> "What became of your bloodhounds, Lord Randal, my son? What became of your bloodhounds, my handsome young man?" "O they swelled and they died; mother, make my bed soon, For I'm weary wi' hunting, and fain would lie down."
> "O I fear ye are poisoned, Lord Randal, my son!
> O I fear ye are poisoned, my handsome young man!"
> "O yes, I am poisoned; mother, make my bed soon,
> For I'm sick at the heart, and I fain would lie down."'
> -Anon.-Lord Randal.

## 9. Words and Phrases

The repetition of a word, though it may become somewhat obvious, is one of the most effective devices in literature. Observe, for instance, the cumulative effect of the repetition of the word charity in the famous passage from Paul's First Epistle to the Corinthians. All the emotion in the passage seems to be bound up in that one word.

Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing. Charity suffereth long, and is kind; charity envieth not; charity vaunteth not itself, is not puffed up, doth not behave itself unseemly, seeketh not her own, is not easily provoked, thinketh no evil; rejoiceth not in iniquity, but rejoiceth in the truth; beareth all things, believeth all things, hopeth all things, endureth all things. Charity never faileth; but whether there be prophecies, they shall fail; whether there be tongues, they shall cease; whether there be knowledge, it shall vanish away. For we know in part, and we prophesy in part. But when that which is perfect is come, then that which is in part shall be done away. When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things. For now we see through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known. And now abideth faith, hope, charity, these three; but the greatest of these is charity.
-Chap. XIII.
The same emphasis is secured in Christina Rossetti's sonnet ${ }^{1}$ through the repetition of the word remember.

Remember me when I am gone away, Gone far away into the silent land;

[^29]When you can no more hold me by the hand, Nor I half turn to go, yet turning stay. Remember me when no more, day by day You tell me of our future that you planned: Only remember me; you understand It will be late to counsel then or pray. Yet if you should forget me for a while And afterwards remember, do not grieve: For if the darkness and corruption leave A vestige of the thoughts that once I had, Better by far you should forget and smile Than that you should remember and be sad. -Remember.

The cumulative effect of the repetition of words is well illustrated in this passage from Spenser's The Faerie Queene. In the last line of the first stanza Spenser mentions the various pleasant sounds: birds, voices, instruments, winds, waters; then, as though lingering over them, he takes up each and dwells on it separately in the second stanza.

> Eftsoones they heard a most melodious sound, Of all that mote delight a daintie eare, Such as attonce might not on living ground, Save in this paradise, be heard elswhere: Right hard it was for wight which did it heare, To read what manner musicke that mote bee:
> For all that pleasing is to living eare Was there consorted in one harmonee; Birdes, voices, instruments, windes, waters, all agree.

> The joyous birdes, shrouded in chearefull shade, Their notes unto the voice attempred sweet: Th' angelicall soft trembling voyces made To th' instruments divine respondence meet: The silver sounding instruments did meet With the base murmure of the waters fall The waters fall with difference discreet, Now soft, now loud, unto the wind did call: The gentle warbling wind low answered to all.

-Book II, Canto xii
In Shakespeare's The Merchant of Venice Lorenzo and Jessica repeat the phrase "in such a night" in their banter, one snatching it from the other.

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Lorenzo. The moon shines bright. In such a night as this, When the sweet wind did gently kiss the trees And they did make no noise, in such a night Troilus methinks mounted the Troyan walls, And sigh'd his soul toward the Grecian tents, Where Cressid lay that night.

| Jessica. | In such a night |
| :---: | :---: |
|  | Did Thisbe fearfully o'ertrip the dew, |
|  | And saw the lion's shadow ere himself |
|  | And ran dismay'd away. |

Lorenzo.
In such a night
Stood Dido with a willow in her hand
Upon the wild sca banks, and waft her love
To come again to Carthage.

> Jessica.
> In such a night
> Mrdea gathered the enchanted herbs That did renew old Aeson.
Lorenzo. In such a night
Did Jessica steal from the wealthy Jew,
And with an unthrift love did run from Venice
As far as Belmont.

Jessica.
In such a night
Did young Lorenzo swear he lov'd her well, Stealing her soul with many vows of faith And ne'er a true one.

Lorenzo. In such a night
Did pretty Jessica, like a little shrew, Slander her love, and he forgave it her.

Jessica. I would out-night you, did no body come; But, hark, I hear the footing of a man.

$$
-V, i, 1-24 .
$$

In many of his poems Edgar Allan Poe is almost hypnotized by the sound effects to be obtained from repetition of word or phrase. In The Raven the refrain comes like a tolling bell, "Nevermore." The poem Ulalume ${ }^{1}$ is constructed with elaborate repetition and variation; in each stanza the third line repeats and varies the second, and the eighth and ninth repeat and vary the sixth and seventir. It is a variation of phrase quite comparable to that employed in music by Chopir:
${ }^{1}$ Reprinted by permission of Charles Scribner's Sons, publishers.

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The skies they were ashen and sober;
The leaves they were crispèd and sere, The leaves they were withering and sere;
It was night in the lonesome October Of my most immemorial year;
It was hard by the dim lake of Auber, In the misty mid region of Weir:
It was down by the dank tarn of Auber, In the ghoul-haunted woodland of Weir.

Possibly we should pause before leaving the question of repetition of words to comment on the skill with which such repetitions are made. The student writing themes is apt to meet the repeated criticism "find synonyms," "do not repeat the same word." For nothing is more awkward than poor repetition, such as, "Let me know when you know the date." The difference can bc traced easily to the reason for the repetition. If the writer is repeating the word because he does not know any other, the repetition is awkward, unpleasing. But if the writer repeats because he wants to emphasize the word, his repetition may be strong and forceful.

## 10. Structure

In this little poem ${ }^{1}$ by Thomas Hardy there is a repetition of phrase or sentence, which is not a refrain, and there is a repetition of grammatical form and structure when there is no repetition of words.

> This is the weather the cuckoo likes, And so do I;
> When showers betumble the chestnut spikes, And nestlings fly;
> And the little brown nightingale bills his best, And they sit outside the "Traveler's Rest," And maids come forth sprig-muslin drest, And citizens dream of the South and West, And so do I.
> This is the weather the shepherd shuns, And so do I;
> When beeches drip in browns and duns, And thresh, and ply;
> And hill-hid tides throb, throe on throe,

[^30]
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And meadow rivulets overflow, And drops on gate-bars hang in a row, And rooks in families homeward go, And so do I.
-Weathers.
In Thomas Carew's Song each stanza begins with the words "Ask me no more"; and in each stanza the first lines state the question, and the last two lines answer it. These are the first two stanzas:

> Ask me no more where Jove bestows, When June is past, the fading rose;
> For in your beauty's orient deep
> These flowers, as in their causes, sleep.
> Ask me no more whither do stray
> The golden atoms of the day;
> For in pure love heaven did prepare
> Those powders to enrich your hair.

A last obvious repetition of structure is that employed in The Rime of the Ancient Mariner of Coleridge, in which each of the numbered sections ends with a reference to the albatross.

## 11. Repetition of Idea

The words and phrases cited as examples of repetition were almost entirely those repeated for tone color in poetry or poetic prose. Epithets and favorite expressions are repeated as an aid to characterization. Homer repeats the epithets characteristic of epic poetry. In the Iliad, for instance, Achilles is always referred to as "god-like Achilles"; Agamemnon is "shepherd of the host"; the Achaeans are "the well-greaved Achaeans"; the Trojans are "the horse-taming Trojans." Such repetition serves to hold together famous episodes of the poem and keep the characters definite in our minds. Dickens uses verbal tags for many of his characters: Barkis "is willin'!" Uriah Heep is "'umble," and Miss Betsey Trotwood is always exclaiming, "Janet! Donkeys!"

Such verbal repetitions are dangerous, however, unless they are very well employed. Less dangerous are repetitions of idea without identical wording. Peggoty, for instance, is always bursting her buttons, but not always in the same language. By calling attention to the same characteristic many times, the author helps to build up the image of the person he wants known. In Of Human Bondage Philip's clubfoot and Mildred's green face belong to this class; in Anna

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Karenina there is much repetition in the references to the black curls and white neck of Anna.

Repetition of idea may be seen in every piece of literature. Observe, for instance, the repetition of the idea of cold in the opening stanza of Keats's The Eve of St. Agnes. Here, without repetition of the exact words, Keats has repeated the idea of cold in many different ways until, almost without our knowing it, he has conveyed the impression that he intends. In Anna Karenina Tolstoy repeats the idea of Konstantin Levin's interest in agriculture and his desire to improve the condition of the peasants. These ideas occur again and again; the sense of the novel depends on them, but it is not a repetition in word or in image.

Sometimes a scene is repeated to emphasize the climax of a story. In Anna Karenina again, Anna meets her lover for the first time at the railroad station. She is arriving in Moscow to visit her brother, and he is at the train to meet his mother, who comes in on the same train. They are introduced and chat for a few minutes; then each goes his own way. Before they have passed the gates there is a terrifying scream, the sound of brakes being suddenly applied, tremendous noise and confusion. One learns that a brakeman has fallen under the wheels of the train and been killed. Years pass; Anna has left her husband and her child for Vronsky; their love has not proved all in all, and Anna is eaten up with jealousy and despair. She finds herself again at the same station; she had not intended to kill herself; she knew only that life could not continue as it was. But as she sees the train on the tracks she recalls the man who was killed the first time she met Vronsky, and as the train gets into action she throws herself under the wheels.

## References

For references on Repetition see the chapters on plan, form, organization in the different arts.

## Questions

1. Study the themes of two great symphonies. Is it true that many of them are not very melodious? Compare with folk songs.
2. Trace the repetitions of a single motive in an automobile, the pattern of dress goods, a piece of furniture.
3. Do the same for the exterior of a building.
4. Do the same for a statue or a palnting.
5. Read aloud a Shakespearean sonnet several times. Note how variety has been obtained.

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6. Make a list of ten popular proverbs and slogans. Analyze the tone color and rhythm of each to determine the reason for its popularity.
7. What basis in sound can you find for the popularity of five well-known quotations?
8. Write an imitation of a popular ballad: Lord Randal, Edvard, The Two Sisters, etc.
9. In Rupert Brooke's sonnet The Soldier ("If I should die") note the repetition of the words English and England.
10. Add other examples of repetition of structure and repetition of idea.
11. Study carefully the first chapter of a novel. Note in the remainder of the book the repetition of the details given in that chapter.
12. Do the same for a play.

PART V
Style and Fudgment

## XIX

## Realism, Classicism, Romanticism

## 1. Definition of Style

. . . I remember myself, years ago, sketching with two well-known men, artists who were great friends, great cronies, asking each other all the time, how to do this and how to do that; but absolutely different in the texture of their minds and in the result that they wished to obtain, so far as the pictures and drawings by which they were well known to the public were concerned.

What we made, or rather, I should say, what we wished to note, was merely a memorandum of a passing effect upon the hills that lay before us. We had no idea of expressing ourselves, or of studying in any way the subject for any future use. We merely had the intention to note this affair rapidly, and we had all used the same words to express to each other what we liked in it. There were big clouds rolling over hills, sky clearing above, dots of trees and water and meadow-land below, and the ground fell away suddenly before us. Well, our three sketches were, in the first place, different in shape; either from our physical differences, or from a habit of drawing certain shapes of a picture, which itself usually indicates-as you know, or ought to know-whether we are looking far or near. Two were oblong, but of different proportions; one was more nearly a square; the distance taken in to the right and left was smaller in the latter case, and on the contrary, the height up and down-that is to say the portion of land beneath and the portion of sky above-was greater. In each picture the distance bore a different relation to the foreground. In each picture the clouds were treated with different precision and different attention. In one picture the open sky above was the main intention of the picture. In two pictures the upper sky was of no consequence-it was the clouds and the mountains that were insisted upon. The drawing was the same, that is to say, the general make of things; but each man had involuntarily looked upon what was most interesting to him in the whole sight; and though the whole sight was what he meant to represent, he had unconsciously preferred a beauty or an interest of things different from what his neighbor liked.

The colour of each painting was different-the vivacity of colour and tone, the distinctness of each part in relation to the whole; and each picture would have been recognized anywhere as a specimen of work by each one of us, characteristic of our names. And we spent on the whode affair perhaps twenty minutes.

I wish you to understand, again, that we each thought and felt as if we had been photographing the matter before us. We had not the first desire of expressing ourselves,


Fig. 159.-Gerard Ter Borch (1617-1681). Chamber Music (after 1655).
Oil. Size: about $181 / 2$ by 17 inches. Paris, Louvre. (Metropolitan Museum of Art.)


Fig. 160.-Gabriel Metsu (1630-1667). The Music Lesson.
Oil on wood. Size: about 24 by $171 / 2$ inches. The Hague, Mauritshuis. (Metropolitan Museum of Art.)
and I think would have been very much worried had we not felt that each one was true to nature. And we were each one true to nature. ${ }^{1}$

This account of a sketching expedition told by the artist, John La Farge, is dramatic because La Farge and his friends had decided together what they wanted to accomplish and how they expected to get it done, but the fact underlying it is one familiar to everyone, namely, that no two people do anything in the same way. No matter what they are doing or how carefully they plan to do it the same way, the results are different.

We may compare two paintings, Chamber Music by Ter Borch and The Music Lesson by Metsu. The composition in both pictures is very nearly the same. In the center is a woman, dressed in satin, who is seated before a table. In the left hand she holds a paper; her right hand is raised. At the left of each picture, behind the table, is a woman standing, playing on a lute. At the right is a male figure; in the Ter Borch it is a boy carrying a tray; in the Metsu it is a man who is leaning on the chair of the seated woman. We have, thus, the same general arrangement in both pictures, the same satin, the same woman playing the lute, the same table covered with a heavy tapestry, and yet the pictures are entirely different.
${ }^{1}$ John La Farge, Considerations on Painting, pp. 71-73, reprinted by permission of The Macmillan Company, publishers.

Or, if we turn to literature, we may take two poems about lambs. Both are religious; both are fresh, simple, and unspoiled; but they are not alike in any sense.

> All in the April morning, April airs were abroad; The sheep with their little lambs Pass'd me by on the road.

The sheep with their little lambs
Pass'd me by on the road;
All in an April evening
I thought on the Lamb of God.
The lambs were weary, and crying
With a weak human cry,
I thought on the Lamb of God Going meekly to die.

Up in the blue, blue mountains Dewy pastures are sweet:
Rest for the little bodies,
Rest for the little feet.
Rest for the Lamb of God
Up on the hill-top green,
Only a cross of shame
Two stark crosses between.
All in the April evening,
April airs were abroad;
I saw the sheep with their lambs,
And thought on the Lamb of God.
-Katharine Tynan, Sheep and Lambs. ${ }^{1}$
Little Lamb, who made thee?
Dost thou know who made thee?
Gave thee life and bid thee feed
By the stream and o'er the mead;
Gave thee clothing of delight,
Softest clothing, woolly, bright;
Gave thee such a tender voice
Making all the vales rejoice?
Little Lamb, who made thee?
Dost thou know who made thee?
${ }^{1}$ From Collected Poems, reprinted by permission of The Macmillan Company, publishers.

> Little Lamb, I'll tell thee; Little Lamb, I'll tell thee: He is callèd by thy name, For He calls Himself a Lamb. He is meek and He is mild; He became a little child. I a child and thou a lamb, We are called by his name. Little Lamb, God bless thee! Little Lamb, God bless thee! -William Blake, The Lamb.

Even when the words mean the same thing there is a difference. When Longfellow says, "Learn to labor and to wait," the meaning is almost identical with that of Milton, "They also serve who only stand and wait." But the first line is rather cheap and commonplace, and the second is dignified and beautiful. When two people set the same words to music, or even when they sing the same song, there is a great difference, and no two conductors with the same orchestra playing the same tones make the same music. Ever in a chorus of ballet girls in which costume and training have done their utmost to make all the members exactly alike, there are subtle differences between one girl and another. No matter what we are doing or how we do it, no two people accomplish exactly the same results.

These differences are what we know as style. Differences in style are very quickly and easily seen and felt, but they are not easily described. We can all see that there is a difference between Longfellow's line and Milton's, between Ter Borch's painting and Metsu's, but we do not know how to put it into words. If Mary borrows Susie's dress to wear to the ball game, we know that she will not look like Susie and that the dress on her will look different from the way it does on Susie, but it is not easy to say wherein the difference lies. It must be in something we can see or we should not be aware of it, but when we try to express the difference we usually do so in terms of personality: "Mary has not Susie's style," or "Anything on Mary would look dowdy." And so in art, when we see two works using the same subjects, the same medium, the same elements and getting, as always, different results, we tend to speak of the difference not in terms of the color or the organization but in terms of the artists behind the picture. When Professor Wölfflin explains the difference between the paintings by Metsu and Ter Borch he does so in terms of the men behind the pictures. He speaks of Ter Borch's "innate distinction" and says that

Metsu saw "differently," the arm is "not . . . less skilfully drawn, but . . . it is felt differently." ${ }^{1}$

Differences in style are not primarily in the medium, the elements, or the organization but in the feeling, in the man behind the work of art. Style is the personality of the artist showing through medium, eTements, and organization. The best definition of style identifies it with personality. This is essentially the famous definition of Buffon, "The style is the man," and, in another sense, this is the meaning of the motto William of Wykeham used both for the school at Winchester and for New College, Oxford. "Manners makyth Man." Manners make the man; the style is the manners, the personality.

When we say that style is personality, we do not mean that the artist obtrudes himself. The work is personal and it shows the artist's personality, but it does so because every work necessarily shows the personality of the artist and not because the artist has tried to show what kind of person he is. In the two poems on the lamb we get a clear impression of Katherine Tynan and an equally clear impression of Blake, but not because they have tried to show us what they are. They have been interested in what they have to say about the lamb, and because they have expressed themselves honestly we learn what they are. Paradoxically, the most personal art is impersonal.

If style is personality, then each person has a different style, for each person has a different personality. Moreover, an individual does not have the same personality at all times. His personality as a young man is different from his personality as a middle-aged man or an old man. And so it is with style. The style of Beethoven is different from the style of Mozart, and the style of Beethoven as a young man is different from his style in his middle period or his style in his last period. The style of Shakespeare is not the same as that of Marlowe or Beaumont, and Shakespeare's early style is different from his later style.

Nevertheless, we can make certain groupings in style just as we make certain groupings in people. We shall consider only a few of the fundamental and underlying tendencies of style.

1. Realism.
2. Classicism and romanticism.
3. Comedy and tragedy.

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Fig. 161.-Head of women from the Western Pediment of Temple of Zeus at Olympia (ca. 475-465 в.c.).
Parian marble. Above life size. Olympia, Museum.


Fig. 162.-Roman Portrait (first century в.c.).

Marble. About life size. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)

## 2. Realism

Definition. Realism is opposed to idealism. Realism is the practice of seeing things as they are, whereas idealism sees them as they should be. If we compare the head of a woman from the temple at Olympia with the bust of an unknown Roman we can see the difference. The head of the woman is idealized; in it one can detect no sign of worry, grief, or pain; it shows none of the sorrows of man nor any of the joys. The face is calm, serene, absolutely quiet, absolutely beautiful. The head of the Roman, on the other hand, is that of a person who has lived and known the world; his brow is wrinkled; there are lines about the mouth and he is bald. The face is by no means ideal; it is the face of a man who has worked and suffered.

In the two little poems that follow the lover is frankly idealistic, and the lady is just as frankly realistic.

Come live with me, and be my love;
And we will all the pleasures prove
That hills and valleys, dales and fields,
Woods, or steepy mountain yields.

And we will sit upon the rocks, Seeing the shepherds feed their flocks By shallow rivers, to whose falls Melodious birds sing madrigals.

And I will make thee beds of roses, And a thousand fragrant posies; A cap of flowers, and a kirtle Embroidered all with leaves of myrtle;

A gown made of the finest wool Which from our pretty lambs we pull; Fair linèd slippers for the cold, With buckles of the purest gold;

A belt of straw and ivy-buds, With coral clasps and amber studs; And if these pleasures may thee move, Come live with me, and be my love.

The shepherd-swains shall dance and sing For thy delight each May morning. If these delights thy mind may move, Then live with me, and be my love. -Ghristopher Marlowe, The Passionate Shepherd to His Love.

If all the world and love were young, And truth in every shepherd's tongue, These pretty pleasures might me move, To live with thee and be thy love.

Time drives the flocks from field to fold, When rivers rage, and rocks grow cold; And Philomel becometh dumb; The rest complains of cares to come.

The flowers do fade, and wanton fields
To wayward winter reckoning yields; A honey tongue, a heart of gall, Is fancy's spring, but sorrow's fall.

Thy gowns, thy shoes, thy beds of roses, Thy cap, thy kirtle, and thy posies, Soon break, soon wither, soon forgotten, In folly ripe, in reason rotten.

Thy belt of straw and ivy buds, Thy coral clasps and amber studs,

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All these in me no means can move, To come to thee and be thy love.

But could youth last, and love still breed, Had joys no date, nor age no need, Then these delights my mind might move, To live with thee and be thy love. -Anon., The Nymph's Reply to the Shepherd.

In both these poems the subject is the same, life in the country. The shepherd sees it as all rosy and gay, carefree. The nymph, with a woman's hardheadedness, takes a more realistic view; winter and age come to destroy the gay freedom of youth and summer.

Or we may compare two paintings of nudes. Giorgione made a beautiful study of a reclining nude figure in his Sleeping Venus. Two centuries later Manet tried his hand at the same figure, Olympia. Giorgione puts his figure out of doors and presents her sleeping. Manet opens her eyes and makes her more erect in posture. The effect of the paintings is very different. Giorgione's is calm and idyllic, idealized, whereas Manet's is realistic, a frank picture of a courtesan, hard and cold-blooded as her profession.

From the nature of the case realism can characterize more definitely than idealism. As we approach the perfect we become alike; -it is in our vices that we have individuality. In the examples just given there is much more individuality, much greater characterization in the realistic picture than in the idealistic. For another example we may turn to the Spanish painter of royalty Goya. A casual glance at his painting of Maria Luisa of Parma shows apparently the usual idealized portrait of a rich person. But when we stop to look at the face we see that Goya was looking through the finery to the real person underneath and was painting her in all her stupidity and cunning.

Importance of the Disagreeable in Realism. Realism also tends to be identified with the less pleasant side of life. This bias is a natural one; idealism is a picture of life as better than it is; realism may tend to show life as worse than it is. Hogarth has a series of pictures called Marriage à la Mode showing different stages in the marriage of a fashionable young couple: the scene before the marriage, when the family solicitors are making out the marriage contract, with the two young people looking rather bored; the scene at the home of the couple after a night of revelry; the escape of a suitor from the countess's dressing room; and the death of both husband and wife.


Fic. 166.-Henri de Toulouse-Lautrec (1864-1901). The Circus (1888).
Oil on canvas. Height: 3 feet $23 / 4$ inches. Chicago, Art Institute.
citizens or to earn a decent living but that profiteers from their necessity to work for any wages and pushes them about with no hope of getting even enough to eat.

All works of this class are called realistic, but no one of them is real in the sense that it pictures life as it is, since in each emphasis has definitely been put on the disagreeable side of life; it is not a cross section; the unpleasant has been chosen. For this type of realism there is no word in common use. Cynicism, pessimism, misanthropy are words used of philosophies, not of art. When distinguished it may be called "crude realism," "crass realism," or "stark realism," but usually it is known just as realism. And such situations are real; they do exist, but the picture of them presents a one-sided view, almost as much away from the center on the one side as the idealistic treatment is on the other.

Keeping the Balance. To keep the balance is difficult, and not all people agree as to when the balance has been struck. The Concise Oxford Dictionary defines realism as "the practice of regarding things in their true nature and dealing with them as they are, freedom from prejudice and convention, practical views and policy," with a second meaning, "fidelity of representation, truth to nature, insistence upon details." But when has one been true to nature? Who can regard things


Fig. 167.-Paul Cézanne (1839-1906). Mme. Cézanne in the Conservatory (1891). Oil on canvas. Size: $361 / 2$ by $281 / 2$ inches. Owned by Stephen C. Clark, New York. (Museum of Modern Art.)
in their true nature and deal with them as they are? It is easy to say that the optimist sees only the rose, the pessimist sees only the thorn, whereas the realist sees roses and thorns, but it is not easy to differentiate them in practice. Every person alive probably feels that he is a realist in that he sees both roses and thorns. But when is a person recognizing that roses have thorns, and when is he putting undue emphasis on the thorns? To the person who has been pricked the thorn is important. Moreover, if there are any thorns there are always some people who say that undue emphasis has been put on them, just as there are always people who accuse one of being soft-hearted if he admits that roses have fragrance or are beautiful to look upon.

But we do notice and probably would agree on certain welldefined tendencies of style. The painting of an old man and little child by Ghirlandaio is grandly realistic. The nose of the old man is shown in all its disgusting reality, but we accept the nose in the picture because of the man's interest in the boy and the boy's interest


Fig. 168.-Bartolomé Estéban Murillo (1618-1682). Two Peasant Boys Eatıng Melon (ca. 1675).
Oil on canvas. Size: 48 by 393 / inches. Munich, Alte Pinakothek.
in the man, just as we would accept that nose in life. Shakespeare's characters are also very realistic in the sense that we see both the good and the bad in them. His heroes, however, veer toward the ideal. The Greeks tend toward the idealistic; their heroes, whether in the epic, the drama, or in sculpture, are greater than men; they are not perfect, but even in their sins they are bigger and grander than ordinary men, Balzac, magnificent as he is, is definitely on the side of the pessimist; the thorns are more in evidence than the roses. Michelangelo, Fra Angelico, and Botticelli belong, again, on the side of idealism. The poems of Chaucer and the portraits of Bellini, Titian, and Raphael are, on the whole, realistic. The portraits of Cézanne likewise owe their charm to their realism.

Novels of a generation ago presented an idealistic picture of the South; the men were brave and true, and the women pure and selfsacrificing. Recent novels of the South have gone to the opposite
extreme in showing the misery and selfishness, the greed and immorality of Southern people. The novels of Thomas Nelson Page and Mary Johnston are typical of the first tendency and those of William Faulkner and Margaret Mitchell, of the second. The same differences are seen in accounts of small-town and country life; the one group shows all the beauty and the goodness of people in the small town and rural community, and the other group shows all their littleness, meanness, and pettiness.

Naturalism. The fundamental contrast with realism is idealism. Other tendencies in art that are kin to realism are naturalism, impressionism, genre art, and the picaresque. Naturalism, as contrasted with realism, shows only the surface, the superficial view. The difference here is seen most clearly in the photograph and the portrait; the photograph presents merely the superficial appearance of a person, whereas a good portrait presents his essential character. "A portrait must look more like a man than he does himself." And this distinction holds true in all the arts.

Genre. Genre art portrays common people in their habitual, human pursuits. Typical genre paintings are Murillo's paintings of small boys eating melons or selling fruit. These are pictures of peasants engaged in the occupations that peasants are ordinarily engaged in, but there is a very great difference between them and the peasants of a person like Millet, who are noble, dignified, idealized. Millet's peasants are better and wiser than real peasants, whereas the peasants of Murillo are only peasants. That which is called genre in painting is called in literature the picaresque.

Impressionism. Impressionism is very close to both realism and naturalism; it is distinguished from them in that it pretends to show only the fleeting, passing impression of the scene. The name was given the school because of a sunrise that Monet exhibited in 1874 called Impression, soleil levant. And, since the word seemed to fit the paintings of his school, it was used of all of them. Monet is not only the founder but may be taken as a type. He used to go out in the morning with twenty canvases and paint the same subject over and over as the light changed and the "impression" of it changed. Impressionism was originally and has remained primarily a method of painting, though the term has been used also in literature to refer to the method by which the author does not try to give a sustained narrative but tries to give "impressions" of what is going on, with the presumption that impressions are more nearly true than logical statements.


Fig. 169.--Claude Monet (1840-1926). Waterloo Bridge (1903).
Oil on canvas. Size: $251 / 2$ by 36 inches. Worcester, Massachusetts, Worcester Art Museum. (Worcester Art Museum.)

## 3. Classicism and Romanticism

The distinction between classicism and romanticism, though one of the clearest and most basic distinctions in art and one almost unerringly recognizable, does not lend itself easily to exact description or definition. The confusion is made worse by the fact that the words themselves have shifted in meaning a great deal. Classic should mean nothing more than "belonging to a certain class." But by a process analogous to that whereby we say that a person has taste when we mean he has good taste, classic came to mean "belonging to the first class of excellence, the best." And the word is still used in that sense when we speak of "the classics of English literature." Since for many years Greek and Latin culture was considered the best, the word classic came to be associated only with Greek and Latin authors, and even today in the schools the "classics" refer to Greek and Latin. When, however, we use the word classic or classicism as opposed to romantic or romanticism we do not mean any of these definitions but a fourth, as the word came to connote the qualities that were supposed to characterize Greek and Latin authors, which were commonly accepted to be clarity, simplicity, restraint, objectivity, and balance.

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The word romantic is also used in various ways. It should mean nothing more than pertaining to or descended from things Roman or Latin, a usage that survives in the term Romance languages-French, Spanish, Italian, Portuguese. The word came into use in the Middle Ages to distinguish the vernacular from the literary Latin. And, by a process of change very similar to that of the word classic, the words romance and romantic came to mean the literature of those countries at that time. The most outstanding type of literature was the tale of chivalry that is still known as the romance, and the word is kept for all narratives with emphasis on plot, as when we speak of Scott's novels as romances. And, in the same way, romantic came to mean the qualities found in the medieval romance, which are taken to be love of the remote and indefinite, escape from reality, lack of restraint in form and emotions, the preference of picturesqueness or grandeur or passion to finish and proportion.

Classicism and romanticism are thus fundamentally in opposition; what is classic is not romantic, and what is romantic is not in that respect classic. The classic is restrained; the romantic is not restrained. The classic is real; it is concerned with the life of everyday; the romantic is unreal, concerned with the fantastic, the strange, the unusual. The classic is finished, perfect; it has great beauty of form; the romantic is unfinished, imperfect, and it is often careless of form. The classic is simple, the romantic is complex; the classic is objective, the romantic is subjective; the classic is finite, concerned only with projects that can be realized and accomplished; the romantic is infinite, concerned with plans that can never be realized, affecting "thoughts co-equal with the clouds." The classic is like an arrow shot from the bow that goes straight to the mark; the romantic is like a sailboat that tacks to one side and then to the other, reaching its destination by heading always away from the mark.

The difference between the two can be seen most clearly in the great art of each type. The Greek temple is classic and the medieval cathedral is romantic. Both are religious edifices, but they show an infinite difference in the attitude that created them, a difference far deeper than the dissimilarities of mere construction and mechanics. The Greek temple is hard, bright, exact, calm and complete; the walls and the columns are no higher than will stand of their own strength; the lintels and the roof are simple, sane, and sensible. Nothing more is attempted than can be accomplished, and the result is a perfect


Fig. 1.70.-View of the ambulatory from the south transept, Cathedral, Chartres. (Harry H. Hilberry.)
building, finished and finite. Anyone can understand its main construction at a glance.

The Gothic cathedral, on the other hand, is not self-contained but is built on the principle of balance. The openings are not made with lintels but are arched. One stone holds in place only by its relation to the other stones. The walls will not stand alone; they must be buttressed. As the walls go higher the arches become more pointed, the roof becomes more pointed, and the buttresses are strengthened with pinnacles and flying buttresses, the whole so carefully and cleverly balanced that a fault in one stone might cause a side or even the entire building to collapse. And the whole cannot be grasped at a glance; one is conscious only of its great complexity, its infinite variety, its striving upward and beyond.

The Greek temple might be as solid as a statue, for all the feeling we have of its interior; the inside does not matter; it has no more


Fig. 171.-Hegeso Stele (late fifth century в.c.).

Pentelic marble. Height: 4 feet $101 / 2$ inches. Athens, National Museum. (Alinari.)


Fig. 172.-Augustus Saint-Gaudens (1848-1907). Adams Memoral (ca. 1891). Bronze figure, granite setting. Height of figure; 6 feet, 1 inch. Washington, D.C., Rock Creek Cemetery.
character than the inside of a box. But with the cathedral, on the other hand, the outside sends us inevitably within. And inside we find a mystery in light and dark, a spiritual experience of unlimited space which is of the essence both of Gothic and of romanticism.

The difference, again, we may see clearly demonstrated if we take two pieces of sculpture, the Greek Hegeso Stele and the American Adams Memorial by Saint-Gaudens. Both are tombstones. But, whereas the Greek stele shows us Hegeso engaged in a simple act of everyday life and is quiet and objective in its treatment, a calm contemplation of the object, the Adams monument wraps us at once in mystery and questioning. Is it man or woman? What does it mean? Our attention no longer terminates on the object, as it did with the stele of Hegeso; the object now serves as a point of departure for our emotional feeling and introspective questioning.

In literature we see the same thing if we compare a great classic play, such as Oedipus the King of Sophocles with a great romantic play, such as King Lear of Shakespeare. In Oedipus the King, Oedipus has been on the throne for a long time, his reign has been a good one, his daughters are grown, and all has been for the best; but there breaks
out a terrible pestilence. Oedipus has sent to the oracle to learn the cause and the means of relief. When the play opens he is waiting for the return of his servant, who comes with the message of the gods that they must get rid of the unclean thing in their midst. Then, as the play develops and Oedipus tries to learn what this unclean thing is, we are told that Oedipus is the son of Laius and Jocasta, whom they exposed as a baby because of the oracle that their son would kill his father and marry his mother, that he ran away from his foster parents in Corinth because of the oracle there that he was doomed to kill his father and marry his mother, that the man he killed as he first entered the city was the king Laius, and hence he had killed his father, and therefore the queen whom he had married is his mother. Jocasta anticipates the outcome before Oedipus has put all the threads together, and when Oedipus finally realizes that he has unwittingly fulfilled the oracle of the gods, he finds that she has hanged herself. Saying that he is too vile to look upon the earth any longer, he blinds himself with her brooch and, as the play closes, is led off the stage, an outcast. There is no relief, no comedy, no subplot; everything in the play bears directly on the unraveling of the clues that lead to the conclusion that Oedipus is himself the unclean thing that has brought disaster to Thebes.

In King Lear, on the other hand, the main plot is buttressed by a subplot very much like it. The main plot tells how Lear cast off Cordelia, the daughter who loved him and was true to him, and gave his all to Goneril and Regan, who had no love for him and were untrue to him, only to be himself cast off by Goneril and Regan and rescued by Cordelia. The subplot parallels the main plot almost to a detail. Gloucester, who cast off his legitimate son Edgar to give everything to his illegitimate son Edward, is thrown out by Edward and saved by Edgar. The seriousness of the two plots is relieved by the humor of the fool, whose songs and dances are designed to cheer up the old king and bring him back to his senses. The contrasts are carried even further in the mad scenes, for Lear goes mad, and in a single scene we have the real madness of the king, the professional madness of the fool, and the pretended madness of Edgar. One scene is balanced against another like the stones of the cathedral, and the whole is fantastic, grotesque, wild, undisciplined, whereas Oedipus the King is calm and self-contained like the Greek temple. We cannot say one play is greater than the other; both reach the greatest heights of emotion, but their methods are onposite.

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The difference is fundamentally a difference of attitude, which may be found in all types of art. We have it illustrated in two love poems, the first, which is classic, by Landor, and the second, which is romantic, by Burns.

Ah, what avails the sceptred race, Ah, what the form divine! What every virtue, every grace! Rose Aylmer, all were thine.
Rose Aylmer, whom these wakeful eyes May weep, but never see,
A night of memories and of sighs I consecrate to thec.

> -Rose Avlmer.

Ae fond kiss, and then we sever! Ae farewell, and then forever! Deep in heart-wrung tears I'll pledge thee, Warring sighs and groans I'll wage thee. Who shall say that Fortune grieves him, While the star of hope she leaves him? Me , nae cheerfu' twinkle lights me, Dark despair around benights me.

I'll ne'er blame my partial fancy: Naething could resist my Nancy! But to see her was to love her, Love but her, and love for ever. Had we never lov'd sae kindly, Had we never lov'd sae blindly, Never met-or never partedWe had ne'er been broken-hearted.

Fare-the-weel, thou first and fairest!
Fare-the-weel, thou best and dearest!
Thine be ilka joy and treasure, Peace, Enjoyment, Love and Pleasure. Ae fond kiss, and then we sever!
Ae farewell, alas, for ever!
Deep in heart-wrung tears I'll pledge thee, Warring sighs and groans I'll wage thee. -Ae, Fond Kiss.

We find the difference also in acting. Many years ago Sarah Bernhardt was starring in Racine's Phedre. The story tells how Theseus, in his old age, married Phaedra, the sister of Ariadne, the


Fig. 173.-Nicolas Poussin (1593-1665). St. John on Patmos (1648-50).
Oil on canvas. Size: 40 by $501 / 2$ inches. Chicago, Art Institute, A. A. Munger Collection. (Art Institute of Chicago.)
daughter of Minos. She fell in love with his son Hippolytus, who combined all the virtues of his father with youth and beauty that matched her own. Hippolytus, though he returned the love of Phaedra, would have nothing to do with his father's wife. In one scene Phaedra makes passionate love to Hippolytus. In the production by Sarah Bernhardt and her company Hippolytus stood unmoved through the time that Phaedra was wooing him; at last she turned away in desperation, and as she turned Hippolytus took one step forward, with his arms outstretched, showing in this one movement all the love that was in his own heart but that honor had kept him from making known. If this gesture of Hippolytus is compared with what we may call the usual cinema portrayal of love, with its emphasis on the embrace, we see again the difference between the classic and the romantic. It is not a difference in the amount of feeling that is expressed but in the manner of expression.

Between the two extremities of classicism and romanticism there are, as always, many gradations. We can never say that any work of art is entirely classic or romantic, but it usually tends toward one


Fig. 174.-El Greco (1548-1614). View of Toledo (ca. 1610).
Oil on canvas. Height: 48 inches; width: $423 / 4$ inches. New York, Metropolitan Museum of Art.
or the other, and the work of any artist is apt to be predominantly classic or romantic, though almost any artist will show both tendencies. Shakespeare is unabashedly romantic in most of his plays but severely classic in Othello, where every scene is focused on the jealousy of the hero, its arousal, and its consequences.

Classicism and romanticism are an opposition that is ever-present in all art of all ages. But, although it is a mistake to say that any period is exclusively classic or romantic, we may discern times when either classicism or romanticism is distinctly ascendant, such as classicism in fifth-century Greece and eighteenth-century Europe and romanticism in the Gothic period and the nineteenth century.

It may be noted also that, just as some periods lean toward classicism or toward romanticism, so, of the various arts, some are more essentially classic or romantic than others. Figure painting may be either classic or romantic, but landscape painting is

## REALISM, CLASSICISM, ROMANTICISM

essentially romantic. The distant view is necessarily vague and mysterious, and even when a composition concentrates on a near-by scene it is not limited and self-contained: landscape, by its nature, leads one on and on; one wants to know what is over the river, beyond the tree, on the other side of the hill. Poussin is known as a classic painter, but his landscapes are classic only in the sense that they are intellectually conceived and planned; in other respects they are romantic. El Greco, in his View of Toledo, has heightened the romantic aspects of the scene by his use of light and cloud; the landscape is gloomy and menacing as well as mysterious and romantic.

Sculpture is by nature exact, precise, well-defined, and balanced. The effects most natural to it are therefore classic, and a people of marked classic tendencies, like the Greeks, find in sculpture one of their best means of expression. It is difficult for sculpture to be romantic and yet true to its medium. Rodin constantly attempted romantic subjects and treatment but only rarely succeeded. Music, on the other hand, is by nature vague, elusive, evocative, emotional. The effects most natural for it are therefore romantic, and music can express in a few bars all the yearning and poignancy that it takes the profoundest efforts of other arts to express. We often hear it said that the truest or best music is the "absolute" music of the eighteenth century, which is objective and without emotion, devoted to purely formal beauty. This is not at all the case; music is essentially emotional, and such objective music as that of Mozart and Scarlatti is the rarest kind.

Finally, we should perhaps insert a word of warning that classicism and romanticism are not in themselves good or bad; they are merely different points of view and must be judged on their own merits. The good in the classic is poised, serene, and balanced; the bad in the classic is cold, overformal, and lifeless. The good in the romantic is rich and full of emotion; the bad in the romantic is gushing and undisciplined. Either can be a complete approach to art; neither without the other is a complete approach to reality.

## References

[^32]
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Neilson, W. A.: Essentials of Poetry (Lowell lectures, 1911), 1912. Quiller-Couch, Sir A.: On the Art of Writing, Chap. XII, "On Style," 1916. Wordsworth, W.: Preface to Lyrical Ballads.

Questions

1. Study style in works of art on the same subject.
2. What cinema productions have you seen that you would call genre?
3. List ten stories, ten novels, ten poems, ten statues, or ten paintings and classify them as primarily (a) realistic, (b) idealistic, (c) naturalistic.
4. Make a list of ten examples of each of the major arts, classifying them as classic or romantic in temperament.
5. Make a list of the adjectives used in this chapter to describe the classic and those used to describe the romantic.
6. Imagine situations that seem to you essentially romantic and other situations that seem to you classic.

# Tragedy and Comedy 

## 1. The Kinship of Tragedy and Comedy

It has been said that tragedy is life viewed close at hand, and comedy is life viewed at a distance. It has also been said that life is a comedy to the man who thinks and a tragedy to the one who feels. In other words, the same situation may seem tragic to one and comic to another or tragic at one time and comic at another. Suppose, for instance, that one looks down a street and sees a man and a woman approaching. The woman is large and tall, and she carries herself with an air of importance; the man is only about half her size. At first one is inclined to laugh at the big woman and the little man, but when he sees that the man is a hunchback the inclination fades.

The close connection between the comic and the tragic is very well illustrated in the characters that formerly were considered comic but that now are counted tragic. There is no question but that Shylock, in The Merchant of Venice, was originally considered a comic character; now he is tragic.

> In the Rialto you have rated me
> About my moneys and my usances.
> Still have I borne it with a patient shrug, For sufferance is the badge of all our tribe. You call me misbeliever, cut-throat dog, And spit upon my Jewish gaberdine, And all for use of that which is mine own. Well then, it now appears you need my help.
> Go to, then! you come to me, and you say, "Shylock, we would have moneys"; you say so-
> You, that did void your rheum upon my beard
> And foot me as you spurn a stranger cur
> Over your threshold; moneys is your suit.
> What should I say to you? Should I not say,
> "Hath a dog money? Is it possible
> A cur can lend three thousand ducats"" Or
> Shall I bend low and in a bondman's key

$$
\begin{aligned}
& \text { With bated breath and whispering humbleness, } \\
& \text { Say this: } \\
& \text { "Fair sir, you spat on me on Wednesday last; } \\
& \text { You spurn'd me such a day; another time } \\
& \text { You calld me dog; and for these courtesies } \\
& \text { I'll lend you thus much moness"? }
\end{aligned}
$$

Malvolio is still a comic character, but with a difference. He is one of the favorite comedy types, the servant who wants to be greater than he is and who is made to believe that his mistress is in love with him. The climax comes in the scene at the madhouse. Olivia, the mistress, thinks Malvolio is mad when he appears before her, cross-gartered, and in yellow stockings, and she commits him to the madhouse. There he cries piteously to get out, calling on the people who had perpetrated the joke and maintaining that he is in his right mind. In the early productions Malvolio occupied the center of the stage and was teased by his fellows. But this baiting of Malvolio by the conspirators no longer seems as funny as it used to; it is not amusing to see him tortured by the servants who were smart enough to fool him. In consequence, there has taken place a change in the acting of the scene; now Malvolio is comparatively inconspicuous at the back of the stage, and the whole emphasis is placed on the jolly conspirators in the center.

In the visual arts, also, a scene may be interpreted as comic or not. Pieter Breughel has painted a picture illustrating the parable of Jesus: "Can the blind guide the blind? shall they not both fall into a pit?" In this picture one may laugh at the ridiculous situation in which the old men find themselves, or one may weep over their miserable plight. A similar case may be made for many of the grotesque carvings on medieval cathedrals, in which a man is being punished by having his ear cut off or a monk with a swollen face is having a tooth extracted. These scenes probably seemed funny to most of the people of that time, just as they seem funny to some of the people of today, but they are not funny to everyone.

Another example is found in William Cotton's caricature of Theodore Dreiser. In this painting the artist has emphasized the roundness of Dreiser's face, just as Paolo Garretto has emphasized the roundness of Herbert Hoover's face in his caricature of the former president. Garretto, however, has distorted so much that the comic and satiric effect is manifest, whereas Cotton's caricature might be judged as a serious portrait. ${ }^{1}$

[^33]

Fig. 175.-Pieter Breughel, the Elder (ca. 1525-1569). Parable of the Blind (1568). Tempera on canvas. Height: 2 feet 10 inches. Naples, National Museum.

## 2. The Fundamental Types

The fundamental types of comedy and tragedy are seen in the attitudes toward the old joke in which a person about to sit down has the chair pulled out from under him. There are, in general, four possibilities: (1) The person sits on the floor, and we laugh. It is comic, but it is comedy of situation only; we are amused because the person on the floor is in a situation in which he did not expect to be. (2) The person sitting on the floor breaks his back. This is obviously not comedy but tragedy, but again it is a tragedy of situation because the person is in an unfortunate situation. It does not matter in either of these cases who the person is; it is the situation that gives the scene its character. (3) We laugh when the chair is pulled out from under someone, but we laugh not at the person who sits on the floor but at the man who pulls out the chair. We are amused that anyone would think that such a thing is funny. We are laughing, in this case, not at a situation but at a man; in other words, this is comedy of character rather than of situation. (4) From comedy of character to tragedy of character it is only a short step. Instead of laughing at the person who has such a sense of humor we feel that it is tragic that anyone who is living in a civilized community should find that kind of thing amusing.

Comedy and tragedy of situation are also called low comedy and low tragedy; comedy and tragedy of character, high comedy and high
tragedy. Low comedy is found in slapstick comedy and farce-the comedy that results from the throwing of custard pies or from the big


Fig. 176.-William Cotton. Caricature of Theodore Dreiser (1931).
Pastel. Size: 9 by $121 / 4$ inches. Owned by Mr. Cotton. (From Vanity Fair. Copyright, 1931, the Condé Nast Publications, Inc.) feet of Charlie Chaplin. The Comedy of Errors of Shakespeare and the Menaechmi of Plautus, from which it derives, are entirely comedies of situation. As everyone knows, Shakespeare's story, which is a little more complicated than Plautus's, tells of the twins Antipholus of Ephesus and Antipholus of Syracuse and their twin servants Dromio of Ephesus and Dromio of Syracuse. Separated at birth, they find themselves in Ephesus, and naturally there are many confusing situations before their identity is discovered and their relationship established. There is nothing comic in the twin masters or in the twin servants. The comedy lies in the situation in which they find themselves, because they are confused one with the other.

Shakespeare and the English in general base comedy of character on comedy of situation. In Much Ado about Nothing there is a comic situation when Beatrice and Benedick fall in love, each under a misapprehension about the other's love. The comedy of character comes in our thinking of Benedick and Beatrice as persons who pretend to be something they are not. In The Rivals Mrs. Malaprop is an example of comedy of situation when she uses the wrong word and speaks of the "allegory on the banks of the Nile." She is at the same time an illustration of comedy of character in that she makes the mistake because she is trying to pretend that she is wiser and more learned than she is.

Observe me, Sir Anthony. I would by no means wish a daughter of mine to be a progeny of learning; I don't think so much learning becomes a young woman. For instance, I would never let her meddle with Greek, or Hebrew, or Algebra, or simony,
or fluxions, or paradoxes, or such inflammatory branches of learning-neither would it be necessary for her to handle any of your mathematical, astronomical, diabolical instruments.-But Sir Anthony, I would send her, at nine years old, to a boarding-school in order to learn a little ingenuity and artifice. Then, sir, she should have a supercilious knowledge in accounts; and as she grew up, I would have her instructed in geometry, that she might know something of the contagious coun-tries;-but above all, Sir Anthony, she should be mistress of orthodoxy, that she might not misspell and mispronounce words so shamefully as girls usually do; and likewise that she might reprehend the true meaning of what she is saying.-This, Sir Anthony, is what I would have a woman know; and I don't think there is a superstitious article in it.

In the same play, Lydia's desire for a romantic elope-


Fig. 177.-Paolo Garretto. Portrait of President Hoover (1931).
Air brush and tempera. Size: about 10 by 10 inches. Owned by Mr. Garretto. (From Vanily Fair. Copyright, 1931, the Conde Nast Publications, Inc.) ment shows primarily comedy of character.

Why, is it not provoking, when I thought we were coming to the prettiest distress imaginable, to find myself made a mere Smithfield bargain of at last? There had I projected one of the most sentimental elopements-so becoming a disguise-so amiable a ladder of ropes!-conscious moon-four horses-Scotch parson with such surprise to Mrs. Malaprop-and such paragraphs in the newspapers!

Now-sad reverse!-what have I to expect but, after a deal of flimsy preparation with a bishop's lieense and my aunt's blessing, to go simpering up to the altar; or perhaps be cried three times in a country-church, and have an unmannerly, fat clerk ask the consent of every butcher in the parish to join John Absolute and Lydia Languish, spinster! Oh, that I should live to hear myself called spinster!

The French comedy of Molière and the English comedy of Ben Jonson present comedy of character almost without comedy of situation. In Molière's Les Précieuses Ridicules (The Learned Ladies) the young women try to impress their lovers with their style and with their learning. They decide they will tolerate only very refined gentlemen among their acquaintances. The suitors vie with each other in their use of ultrapolite language. The miser Volpone, in Ben Jonson's play of
the same name, pretends to be very ill; his miserly friends bring rich gifts, each one hoping to ingratiate himself so as to be the sick man's heir. When Volpone has got all their gifts, he resumes his usual state of health. There is nothing comic in either situation; it is only the characters at whom we smile.

Deformity, insanity, and pain used to be considered comic and were regularly introduced for low-comedy effects. The fool, frequently a hunchback, and the midget were accepted as comic characters of the court; and as such they are prominent in Velásquez's paintings of court scenes. In the Elizabethan drama choruses of madmen are sometimes introduced for comic effects. Drunkenness, until a few years ago, was considered a cause of merriment, and is still so considered in many cases.

Low comedy is the basis for farce. Low tragedy is the essence of melodrama. One is interested in the exciting events that occur because they are exciting-the train wreck, the explosion, the race, etc.

In tragedy, as in comedy, Shakespeare mixes situation and character, and his plays usually are made of tragedy of character based on tragedy of situation. A play like Shakespeare's Hamlet abounds in melodrama. But, as usual with Shakespeare, the interest in melodrama is superseded by the interest in character, and one is usually surprised to learn that in a play like Hamlet melodramatic elements are as important as they are. To enumerate, the guards are watching at midnight when they see a ghost; the hero kills a man through a curtain; Laertes and Hamlet fight in the grave of Ophelia; Gertrude drinks the poison that was prepared for Hamlet; the swords are exchanged when they fall, and Hamlet kills Laertes with the poisoned point that was intended for himself. All this is melodrama; the real tragedy is the tragedy of character.

The Greek drama allows no violence on the stage. Violent actions take place, but they occur off the stage, and the element of melodrama is thus reduced to a minimum, if not eradicated entirely.

## 3. The Essence of the Comig

Comedy arises from the difference between what one expects and what one receives. In the instance cited at the beginning of the chapter, one expects a man to be as large as or larger than a woman; therefore the appearance of a small man and a large woman is comic. In the case of the man pulling out a chair from under his friend, there is the contrast between the position in which the person expects to be and the position in which he finds himself.

It is the unexpectedness of the speech that makes for comedy in the speech of the nurse in Romeo and Juliet.

Your love says, like an honest gentleman, and a courteous, and a kind, and a handsome, and I warrant, a virtuous,-Where is your Mother?

Juliet has sent the nurse to find from Romeo if she is to be married that day. The nurse has returned with the news, and Juliet wants to know. But the nurse is hot and tired and out of humor because of the long trip she has had. Then just when Juliet seems to be successful the nurse breaks off with the question about her mother. It is the contrast between the answer we expect and the question we receive that makes it comic.

In comedy of character it is the difference between the person he thinks he is and the person we think him to be that is funny. If we laugh at the person who pulls out the chair, it is the contrast between his opinion of the act and our own that is amusing. In the case of Malvolio, it is the difference between the feeling that Olivia has for Malvolio and the feeling he thinks she has for him. In the case of Lydia Languish, it is the contrast between her idea of love and romance and the author's and ours.

Comedy thus implies a norm or a standard; the actual is measured by this standard, and the comic arises in the difference between the actual and the standard. The perception of the comic is an intellectual perception of this difference. If one does not know the standard, or if one does not perceive the deviation from the standard, he does not find it funny. Sometimes the standard is given; more often it is implied; but in any case we expect the standard, and hence we find it amusing when the actual deviates from it. It is in this sense that the comic is the unexpected. The unexpected is not, as such, comic; there is nothing comic in having an unexpected attack of ptomaine poisoning, or in getting a letter one has not expected, but if one is expecting the nurse to tell what Romeo said and she says, "Where is your mother?" the difference between what one expects and what he hears is comic.

Comedy, moreover, is detached. No one can laugh at anything that is too close to him. Even when one laughs at himself he must, as it were, get off from himself in order to laugh. When one is suffering from puppy love he cannot laugh at himself, but when he has recovered from the attack he can join with the others in the laugh. There is thus something impersonal about the comic. And it implies a degree of insensibility on the part of the audience; we cannot sympathize too
much if we are going to laugh. If we are too much concerned about the nurse's fatigue or her desire to know how the dinner is progressing, we cannot laugh when her mind wanders: "Your love says . . . Where is your mother?"

The comic is detached also in the sense that the person laughed at must be unconscious of his plight. The girl who knows she is awkward is not funny because of her awkwardness. If we suspect the nurse of deliberately throwing in an irrelevant remark her remark loses its interest. The vaudeville act must seem unexpected, no matter how carefully it is rehearsed.

Because comedy is intellectual and depends on perception, it has been said that the comic always has in it a feeling of superiority. The one who sees the joke feels superior to the person who does not. And if we feel superior we may tend to be judicial toward the people or events concerned. We blame them for being what they are; and we, in turn, become satiric. On the other hand, we may be sympathetic toward them and nonjudicial; instead of blaming them we feel sorry for them, and they become, in our eyes, pathetic. The attitude toward the comic tends to swing toward the judicial and satiric or toward the nonjudicial and sympathetic. We feel sympathetic toward the nurse in Romeo and Juliet but judicial toward Volpone.

Comedy is exceedingly specialized in its appeal. The people of one country do not like the jokes of another country. There is the American joke, the English joke, the French joke, the German joke. Even the sexes differ in their appreciation of comedy; women do not appreciate all the jokes of men. On the other hand, comedy is essentially social; we laugh with other people; we do not ordinarily laugh alone.

Literature can deal with the intellectual more completely and more exactly than the other arts because its medium is the language of the intellect, the language of philosophy; therefore, the comic finds itself at home in literature more than in any of the other arts. This does not mean, however, that there is no humor in the visual arts and in music. In the visual arts there are paintings of comic situations, as, for example, the type of low-comedy situation referred to earlier. The genre paintings of the Dutch and German realists show many examples of this type. In these, however, there is ever present the problem of interpretation. The scene or the character that is intended as comic may not seem comic once it is painted. For pictures or statues of happy people having a good time there is no difficulty of interpretation, but neither is there anything comic.

The obvious field for the comic in the visual arts is found in the cartoon and the caricature in which the exaggerations make clear the interpretation. In the cartoon by William Steig You're Fired, no one can mistake the contrast between the pompous power of the directors and the calm helplessness of the office boy.

There is a great deal of comedy in program music and in vocal music, but the comedy lies primarily in the story or the words, not in the music.

The classic example for comedy in pure music is the Scherzo of Beethoven's Fifth Symphony. The trio begins with a figure in the low strings. After the first section of the trio this figure is given to the double basses. It is quite fast, and


Fig. 178.-William Steig. You're Fired (ca. 1932). Wash. Size: about 10 by 8 inches. (Courtesy The New Yorker and William Steig.) the sound of the double basses trying to do so fast a figure is in itself rather comic, like a fat man running to catch a train. The comedy is increased a hundredfold by the fact that Beethoven gives them only the first half of the figure. After a short rest they repeat it, and then, after a second rest, they manage to go through the entire figure. It is as though the stout double basses attempted the difficult figure but could not make it; they take a long breath and try again, but again they fail; then, with the most dogged persistence, they go at it again, determined this time to do or die, and they succeed in carrying it through.

The music of Haydn is friendly and genial, and we are tempted to call it witty because of the way one theme or one voice repeats and answers another, but it is not really comical. A superb example is the Rondo from the Sonata in $E$ minor. We laugh aloud when listening to it, but it is a laugh of pleasure, of joy, and excitement from following the garrulous repetitions. The variations may even be called incon-
gruous if we accept the unvaried theme as the standard, but the music is not really comic in the sense in which literature is comic.
4. Special Forms of the Comic

Wit is the form of the comic most easily explained, because it is primarily verbal; it has to do with ideas or with words. Under the heading of wit come spoonerisms, malapropisms, puns, and epigrams. A spoonerism, named from one of the most distinguished makers, the Reverend W. A. Spooner of Oxford, is the accidental transposition of initial letters of two or more words, as when one says he has just received a "blushing crow." To this same class belong malapropisms, named for Mrs. Malaprop in The Rivals, the ludicrous misuse of a word in mistake for one resembling it; "contagious countries" for "contiguous countries." The pun is also a form of wit, though it is often considered the lowest form of wit. One of the more serious puns is that on "grave" in Mercutio's speech from Romeo and Juliet:

> Rome. Courage, man; the hurt cannot be much.
> Mercutio. No, 'tis not so deep as a well, nor so wide as a church-door; but 'tis enough, 'twill serve. Ask for me to-morrow, and you shall find me a grave man. I am pepper'd, I warrant, for this world.

The epigram is a condensed, pithy statement, like that of the young man in Wilde's Lady Windermere's Fan, "I can resist everything except temptation." Martial is one of the famous writers of epigrams:

> I do not love thee, Doctor Fell, The reason why I cannot tell; But this alone I know full well, I do not love thee, Dr. Fell.
> Tr. by Thomas Brown.

And one does not forget the famous epigram of John Wilmot on Charles II:

> Here lies our Sovereign Lord the King,
> Whose word no man relies on,
> Who never said a foolish thing,
> Nor ever did a wise one.

Humor, though often confused with wit, is not at all like it, since it is a matter of spirit rather than of words. It is less intellectual and more kindly; it is always sympathetic. Usually it has in it something of extravagance, and the author, looking at the extravagant person,
smiles with tolerant indulgence. In this way we love while we smile at the wild extravagance of Mr. Micawber or Falstaff. Because humor depends on spirit, it can never be quoted very well, nor can it ever be made clear in a short space, whether it be a quotation or an entire poem. We must know and love Falstaff before we can find the full humor of this paragraph.

Bardolph, am I not fallen away vilely since this last action? do I not bate? do I not dwindle? Why, my skin hangs about me like an old lady's loose gown; I am withered like an old apple-john. Well, I'll repent, and that suddenly, while I am in some liking; I shall be out of heart shortly, and then I shall have no strength to repent. An I have not forgotten what the inside of a church is made of, I am a peppercorn, a brewer's horse. The inside of a church! Company, villainous company, hath been the spoil of me.
-I Henry IV, III, iii.
When Orlando protests that he will die if he does not win Rosalind in As You Like It, she cites the famous lovers Troilus, whose brains were beaten out with a club, and Leander, who died of a cramp while swimming the Hellespont; and she ends with a summary for all time:

But these are all lies: men have died from time to time, and worms have eaten them, but not for love.

Because we know Rosalind and realize how much she is in love with Orlando and how gallantly and cleverly she is carrying on her game with him, we find the words humorous, but had they been spoken by another we might have found them cynical or even sad.

Satire aims, or at least pretends to aim, at improvement. The satirist sees the vices and faults of the human race and writes about them in a comic manner in order to call the matter to attention for correction. To this end, the satirist may use any device. Swift uses allegory in Gulliver's Travels, where he is satirizing the littleness of men. On his first voyage Gulliver goes into the land of the Lilliputians, a people who are only a few inches in height. Here he is amazed at the cunning and the foolishness of the little people. They are in a great agony of disagreement and even fight a war to decide at which end the egg should be broken. Some who believe it should be broken at the big end are called the Big Endians; others, who are just as strong in their faith that it should be broken at the little end, are called the Little Endians. The test of the politician's ability to hold office is his skill in walking a rope. On his second voyage Gulliver goes to the land of the giants, Brobdingnag, where he himself seems like a Lilliputian in

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comparison to the giants. The giants are amazed when they hear Gulliver tell of the little people in England.

In A Modest Proposal Swift uses another method, the grave understatement.

I am assured by our merchants, that a boy or a girl before twelve years old is no saleable commodity; and even when they come to this age they will not yield above three pounds or three pounds, half-a-crown at most, on the exchange; which cannot turn to account either to the parents or kingdom, the charge of nutriment and rags having been at least four times that value.

I shall now therefore humbly propose my own thoughts, which I hope will not be liable to the least objection.

I have been assured by a very knowing American of my acquaintance in London, that a young healthy child well nursed is at a year old a most delicious, nourishing, and wholesome food, whether stewed, roasted, baked, or boiled; and I make no doubt that it will equally serve in a fricassee or a ragout.

I do therefore humbly offer it to public consideration that of the 120,000 children already computed, 20,000 may be reserved for breed. . . . That the remaining 100,000 may, at a year old, be offered in sale to the persons of quality and fortune through the kingdom; always advising the mother to let them suck plentifully in the last month, so as to render them plump and fat for a good table. A child will make two dishes at an entertainment for friends; and when the family dines alone, the fore or hind quarter will make a reasonable dish, and seasoned with a little pepper or salt will be very good boiled on the fourth day, especially in winter.

I have reckoned upon a medium that a child just born will weigh 12 pounds, and in a solar year, if tolerably nursed, will increase to 28 pounds.

I grant this food will be somewhat dear, and therefore very proper for landlords, who, as they have already devoured most of the parents, seem to have the best title to the children.

Satire is just as great in painting as in literature. Goya, Hogarth, and Daumier are outstanding. In the chapter on realism we have already referred to the satires of Goya and Hogarth. Goya, who painted the family of Charles IV with great apparent state and dignity but at the same time maliciously managed to show them to be as foolish as they really were, has also a series of paintings on the foolishness of war. Hogarth's satire was preeminently social. His fame as a satirist depends primarily on the two series of paintings, Marriage à la Mode and The Rake's Progress. Daumier's drawings were published as cartoons in the daily papers of Paris, and they cover a wide range of subjects; his satires have to do with such subjects as the trickery of the shyster lawyer, the conceit of the art connoisseur, or the usual misadventures of ordinary people.

Irony is a method of speaking rather than the speech itself. It aims at mystification or exclusiveness. The ironical speech is always ad-

## TRAGEDY AND COMEDT



Fig. 179.-Honore Daumier (1808-1879). Strangers in Paris.
Lithograph. Size: about $81 / 2$ by 7 inches. New York, Metropolitan Museum of Art. (Metropolitan Museum of Art.)
dressed to two audiences: one understands; the other does not. In drama an ironical speech is one that is understood by the audience in an entirely different sense from the way in which it is understood by the speaker or the people on the stage. An example is found when Romeo awakes, saying that he is to have good news that day, when the audience knows that he is to learn almost immediately of Juliet's death.

If I may trust the flattering truth of sleep,
My dreams presage some joyful news at hand.
My bosom's lord sits lightly in his throne,
And all this day an unaccustom'd spirit
Lifts me above the ground with cheerful thoughts.

$$
-\mathrm{V}, \mathrm{i} .
$$

In Oedipus the King Creon returns from his visit to the oracle announcing that the slayer of King Laius is the cause of the plague now visiting the people of Thebes. Oedipus vows to find this man and to avenge the death of Laius. Neither Oedipus nor Creon knows that it is Oedipus himself who killed Laius, but the audience knows. The term irony
of fate is used when the expectations of men are in direct opposition to their manifest destiny.

Sarcasm has as its purpose the infliction of pain. The person who is sarcastic is aiming to discomfort the other person. Sarcasm is never, or rarely, the subject of an entire composition, but it may be used in a few lines or in an individual speech. Sarcasm may, and frequently does, use irony. The essential point about sarcasm, however, is its bitterness, its intent to wound. The speech of Job is undoubtedly sarcastic when he turns on his would-be comforters and says, "No doubt but ye are the people, and wisdom shall die with you."

So is the speech of Hotspur when Owen Glendower is telling of the miraculous omens at the time of his birth.

> Glendower.
> At my nativity
> The front of heaven was full of fiery shapes, Of burning cressets; and at my birth The frame and huge foundation of the earth Shak'd like a coward.

> Hotspur. Why, so it would have done at the same season, if your mother's cat had but kitten'd, though yourself had never been born.
> -I Henry IV, III, i.

Burlesque, caricature, parody, and travesty are alike in that each imitates a special person. The words are often used interchangeably, but, strictly used, they differ in the subject of their imitation. Burlesque imitates action and acting. A student who "takes off" his professor is burlesquing him.

Caricature makes sport of form and features as burlesque does of action and acting. The actor burlesques the famous man in his walk but makes up his face as a caricature of him. Caricature is at its best in drawing and painting. It is usually cynical in character, and ordinarily the subject is an individual rather than a work of art. The caricaturist selects the outstanding characteristics and exaggerates them, as in the caricature of Scotti by Caruso.

Parody is verbal; the parodist consciously imitates the language of the author he is parodying. One of the best parodies is that of Hugh Kingsmill on A. E. Housman.

What, still alive at twenty two, A clean upstanding chap like you. Sure, if your throat is hard to slit, Slit your girl's and swing for it.


Fig. 180.-Enrico Caruso (1873-1921). Portrait of Antonio Scott. (From Caricatures by Enrico Caruso, published by Marziale Sisca, New York.)

Like enough, you won't be glad,
When they come to hang you, lad.
But bacon's not the only thing
That's cured by hanging from a string.
When the blotting-pad of night
Sucks the latest drop of light,
Lads whose job is still to do
Shall whet their knives and think of you. ${ }^{1}$
Travesty is intended to be serious but falls short. When the pupil, copying his master seriously, produces a work that is comical, his product is called a travesty. The word is now much overused. Almost every paper speaks of a travesty of justice, of religion, or of peace.

## 5. Essentials of the Tragic

Comedy, no matter what its form, tends to be light and witty in its presentation; moreover, the evils that are exposed are those for which
${ }^{1}$ From Laurence Housman, My Brother, A. E. Housman, reprinted by permission of Charles Scribner's Sons, publishers.
man is responsible and which he could cure if he would. Tragedy, on the other hand, is the struggle of someone against an evil over which he has little or no control. It shows the weakness and helplessness of man and emphasizes his courage and high-mindedness.

The word tragedy is often loosely used. It may mean anything that is unpleasant, from the failure of a tea party to the bullet put through his head by a man out of work. However, most people who say it is tragic that the deal did not go through or that the cake did not rise know that they are not using the word with any exactness of meaning.

In its true meaning tragedy involves a conflict. It may be any kind of a struggle. In Sophocles' Oedipus the King we have the struggle of man against the gods. In Galsworthy's Strife the struggle is between two men who represent social forces. John Anthony, the president of the iron works, stands for law and order, for society as it is organized, and capital as the working principle of that order; David Roberts, the president of the union, stands for the rights of the underdog, the laborer who is treated as so much raw material by the members of the ruling class. In Aeschylus's Agamemnon there are, on the one side, the pride and haughtiness of Agamemnon, the insensitiveness to others that makes him sacrifice his daughter Iphigenia in order that the army may sail and that causes him to bring back his new mistress Cassandra openly and brazenly; on the other side are the fierce resentment of Clytemnestra because of her daughter's death and her satisfaction in her new paramour Aegisthus. Very often the conflict reduces itself to a struggle within the hero, between the two sides of his nature. In King Lear, for instance, it is not so much a struggle between Lear and his daughters as it is between the two sides of Lear's nature.

If there is no struggle, if the person having the difficulty does not put up a fight, we do not feel that the event is tragic. The innocent bystander who gets shot when a desperado is holding up a bank has met a death that is unfortunate, regrettable, and unjustifiable, but it is not strictly tragic. Ophelia and Desdemona suffer, and they die, but they are not controlling the events that happen to them or even fighting against them; hence we feel sad at their fate, and we say that they are pathetic victims; but they are not tragic. There is a similar situation in Galsworthy's fustice. The hero Falder, if he can be called a hero, changes the sum written on a check in order to save his friend Ruth from her cruel husband. The alteration is discovered, he is sent
to prison, and, by the time he is out, Ruth has resorted to prostitution as the only means she can find to keep her children safe from their father. Falder then kills himself. In this play we feel, as Galsworthy intended us to feel, that the sacrifice of Falder and Ruth is unnecessary and stupid, that society is foolishly organized, and that Ruth and Falder are helpless victims, but in so far as they are helpless victims they are not tragic.

Not only must there be a struggle, but for tragic effect the collapse at the end must be final; there can be no happy ending. In the cinema version of Hardy's Tess of the D'Urbervilles the ending is changed. As Hardy conceived the story, Tess is executed for the murder of her husband, and the book closes with Angel and Tess's sister watching from a hill for a flag that will show that the execution has taken place. In the cinema version the execution is stayed at the last minute, and Tess and Angel are reunited-but the story ceases to be tragedy. Neither can there be any doubt about the ending. In Ibsen's The Doll's House, Nora tells Helmer that she can no longer live with a man who treats her only as a doll, and she leaves him to go out and make a new life for herself. When he asks if there is no chance she replies that before they could be reunited the greatest of miracles would have to happen, and when the play ends Helmer springs from his chair with the words "the miracle of miracles." In that hint of reunion the play loses its tragic appeal.

Moreover, the ending of the struggle must have a definite relation to the struggle; it may not be chance or blind fate; there must be ethical substance. The failure of Agamemnon or Lear must have reference to the man Agamemnon or Lear. In other words, real tragedy is always tragedy of character. Tragedy of situation may, and frequently does, accompany the tragedy of character, as we have seen, but it is the tragedy of character that is essential.

For tragedy, also, the struggle must be over something worth while: struggle over the trivial or inconsequential is not tragic. A stock example is the incident that caused the writing of Pope's poem The Rape of the Lock. A young nobleman, Lord Petre, stole a curl from the head of one of the fashionable ladies, a famous beauty, Miss Arabella Fermor. A quarrel arose into which the friends of both sides entered avidly and seriously. At the suggestion of a friend Pope wrote his poem, which he called The Rape of the Lock, An Heroi-Comical Poem. Pope shows the essential triviality of the quarrel by treating it in the manner of Homer and Virgil as though it were very serious.

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What dire offense from amorous causes springs, What mighty contests rise from trivial things, I sing.

Say what strange motive, Goddess! could compel
A well-bred lord t'assault a gentle belle?
Oh , say what stranger cause, yet unexplored, Could make a gentle belle reject a lord?
In tasks so bold, can little men engage, And in soft bosoms dwells such mighty rage?

But the subjects of his great seriousness are ludicrous-lap dogs and lovers.

Now lap-dogs give themselves the rousing shake, And sleepless lovers, just at twelve, awake.

To support his air of great pompousness he invents an elaborate "machinery" composed of the spirits of the earth, air, fire, and water. These he explains further by saying that when women die they return to their elemental substance; the hot-tempered woman becomes a salamander living in the fire, the prudes are gnomes in earth, and coquettes become sylphs in the air.

Think not, when woman's transient breath is fled,
That all her vanities at once are dead;

For when the fair in all their pride expire, To their first elements their souls retire:
The sprites of fiery termagants in flame Mount up, and take a salamander's name. Soft yielding minds to water glide away, And sip, with nymphs, their elemental tea. The graver prude sinks downward to a gnome, In search of mischief still on earth to roam. The light coquettes in sylphs aloft repair, And sport and flutter in the fields of air.

These elemental spirits watch over the frivolous lives of the ladies and gentlemen keeping the powder on and the curls in place. In Pope's high-flown language everything becomes ludicrous. A tea party is announced thus,

For lo! the board with cups and spoons is crowned,
and all the panoply of heaven is called in for a card game. In such a world the loss of a curl is a serious affair.

Not louder shrieks to pitying Heaven are cast, When husbands, or when lap-dogs breathe their last:
"Restore the lock!" she cries; and all around
"Restore the lock!" the vaulted roofs rebound.
Not fierce Othello in so loud a strain
Roared for the handkerchief that caused his pain.
By assuming this heroic-comical tone Pope succeeded in calling attention to the slightness of the cause of the trouble and so made peace in the hostile camps.

This is, of course, an exaggerated case, but it is true that to have a sense of tragedy we must feel that the cause of the trouble is an adequate one. This is one way in which Pinero's play The Second Mrs. Tanqueray fails. Aubrey Tanqueray falls in love with a woman who has been the mistress of a number of his friends, and, believing that she is essentially pure and true in spite of her past, he marries her. When the play opens she recognizes the fact that she will have to struggle to win a place in society, and she is willing to work and wait, dreaming of the time when she can be accepted in the society she covets as the wife of Aubrey Tanqueray. But she grows tired of waiting, and when at last she has the opportunity she has been waiting for she becomes jealous and insults the woman who is trying to help her. This play fails of being tragedy on the first count, in that there is not enough of a struggle; it fails also in the matter under consideration; position in society is too little a subject for tragedy.

Tragedy, then, must be a real struggle, and it must be a struggle over something worth fighting for. Given these two points, a third follows: the characters must be people like us. The tragic hero can be neither entirely good nor entirely bad; Socrates and Iago are not tragic figures. Socrates is too good, and Iago too bad. For a tragic hero we demand a person like ourselves, with both good and evil in him; then his fight seems noble. We admire the man who puts up a gallant fight, just as we despise the coward who gives up.

The nobility of the hero, in the older tragedy, is emphasized by the fact that the heroes are nearly all of noble blood-Oedipus is king of Thebes, Agamemnon is king of Mycenae and leader of the Greek army, Lear is king, Hamlet is the son of the king, and Caesar aspires to be king. In the more recent drama, however, the heroes are not of noble rank. Ibsen's characters are just ordinary people; so are those of Galsworthy. The essential point, however, is the nobility of the


Fig. 181.-Medusa Ludovisi (or Sleeping Fury). Copy of a late Hellenistic original. Pentelic marble. Size: about $141 / 2$ inches. Rome, Terme Museum. (Alinari.)
person involved, not his rank. Katherine Mansfield writes about a fly, describing its struggle for life in such a way as to make it seem of great importance, if not tragic.

A last characteristic of the tragic is that it produces what Aristotle called the catharsis or purging of the emotions, also called the imaginative redemption. Just what Aristotle meant is by no means exactly clear, and no one has yet evolved a satisfactory explanation, artistic or psychological, why it is that we feel tragedy to be one of the finest of artistic forms. But it is certain that we emerge from King Lear or Tristan and Isolde not depressed and dejected but positively exhilarated and ennobled. Probably the explanation is in the points just given: because the person puts up a good fight, because we do admire him, because we do take pleasure in nobility and grandeur, in the heroic; we feel purified by the contemplation of that grandeur. In Hamlet there are real honesty and goodness of soul that may be baffled, even defeated, but it is real nobility, and we rejoice in it.


Fig. 182.-Piero della Francesca (ca. 1410-1492). The Resurrection of Christ (1460).
Fresco. Figures life size. Borgo San Sepolcro, Palazzo Del Comune. (Metropolitan Museum of Art.)

In conclusion, we need to remind ourselves of the point made at the beginning of this chapter. Tragedy is a matter not of fact but of style. No situation is in itself tragic, but it is made tragic by the attitude toward it. Any tragic plot as a plot may be reduced to the details of a sordid police murder or melodrama. The plot of Othello, thus reduced, is commonplace: a black man marries a white girl, is

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made to believe she is untrue to him, and smothers her. The story becomes heroic because the characters are heroic, because Shakespeare conceived them as heroic and the struggle as one worth making. This heroic view of life is not very much in tune with modern life. Tragedy is stern, hard, masculine. We are soft-hearted; we see man as the victim of circumstances, of heredity, of society's injustice, but we do not see him as a free person, master of his fate; consequently we do not have much tragedy.

The tragic, like the comic, is primarily in the realm of literature. Music can and does portray admirably the tragic conflict and the resolution of that conflict. Most of Beethoven's sonatas and symphonies show conflict, and one feels that in the end the proper purging has taken place. But, as always, music is disembodied unless it is associated with a story. Wagner's music dramas are superb examples of the way music may interpret and resolve the conflict of the story.

Painting and sculpture are limited by the fact that they can present only a single moment of time. Hence they can show either the struggle or the peace attained after the struggle is ended, but they cannot show both. The Laocoön is a clear example of the difficulties of presenting the struggle. A greater example is the so-called Medusa Ludovisi from the Terme Museum at Rome. But here, as in the Laocoön, the tragic catharsis is lacking; there is no solution.

Painting and sculpture at their greatest show the elements of the conflict after the conflict is ended, when the warring elements are no longer in collision but at peace. They may therefore be grand, but not often are they tragic. The painting of the Resurrection, by Piero della Francesca, is as nearly tragic as can be found in the plastic arts. On the face of the Christ one can tell of the suffering and the horror of the time in hell, the sympathy that he had felt for those whom he met, and his final victory over death.

## Reperences

Eastman, M.: The Enjoyment of Laughter, rev. ed., 1921.
Flaccus, L. W.: The Spirit and Substance of Art, rev. ed., 1926.
Meredith, G.: Essay on Comedy and the Uses of the Comic Spirit, 1897.
Nicoll, A.: The Theory of Drama, rev. ed., 1931.
Thorndike, A. H.: Tragedy, 1908.

## Questions

1. Test the statement about the kinship of tragedy and comedy by using the same situation for both comedy and tragedy.

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2. Think of ten cinema actors; do you find each one is easily identified with one of the four fundamental types of tragedy and comedy?
3. Can you think of any examples of comedy that can not be resolved into the perception of the unexpected?
4. Analyze ten instances of comedy for the types of comedy represented.
5. Analyze one of Shakespeare's comedies for the different types of comedy involved.
6. Do the same for one of Molière's plays.
7. Collect examples of (a) jokes of different countries, (b) jokes of different states, (c) jokes of different people.
8. Collect ten malapropisms from The Rivals.
9. Write a parody.
10. Rewrite any of the great tragedies as a news item for a daily paper.
11. Study a modern tragedy, a Greek tragedy, and a Shakespearean tragedy for the forces involved in the conflict.

## XXI

## Styles in Architecture

## 1. Architectural Styles

The fundamental distinctions in style are the ones we have just studied: classic and romantic, real and ideal, tragic and comic. Most works tend in one of these directions. Certain periods and certain countries also have special characteristics by which they are known; we speak of Italian Renaissance painting, Greek architecture, or Elizabethan drama. The question then arises whether these are other styles or whether they are simply the sum total of the characteristics of a certain period and place? They are commonly called styles, and they are styles in the sense that they constitute a manner by which they can be recognized. In general, however, they rest on the fundamental bases of classic and romantic, real and ideal, tragic and comic; Greek architecture is classic, Elizabethan drama is romantic, painting of the Italian Renaissance is idealistic, and that of the northern schools (Flemish, Dutch, German) is realistic. Moreover, when we attempt to analyze in detail any of these styles, we find that the distinguishing name characterizes the age and race, and, as such, it belongs in the province of history rather than of style.

An exception must be made of architecture, for the names in architecture represent styles that can be and are duplicated in other ages and in other places. The term Gothic, for instance, is used historically to define the architecture just before the Renaissance, but we build churches today that we say are Gothic because they preserve the special features of the Gothic, whereas we cannot paint Gothic pictures or carve Gothic statues. An artist today may build an Elizabethan house, but he cannot write an Elizabethan drama. Accordingly we give a brief description of the chief styles in architecture.

## 2. Preclassical Architecture

Primitive. Primitive architecture can hardly be called architecture, for the people who produced it lived in caves. Stonehenge, on

Salisbury Plain, is one of the remarkable examples of efforts of prehistoric man in the direction of architecture. It is made of two concentric circles built of huge pillars. In the outer circle the stones are kept together with flat lintels. The purpose of the building is not known. It probably had a religious function, and it certainly had something to do with the calendar, because the stones are arranged to show the place in the sky where the sun rises on the longest day of the year.

Egyptian. Egyptian architecture is closely bound up with religion. The Ka , or "vital force," was dependent upon the body for its life; if the body was destroyed, the Ka ceased to exist. Hence pyramids were built to preserve the body that the Ka might be safe. The most striking group of pyramids is that at Giza, where the great pyramids are Khufu (Cheops, Kheops), Khafre (Chephren, Khefren), and Menkure (Mycerinus).

Great as were the pyramids, however, they did not protect their dead from robbers and marauders, and later tombs were cut in rocky cliffs. A temple adjoined each tomb, and, as the tombs were made more inaccessible, these temples developed independently. The great temples are those at Karnak, Edfou, and Luxor. The sloping line of the pyramid is repeated in the sloping sides of the great gate or pylon, which stands at the entrance of the temple. The pylon is surmounted by a wide, overhanging, concave piece called a gorge molding. This molding is one of the few motives of Egyptian architecture commonly used in modern times; it has been adopted frequently on ornamental gates for cemeteries.

Just within the pylon is an open court surrounded by a series of columns; beyond this is the hypostyle hall, and beyond it the sanctuary. The Egyptian temple has no windows; the pylon gate has some relief as decoration; otherwise all the interest of the temple lies within. Roofs are flat and are built in a simple lintel construction. In the hypostyle hall, which is one of the distinguishing marks of Egyptian art, the columns cover almost the entire floor. In the temple of Karnak and in some of the other temples the center columns of the hypostyle hall are higher than those on the edges, and the light comes in on the sides above the roof of the lower columns forming a clerestory.

Egyptian columns are primarily of two types, the flower and the bud. In both types the column approximates a group of flowers. Just below the bud or the flower that constitutes the capital is a row of bands that holds the stems together. In the flower columns the flower

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Limestone. Height: 480 feet; side: 755 feet. ( $2900-2750$ b.c., fourth dynasty).


Fic. 184.-Temple of Horus (started by Ptolemy III, third century b.c.). Sandstone. Height: about 100 feet. Near Edfou, Egypt. (New York University.)


Fig. 185.-Temple of Amon (ca. 1300 b.c.). Hypostyle Hall (model in Metropolitan Museum, New York).
Red-brown sandstone. Height of columns in middle aisle, 69 feet; width of capital at top, 22 feet; height of columns in side aisles, $421 / 2$ feet; Karnak, Egypt. (Metropolitan Museum of Art.)
makes a wide bell-shaped capital. In the bud columns the uppermost part of the capital is smaller than the lower part, like the bud of a flower. The model of the hypostyle hall at Karnak shows the clerestory and the columns; the central columns have flower capitals, the aisle columns, bud. Before the temple there was usually an avenue of recumbent animals or sphinxes, and on each side of the gate were two rectangular shafts called obelisks. The obelisk has been copied in memorial pillars such as the Washington Monument.

An outstanding characteristic of Egyptian art is its massiveness. This is probably due to the nature of the country, for in the desert everything is swallowed up, and only the very large stands out in the wide stretches of sand. But even with this warning one can hardly grasp the enormous size of Egyptian buildings. The columns of the Great Hall at Karnak are large enough for a hundred men to stand on top of the capital. ${ }^{1}$ The Great Hall at Karnak is 338 feet wide and 170 feet deep, furnishing a floor area about equal to that of the cathedral of Notre Dame in Paris, although this is only a single hall of the

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Temple. ${ }^{1}$ The step pyramid of King Zoser is 200 feet in height, ${ }^{2}$ and it is but a dwarf when compared with the pyramid of Khufu at Giza, which is 480 feet in height and covers about 13 acres. ${ }^{3}$

Mesopotamian. Of all the great palaces and temples of the Mesopotamians, Chaldeans, Babylonians, and Assyrians, very few examples are left, because of the building materials used. The distinguishing characteristic is the ziggurat, or tower, built at successive levels, with ramps leading from one platform to the next.

## 3. Classical Architecture

Greek. Greek architecture in its most characteristic form is found in the temple, a low building in lintel construction, with columns and a gable roof. The essential feature of the temple was a small room where the statue of the god was kept. The typical temple had columns in front and often at the back, also. Sometimes the entire building was surrounded by a row of columns, making a double row of columns in the front and back of the building and a single row at the sides. The Parthenon belongs to this class. In the pure Greek style all columns are fluted. The space between the columns and the roof, called the entablature, is divided into three bands: architrave, frieze, and the cornice. The architrave, just above the columns, was undecorated; the frieze was usually decorated with sculpture; the cornice, which projected beyond the frieze and the architrave at the beginning of the roof, was not decorated. The triangular space formed by the sloping roof is called the pediment.

There are three styles of Greek architecture, Doric, Ionic, and Corinthian. The Doric is represented by the Parthenon, one of the greatest buildings ever constructed. The Doric column has no base, the bottom of the column resting on the top step. The capital is very plain; the column is surmounted by a flat block or slab, and the transition from it to the column is made by a simple curve looking something like a cushion. The frieze is divided into triglyphs and metopes; the triglyph is a square slab having two vertical grooves (or glyphs) in the middle and a half groove at each end; the metope, which alternates with the triglyph, is also square. Metopes are often carved, but the Parthenon is the only extant temple in which all the metopes were carved.

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Fig. 186.-Temple of the Sibyl (first century b.c. or first century A.D.).
Cella, brick-faced cement; remainder, travertine covered with fine stucco. Height of columns: 231/2 feet. Tivoli. (Anderson.)

The Ionic column is taller and more slender than the Doric. It has a base, and the capital is ornamented with scrolls, or volutes, on each side. In the Ionic order the frieze is continuous instead of being divided into triglyphs and metopes. The architrave is stepped, that is, it is divided horizontally into three parts, each being inset slightly. The greatest example of the Ionic order is the Erechtheum, which is unfinished and, unlike most Greek temples, is irregular in shape; but, like all examples of the Ionic order in general, it is characterized by great elegance and grace.

The Corinthian column is distinguished from the Ionic by still greater height and by its capital, which shows two rows of acanthus leaves with volutes rising from them. The Corinthian, although an authentic Greek order, was last in point of development and was not so much used in Greece as the Doric and the Ionic. For the best preserved examples one must go to Italy; the Roman Temple of the Sibyl at Tivoli is a favorite.


Fig. 187.-Arch of Titus (81 A.d.). Cement sheathed with marble, with travertine restorations. Height: 49 feet. Rome. (Anderson.)


Fic. 188.-Stanford White (1853-1906). Wash ington Square Arch (1892).
Marble. Height: 86 feet. New York. (Wid World.)

Roman. Roman architecture follows the general lines of the Greek, with many significant changes. The temple is no longer the typical building, for civic buildings, baths, law courts, amphitheaters, aqueducts, and bridges are equally important. A typical structure is the commemorative or "triumphal" arch, put up to commemorate some important national event. The Arch of Trajan and the Arch of Titus are examples; modern arches of the same kind are the Washington Arch in New York City and the Arc de Triomphe in Paris.

The most important structural innovations made by the Romans are the arch and the vault. The arch, which was very widely used by the Romans, though not invented by them, was made with a keystone on top. It is seen at its best in the aqueducts, such as those at Nimes and Segovia. There, and in the Colosseum at Rome, the arches are built one on top of the other. Even more outstanding in Roman architecture is the vault or dome that covers an entire building, as in the Pantheon. This dome is made of brick and covered with concrete. The interior shows square ornaments as decorations on the ceiling; it is called a coffered ceiling.

Even when the Romans used the same materials as the Greeks, they did not use them in just the same way. The columns are taller


Fig. 189.-Pantheon (120-124 A.d.) Portico 202 A.D.
Brick, mortar, and concrete, originally faced on the exterior with Pentelic marble and stucco. Height of columns: $461 / 2$ feet. Rome. (Brogi.)


Fig. 190.-Interior, Pantheon.
Cement dome; wall decoration and pavement of marble and porphyry. Diameter of rotunda: 142 feet. (Alinari.)
and thinner and often, as in the Pantheon, the columns are not fluted. The Corinthian column is used extensively, as is the composite column, an invention of the Romans made by combining the Ionic volutes with the Corinthian acanthus-circled bell. The orders are not kept separate, but are stacked or superimposed, as in the Colosseum. Moreover, the elements borrowed from the Greeks are sometimes used only as ornaments whereas with the Greeks they were used structurally. In the Colosseum, again, the columns between the arches and the entablature above them are not essential to the structure of the building, as is seen in that part of the building from which the outer layer of concrete has been torn away; the columns are missing, but the arches stand as before.

Domestic architecture was of great importance in Rome, and fortunately it can be seen in the remains of Pompeii and Herculaneum. The typical Roman house was built around an open court, atrium, with a pool of water in the center and with small sleeping rooms, cubicles, opening from it. In the more elaborate houses a second atrium was added; it was often decorated with columns and is frequently referred to as the peristylc. Since the openings were all on the inside, little attention was paid to the exterior of the house, which was usually inconspicuous. The house was frequently flush with the street, its street side being used for a succession of small shops.

The arrangement of the Roman home left large wall spaces that were brilliantly decorated with frescoes; these brightened the dark, cell-like rooms and made them seem larger, especially if they were painted in perspective, as they frequently were. The favorite colors were black and creamy white and the red, known from its use in Pompeii, as Pompeian red. Sometimes the entire surface of the wall was covered; more often it was treated architecturally, being divided into a number of squares or rectangles, with a painting on each.

Roman architecture in general is heavy and massive; it lacks the grace and dignity of the Greek. Some of the most beautiful examples are those which were erected purely for utilitarian purposes, as were the aqueducts and bridges.

## 4. Medieval Architecture

The period that we are in the habit of calling the Middle Ages begins, strictly speaking, with the birth of Christ, since it is primarily the era of Christianity. At the time of the birth of Christ, however,

Rome still ruled the world, and the beginning of the Middle Ages is placed in the fourth or fifth century. The chief characteristic of the Middle Ages, considered as a whole, is its emphasis on religion or otherworldliness. All the people centered their efforts on the life beyond, and they regarded this life as but a preparation for that. No matter what one was doing, the emphasis was primarily on Christianity or was derived from Christian belief or Christian practice. Christian stories and Christian symbols are found everywhere-the fish, the ship, the vine, and the sheep and the shepherd.

The largest and most important building is the cathedral, where the bishop had his seat or chair (cathedra). There were four different types of Christian church. In the East was the type known as the Byzantine. In Europe three types followed one another, the early Christian, the Romanesque, and the Gothic.

Byzantine. Byzantine architecture takes its name from Byzantium, the early name of Constantinople, where it saw its first development. The Byzantine cathedral is characterized by a great central dome with subordinate domes grouped around it. The exterior is made largely of brick, often laid in ornamental patterns. The interior, which is very spacious, shows great wealth and splendor. The decorations are very fine and delicate; the carvings are compact, in a flat relief, with allover design covering the entire surface. Often it was ornamented with mosaics. The typical capital of a Byzantine column is double; the lower capital has a bell shape; on it is placed an impost block or second capital.

The two greatest examples of Byzantine architecture are the Santa Sophia, or Church of the Divine Wisdom in Conṣtantinople, and St. Mark's Cathedral in Venice. The Byzantine type has been widely used for the national church of Russia and for Jewish synagogues in America.

Basilica. In Europe the three types of medieval cathedral followed the general type of the Roman basilica, a long rectangular building divided by pillars into a central nave and aisles. Sometimes there is one aisle on each side of the nave; sometimes there are two. Ordinarily the nave is higher than the aisles, and, therefore, there is opportunity for clerestory lighting. In later examples the single rectangle is crossed at one end, or near one end, by two transepts, making a building in the form of a cross. The altar stands at the end closed by the transepts, which are at the east. Directly opposite the altar, i.e., at the west, is the main entrance.


Fig. 191.-Sant' Apollinare in Classe (second quarter of sixth century). Interior looking toward apse.
Marble, mosaic, and plaster; wooden roofing. Length: 150 feet; width: 98 feet. Ravenna. (Alinari.)


Fig. 192.-Busketus and Rainaldus, Cathedral (1063-1100). Bonannus of Pisa and William of Innsbruck, Leaning Tower (1174-1350). Diotisalvi and others, Baptistery (1153-1278). White, black, and colored marbles and some stone. Cathedral: length 312 feet; width, 106 feet. Tower: height, 179 feet. Baptistery: height 179 fect. Pisa. (Alinari.)


Fig. 193.-Cathedral of Saint Pierre (first half of twelfth century). Stone. Length: about 250 feet; width: about 60 feet. Angoulême. (Neurdein.)

Early Christian. The basilica type of building passed through three stages in its development; of these the first is the early Christian. It does not have transepts; its distinguishing characteristics are the flat ceiling and the small windows of the clertstory. An example is Sant' Apollinare in Classe, Ravenna.

Romanesque. The Romanesque style is characterized by many round arches in the shape of the Roman arch but differently used. An opening, especially if it be a door, is made of a series of arches, each slightly farther back than the preceding, so that the door or window is deeply recessed. In this way the opening gains greatly in weight and massiveness. The arch, also, is combined with one or two other arches under one large arch, known as the compound arch. A third characteristic of the Romanesque style is the colonette, or little column, a very light and unsubstantial column that appears along with the large columns. It is not strong enough to bear any weight and is largely ornamental. For an example of the Romanesque we may turn to the cathedral of St. Pierre, Angoulême; St. Trophime, Arles; St. Etienne and La Trinité, Caen; and Nôtre Dame la Grande, Poitiers. The cathedral at Pisa shows the colonettes and the compound arch and is a clear example of the typical church structure with nave, clerestory, and aisles. The Baptistery is largely Gothic. The church at Iffley, just outside Oxford, is an excellent example of Norman architecture, which is the English form of the Romanesque. The Roman-
esque style was used extensively by the nineteenth-century American architect H. H. Richardson, as in the Trinity Church at Boston. And since his time we have had


Fig. 194.-H. H. Richardson (1838-1886). Trinity Church (1872-1877). (Porch and turrets, 1894-1898.)
Granite and sandstone. Height from ground to top of finial: 211 feet 3 inches. Boston, Massachusetts. (Harris and Ewing.) many round recessed arches in banks and schools as well as churches.

Gotнгс. The name Gothic originated as a term of contempt. After the Renaissance, medieval architecture was thought very poor, and it was called Gothic, in the sense of "barbaric." Since then it has been recognized as one of the greatest of all styles, but the name has stuck. Gothic architecture is as light, soaring, and dynamic as Romanesque is heavy, crouching, and static.

The Gothic developed from the Romanesque as the buildings became larger and taller, most of the changes being made possible because of the use of ribbed vaulting. First the round arch gave way to the pointed; since the thrust of a pointed arch tends to be down and not out, the walls may be made higher as a consequence. By this means the buildings were made so high that the ordinary abutment in the wall was not enough, and buttresses were strengthened by flying buttresses. In the Romanesque several small windows were combined in a compound arch; in the Gothic this process was continued until the windows became very large, and the old casings of the windows appear only as stone tracery. Eventually the windows became so large that the walls ceased to have any function as walls; the roof was supported by the huge buttresses and the entire wall space filled with stained-glass windows. In the interior the space formed by the sloping roof over the aisles is filled with small arches and is called a triforium. The wall of a cathedral such as Chartres is divided horizontally into three parts: the clerestory at the top, the triforium in the middle, and the arches separating the nave from the aisles at the bottom.


Fig. 195.-Notre Dame from Southeast, showing the flying buttresses. Length: about 415 feet; height of fleche: about 310 feet. Paris. (X Phot.)

Above the west door is usually a large, round window filled with intricate tracery and known as the rose window. The façade of the Romanesque church sometimes has one doorway; sometimes it has three-a center door with smaller openings on each side-and ir. some churches the central doorway is decorated. The Gothic façade regularly has three doorways. Each is made with multiple orders, like the Romanesque, though the arch, of course, is pointed. The decorations, also, are much more elaborate. In the Romanesque they were relatively simple moldings, with or without carvings of conventional designs, animals, or fruit. In the Gothic the human figure became the characteristic decoration, a doorway being filled with rows of saints or kings, which, however, follow exactly the curve of the arch. In general shape the façade is a rectangle resting on the short side. All the lines are vertical, and the great height is emphasized by the two towers that usually finish the façade. In Notre Dame, at Paris, and in the cathedrals at Amiens and Reims, the towers are square and relatively short, but in many other cathedrals, such as Cologne and Chartres, the towers are tall and pointed. In the monastic churches there was usually a square cloister at one side connecting


Fig. 196.-Chartres Cathedral. Nave (twelfth and thirteenth centuries).
Limestone. Length of nave: 241 feet; width of middle aisle: 45 feet; height: 122 feet. Chartres. (Houvet.)
the church with the other buildings. This was an open square court surrounded by a covered walk.

The Gothic cathedral is the spontaneous expression of the communal life of the people. Often it took centuries to build, and the same style was not used throughout. Part of a building may be in Romanesque, part in early Gothic, and another part in late Gothic. As the ideas of architecture changed the building itself was changed. In the Chartres Cathedral, one of the greatest of all cathedrals, the towers are not the same; the older tower is shorter, more solid, and more substantial than its younger brother.

The Gothic cathedral is found in all the countries of Europe: England, Germany, Spain, Italy, though it took hold less in Italy than in the other countries, probably because of the dominance of the Roman architecture already there, probably also because in tempera-


Fig. 197.-Cathedral of Notre Dame (twelfth and thirteenth centuries). Stone. Diameter of rose window: $\mathbf{4 2 \text { feet; height of towers: } 2 2 3 \text { feet. Paris. (X Phot.) }}$
ment the Gothic style does not suit the Italian people. France is, however, the home of the Gothic cathedral, and it is to France that we look for the Gothic at its best: Chartres, Paris, Amiens, and Reims. Today the Gothic is accepted as preeminently the style for religious buildings. The tall spires, the pointed arches, and the vertical lines in the tall building all point upward, giving a feeling of elevation and exciting a religious inspiration that is found in no other type of architecture. The National Cathedral at Washington, St. Patrick's and St. John the Divine in New York, and the chapel of the University of Chicago are all Gothic.

Secular Architecture. Though ecclesiastical architecture is by far the most important during the Middle Ages because of the emphasis on religion, we are not without knowledge of secular buildings. The castles of the feudal lords were built for protection against the enemy as well as for residences. As the need for protection became less great, the residential character in architecture was emphasized. Throughout the period of the Middle Ages the hall was the most important part of a medieval residence. It may be seen very nearly


Fre. 198.-Giovanni Buon (?-ca. 1443), Bartolommeo, the Elder (?-ca. 1465), and Matteo Raverti. Ca d' Oro (canal front) (1421-1436).
Marble. Width: 72 feet; height $661 / 2$ feet. Venice. (Alinari.)
intact in the dining halls of Oxford and Cambridge. A hall is a large room with a fireplace in the center; just over it, in the roof, is an opening, a louver, for smoke. At one end of the hall is a platform for the table of the master of the house, the women, and the guests. The hall itself was used as the living quarters and frequently also as the sleeping room of the retainers; the master and the women had their sleeping rooms apart. This is the kind of hall spoken of in Beowulf, where the minstrel went through the crowd singing his songs and where, after the lord and lady had retired to their bower for the night, Grendel came to kill the sleeping men. In the fifteenth century the fireplace was moved to one side of the room, and the great hooded fireplace was set up.

In the sixteenth century arose the Tudor house in England, a Gothic building influenced by the Renaissance, as seen in the great Compton Wynyates House in Warwickshire, England. The common people in towns usually combined their shops with their homes; the Timbered House at Chester and the Jew's House at Lincoln are examples.

All examples of secular architecture so far given have been from England, but there are others. Italy, which did so little for the Gothic in cathedrals, has preserved two of the most famous palaces of the Gothic period, the Doges' Palace and the Ca d'Oro Palace, both in Venice. Belgium has preserved a number of very fine secular halls in the Gothic style; the Town Hall of Ghent is an outstanding example. A similar building is the French Palais de Justice at Rouen; more pretentious residences in the Gothic style are the House of Jacques Coeur at Bourges and the Château de Blois.

## 5. Renaissance Architecture

In Renaissance architecture the cathedral or temple is no longer the typical building. As in Roman times, secular architecture comes to the front; palaces and office buildings are important. Although Renaissance architecture, as the name implies, is a return to the ideals of the Greeks and Romans, it is not a slavish imitation but, rather, a free use of the materials found in classic architecture. The designers got their ideas from Greece and Rome, but they used these suggestions freely, according to their own tastes, in a way that was original. For example, in the Medici-Riccardi Palace at Florence, built by Brunelleschi, we find the round arches of the Romans. On the first floor a single arch occupies the space of two arches on the second and third floors. In the upper floors, moreover, the window space is divided as in the compound arch of the Romanesque. The arches of the first floor do not outline the windows; within each arch is a rectangular window with its own pediment. The pediment, which is supported by brackets at each end, is purely decorative, as is the base under the window.

In the Farnese Palace at Rome each large window has its own post and lintel system. The windows on the second and third stories are decorated with pediments; for variety some of the pediments are round, and some are triangular. The classical rule would have been one pediment, one building; and the pediment would have been in scale with the building. At the top of this building and of the Medici Palace there is a large cornice, heavy enough to crown the whole mass of the building. In each building, also, there is a molding or stringcourse that separates one story from the other. In the Vendramin Palace there are ornamental columns on each floor. On the second and third floors they are round engaged columns; on the first floor they are pilasters.

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The overhanging cornice, the stringcourse, the pilaster, and the ornamental pediment are some of the characteristic features of the Renaissance style. Another characteristic is the dome on a drum. The Roman dome, which covered the entire building, was so low that it could not be seen from the outside. In Renaissance architecture the dome was used not as a vault for a building but as a decorative feature. Accordingly, it was made small, and in order that it might be seen it was raised high on a circular drum and surmounted with a lantern. The curve of the dome was changed, too; it was made much steeper, often more than a half circle. However, a dome so high was not decorative on the interior, and therefore an inner dome, which might be seen from the interior, was constructed under the outer dome. St. Peter's in Rome is the most prominent example of the Renaissance dome. The decorative dome was used for the Capitol Building at Washington and has been repeated in many of the state capitals throughout the United States.

The later Renaissance is a period of great extravagance. All the restraint of classical architecture is gone, and we have, instead, ornamentation in very great profusion. This is frequently identified as a separate style called the baroque. It is known by its extravagance and its fondness for curved lines, which are found in the ground plan of the building as well as in the arches and in the decoration. One of the best features of baroque architecture is its use of a building as a feature of a larger design. Trees are planted to serve as background, a lake is built in front to reflect a building, and drives are made to show the building from the most advantageous views.

In the smaller building, whether residence, church, or store, the Renaissance produced a building exactly symmetrical, of great simplicity and beauty. In England it is known as the Georgian style, and in the United States as the American colonial. Always the Renaissance is a style of borrowings; the architects are eclectic; they take what they want where they can find it. On the other hand, the details they borrow are uniformly good, and, given some red bricks and some white columns, it is almost impossible to make a building in Renaissance style that is totally ugly.

## 6. Modern

The Renaissance has been the prevailing style in architecture of Europe and America from the sixteenth century until the present time. There have been many revivals of Romanesque and Gothic
as well as the classical styles, but the Renaissance style has been most prominent. There have also been borrowings from the oriental styles, but no one style has characterized the entire period, as the Gothic and Romanesque did medieval times, or the Renaissance the fifteenth and sixteenth centuries. Recently, however, a new style has been developed, found most characteristically in the skyscraper. In it we return to the emphasis on the vertical, and, in some of the skyscrapers, we can see a definite influence of the Gothic in carvings and stone tracery, as in the Woolworth Building in New York and the Chicago Tribune Tower.

## 7. Nonhistorical Styles

The Indian, Mohammedan, Chinese, Japanese, and Persian may be put in a class by themselves as nonhistorical styles, because they have not influenced very greatly the work of Europe. They remain as separate styles today. They are interesting; we study them in reproductions, and in the countries of their origin, but they have not been of great importance in Western art.

India is a country of many religions and many castes and many races that were never amalgamated, and, therefore, when one attempts to study the art of India he finds few, if any, characteristics for the work of the entire country. In all Indian architecture is seen a profuseness of ornament that is bewildering in its richness; there is hardly a plain surface on either the interior or the exterior of a temple. The square pyramidal tower is a characteristic of the temples that stand free.

Mohammedan architecture was borrowed from the Persians and, of course, dates from the rise of Mohammedanism. The three characteristics of Mohammedan architecture are the horseshoe arch, carvings of lacelike fineness covering an entire surface, and a tall dome the shape of a bulb.

Chinese and Japanese architecture is characterized by the steeply pitched overhanging roof. In Chinese architecture the roofs show an almost imperceptible curve upward; in the Japanese the curve upward is more pronounced, and there tend to be more stories to a building. The style is characterized by greater delicacy in Japanese than in Chinese architecture. In both, wood is the building material; buildings so light could not be constructed of stone.

## References

Kimball, F., and Edgell, G. H.: A History of Architecture, 1918.
Parkhurst, H. H.: Cathedral, 1936.

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Robb, D. M., and Garrison, J. J.: Art in the Western World, 1935. Simpson, F. M.: A History of Architectural Development, 3 vols., 1921-1922.

## Questions

The study of styles in architecture should enable the student to recognize the various styles in historical buildings and to identify elements of older styles in modern buildings. Work with pictures of buildings is valuable chiefly as a prelude to the recognition of details in actual buildings. For this no specific questions can be asked.

The student may identify styles or details of styles in the buildings of his home town. Again, the teacher may name certain buildings as examples of specific styles and ask the student to name the characteristics by which the style is identified.

## XXII

## The Fudgment of Art

## 1. The Meaning of Art

Analysis is now at an end; we have gone as far as we can go in analysis when we have studied the background, the medium, the elements, the organization, and the style of a work of art. If it has served its purpose it has given us greater understanding and increased sensitiveness; it has taught us to see and hear what we might otherwise have failed to notice. And yet one comes to the end of analysis with a sense of incompleteness. Something has been left out, and that something is what makes it a work of art. It is like the biography of a friend that gives the facts of her life, a description of her face, and a record of her opinions, and yet somehow misses that which makes us cherish her as a friend.

But just what is the thing itself, and how is it distinguished from the lines, colors, rhythms, and images we have analyzed? Here we have the whole problem of meaning, and again we shall use the comparison with a friend. We know our friend only through physical manifestations: voice, words, actions, her way of walking, her opinions, her reputation, her ideas, the position she fills, but our friend is something more than the sum total of all these characteristics. The difference between one friend and another is not that this friend has a better position, chooses better words to express herself, or uses them more grammatically; it is not that she is a wiser person or has a wider reputation. It is something that is the sum total of all these things and yet is independent of them. So it is in art. The artist has at his command only the physical mediums of his art but through them he can express something that is greater than the line, color, rhythm, imagery, form, or melody; something for which we have no word but which represents the meaning of that work of art. It is the sum total of all that the artist is saying through that work, the "message," "idea," or "meaning" of his work. In Abt Vogler Browning says the musician puts

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together three sounds, and out of them he frames "not a fourth sound, but a star." The whole is not just the sum of its parts. We can analyze the three sounds, but we cannot tell how they make a star. There is always something of the inexplicable about art.

Because it is inexplicable the meaning of art can never be put into other terms. The story is told of two musicians who were discussing one of Bach's preludes, "Do you know what he means?" asked one. "Certainly," replied his friend, "he means this," and he played the music on the piano. Music always means music, and painting means painting. We are always trying to tell what art means. Pater has attempted to describe Mona Lisa, and Ruskin, St. Mark's Cathedral in Venice, and these are a help, as all analysis is a help; they help to the meaning. But the meaning is in the picture or the building, not in the description. Sometimes the artist himself tries to tell his meaning. Coleridge sums up The Rime of the Ancient Mariner in these words:

> He prayeth best, who loveth best
> All things both great and small;

and Rodin has approved of the interpretation given by Gsell to his statue The Burghers of Calais. But the lines quoted do not give the real meaning of The Rime of the Ancient Mariner, nor does Gsell's description of The Burghers of Calais make clear the "soul" of that statue. Even in these cases it is more nearly a description of the three sounds than of the star. The meaning of art cannot be put into words.

Because it is inexplicable, any final and definite evaluation of art is impossible. And the history of art criticism is full of reversals of opinion. What is thought good today may tomorrow be counted a masterpiece, or it may be forgotten. Nevertheless, it is impossible to avoid some kind of evaluation. Whether we wish it or not, whether we do it consciously or unconsciously, whether we do it wisely or foolishly, we do evaluate art; we put this above that and-below the other. Therefore, it is well to name some qualities of great art, when it is considered as a whole, in order that we may use them as standards and thereby make more definite and explicit our evaluations and judgments. Various standards have been suggested at various times by various critics; none are more universally accepted than the three named by Aristotle in his definition of tragedy, when he said it should be "serious, complete, and of a certain magnitude."

## 2. Serious

The Сомic. When we say that a work of art should be serious, we have reference not so much to the lack of humor as to the attitude of the artist. It is true that the comic spirit does not produce the greatest art. The reason is inherent in the nature of the comic, for comedy always implies a certain distance, as we saw in our study of the comic. We cannot laugh at anything unless we feel apart from it. But in the greatest art there is no distance; it is a part of us. We are Lear or Juliet, Siegfried or Brynhild. Chaucer makes a delightful humorous poem about his empty purse, praying it to be heavy again or else he must die. But the poem does not move us as does the entirely serious ballade of truth with its refrain:

> And trouthe shal delivere, hit is no drede.

The fool in King Lear may seem to offer a contradiction to these statements about the emotions associated with the comic. Like Mercutio, the fool is one of the lovable characters in Shakespeare, and he is known chiefly for his wit. But we are never primarily interested in the jest as a jest; we are always conscious of the man who is jesting and of his fear and solicitude for his master, and it is this individual for whom we feel love and pity. Moreover, the fool drops out in the middle of the play. He is there for the terrific scene in the storm, but when Lear comes to his senses, when he is reconciled with Cordelia, the fool is not there.

In the matter of seriousness humor and satire rank above other forms of the comic. Humor wins this place because it is kindly, because the artist of humor always identifies himself with the object. He laughs with as well as at the subject of his merriment. But even in humor the distance remains, and, much as we love Mercutio for his gallant way of meeting death in the speech

[^36]it does not move us as does the death of Romeo:
Death, that hath suck'd the honey of thy breath,
Hath had no power yet upon thy beauty.
Thou art not conquer'd; beauty's ensign yet
Is crimson in thy lips and in thy cheeks, And death's pale flag is not advanced there.
Tybalt, liest thou there in thy bloody sheet?

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> O, what more favour can I do to thee, Than with that hand that cut thy youth in twain To sunder his that was thine enemy? Forgive me, cousin! Ah, dear Juliet, Why art thou yet so fair? Shall I believe
> That unsubstantial Death is amorous, And that the lean abhorred monster keeps Thee here in dark to be his paramour? For fear of that, I still will stay with thee, And never from this palace of dim night Depart again. Here, here will I remain With worms that are thy chamber-maids; $O$, here Will I set up my everlasting rest, And shake the yoke of inauspicious stars From this world-wearied flesh. -Romeo and Juliet, V, iii, 92-112.
With satire there is not the same difficulty. The satirist may and usually does identify himself with his object, and he may feel and arouse the keenest and fiercest emotions, as does Swift in A Modest Proposal or Hogarth in Marriage à la Mode. Satire fails, not by the strength of its emotions but by the nature of them. Satire is by nature denunciatory; it is a protest, an outcry against something. The emotions of rebuke and denunciation, however, are not so powerful as the emotions of love and pity. They are fierce and passionate and consuming; they destroy the person in whom they live as well as the object against which they are aroused; but they do not reach the heights of the more creative emotions. We can love Othello and Desdemona more than we can ever hate Iago.

Sincerity. When, therefore, we demand that a work of art be serious, we refer primarily to the attitude of the artist. We mean that the work should be a serious expression of his thoughts and ideas; it should be an honest, genuine piece of work. This does not mean that an artist must always have a long face; it does mean that he should be sincere. Seriousness in this sense is extremely difficult to judge; judging sincerity in art is just like judging sincerity in people. Which of our friends are sincere? Which can we trust to give us their honest opinions? What does our friend really think? It is impossible to have any final or fixed judgment of sincerity, but it is nevertheless a matter of the greatest importance. And in art as in life sincerity is one of the essential virtues.

Sentimentality. There are two ways, primarily, in which insincerity is found in art: one is in sentimentality; the other is in imita-

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tive or mechanical work. Sentimentality may be defined as interest in the effect of an action rather than in the action itself. To take a very simple example: a wealthy woman driving downtown notices a poor girl walking in the same direction and asks her to ride. When the girl leaves the car she thanks her benefactor. If the girl is only expressing her gratitude for the ride she is sincere. If, however, she is thinking instead of the impression she is making on the wealthy woman her thanks become insincere and sentimental. Or let us take the little poem by Christina Rossetti: ${ }^{1}$

## Song

When I am dead, my dearest, Sing no sad songs for me; Plant thou no roses at my head, No shady cypress-tree:
Be the green grass above me With showers and dewdrops wet; And if thou wilt, remember, And if thou wilt, forget.

I shall not see the shadows, I shall not feel the rain;
I shall not hear the nightingale Sing on, as if in pain:
And dreaming through the twilight That doth not rise nor set, Haply I may remember, And haply may forget.

It is not natural and spontaneous. She is too much interested in the effect of her death, and she is enjoying the melancholy prospect of being in the grave. It is essentially a romantic pose, but it is a pose, and is sentimental.

Similarly, in the "Good Night" from the first canto of Childe Harold's Pilgrimage, Byron is not so much lonely and deserted as he is enjoying the thought of being lonely and deserted.

Adieu, adieu! my native shore
Fades o'er the waters blue;
The Night-winds sigh, the breakers roar, And shrieks the wild sea-mew.

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Yon Sun that sets upon the sea We follow in his flight;
Farewell awhile to him and thee, My native Land-Good Night!

A few short hours, and He will rise, To give the Morrow birth;
And I shall hail the main and skies, But not my mother Earth.
Deserted is my own good hall, Its hearth is desolate;
Wild weeds are gathering on the wall, My dog howls at the gate.

And now I'm in the world alone, Upon the wide, wide sea;
But why should I for others groan, When none will sigh for me?
Perchance my dog will whine in vain, Till fed by stranger hands;
But long ere I come back again He'd tear me where he stands.

With thee, my bark, I'll swiftly go Athwart the foaming brine;
Nor care what land thou bear'st me to, So not again to mine.
Welcome, welcome, ye dark blue waves!
And when you fail my sight,
Welcome, ye deserts, and ye caves! My native land-Good Night!

For comparison, read the lyric She Walks in Beauty, where Byron has his mind on the woman, not on himself; in other words, he is not sentimental.

She walks in beauty, like the night
Of cloudless climes and starry skies;
And all that's best of dark and bright
Meet in her aspect and her eyes:
Thus mellow'd to that tender light
Which heaven to gaudy day denies.
One shade the more, one ray the less,
Had half impair'd the nameless grace
Which waves in every raven tress,
Or softly lightens o'er her face;

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Where thoughts serenely sweet express How pure, how dear, their dwelling-place.

And on that cheek, and o'er that brow, So soft, so calm, yet eloquent, The smiles that win, the tints that glow,

But tell of days in goodness spent,
A mind at peace with all below,
A heart whose love is innocent!
It is harder to be sincere about oneself than about other people but, in his later years, Byron was sincere even about himself.

And I have loved thee, Ocean! and my joy
Of youthful sports was on thy breast to be
Borne, like thy bubbles, onward. From a boy
I wanton'd with thy breakers-they to me
Were a delight; and if the freshening sea
Made them a terror-'twas a pleasing fear,
For I was as it were a child of thee, And trusted to thy billows far and near, And laid my hand upon thy mane-as I do here.
-Childe Harold's Pilgrimage, Canto IV.
It is easy to be sentimental about death, more so than about other subjects; and death is a frequent subject of the sentimental.

> Yet each man kills the thing he loves, By each let this be heard.
> Some do it with a bitter look, Some with a flattering word, The coward does it with a kiss, The brave man with the sword!

Some kill their love when they are young, And some when they are old;
Some strangle with the hands of Lust, Some with the hands of Gold:
The kindest use a knife, because The dead so soon grow cold.

Some love too little, some too long, Some sell, and others buy;
Some do the deed with many tears, And some without a sigh;
For each man kills the thing he loves, Yet each man does not die.
-Oscar Wilde, The Ballad of Reading Gaol

> From too much love of living, From hope and fear set free, We thank with brief thanksgiving Whatever gods may be That no life lives forever; That dead men rise up never; That even the weariest river Winds somewhere safe to sea.
> Then star nor sun shall waken, Nor any change of light: Nor sound of waters shaken, Nor any sound or sight: Nor wintry leaves nor vernal, Nor days nor things diurnal; Only the sleep eternal In an eternal night. -Swinburne, The Garden of Proserpine.

Because the sentimental person is interested in the effect produced, the emotion expressed is frequently out of proportion to the cause. The poor girl who is trying to impress the rich woman with her good qualities will thank her too profusely for the ride downtown. Hence we say that exaggerated emotion is sentimental. The boy who shoots himself because his girl has refused him a date thinks of himself as a romantic hero, but most people consider him a sentimental fool. The girl who cries when she discovers that her fiancé has married another girl is feeling a genuine emotion, but the girl who is in tears the whole night because her lover has danced one dance with another girl is sentimental. A typical sentimental lover is Faulkland, in The Rivals; every little word or thought of his lady is enough to upset him completely. He is thrown into a passion to learn that she has danced country dances in a mixed crowd in his absence, and he is unhappy if she is not miserable when separated from him.
" . . . but what grounds for apprehension, did you say? Heavens! are there not a thousand! I fear for her spirits-her health-her life.-My absence may fret her; her anxiety for my return, her fears for me, may oppress her gentle temper. And for her health-does not every hour bring me cause to be alarmed? If it rains, some shower may even then have chilled her delicate frame!-If the wind be keen, some rude blast may have affected her! The heat of noon, the dews of the evening, may endanger the life of her for whom only I value mine. O Jack! when delicate and feeling

[^38]souls are separated, there is not a feature in the sky, not a movement of the elements, not an aspiration of the breeze, but hints some cause for a lover's apprehension!"

The essence of the sentimental, however, is in the insincerity rather than the exaggeration. It may be a self-deception, but it is always a failure to perceive or to admit reality.

The examples of the sentimental given so far have been from literature, but sentimentality is found in all the arts. We are especially conscious of it in music, though we cannot explain how we know it any better than we can in literature. Beethoven's Sonata in $C$ minor has in it something of self-pity, something of the spirit that finds itself an abused and sorrowful object; in short, something of sentimentality. This character is evidenced by the title by which it is usually known, the Pathétique, "pathetic." In comparison, Beethoven's Symphony in C minor is entirely lacking in sentimentality; it is open, frank, direct, suffering, but it does not enjoy its suffering.

Often the sentimental in music shows itself in songs that are too sweet, as in the Romance in Eflat by Rubinstein, or the Flower Song by Lange. They become cloying. This does not mean, however, that a melody that is luscious and beautiful is necessarily sentimental. The Liebestraum by Liszt and the Ave Maria by Schubert are rich and full of feeling, but they are not sentimental; they have not lost their grasp on reality.

In painting and in sculpture the insincerity and unreality that we have defined as the element of sentimentalism shows itself chiefly in the consciously sweet, the consciously emotional, and the posed. Often the three are the same. Sculpture, which tends naturally to subjects that are large and dignified, calm and massive, does not lend itself so easily to the sentimental as does painting; yet one may find the sentimental even in sculpture. The emphasis on emotion as such, which is counted one of the signs of decadence in Hellenistic sculpture, frequently produces the sentimental. The Dying Gaul has an element of sentimentality. The wounded warrior seems to be thinking how sad it is that he has to die away from home. Another type of the sentimental in sculpture may be found in the sixteenth-century work of Goujon, the Fountain of the Innocents. The figures of this relief are easy and graceful, but they are too easy and too graceful. Again one feels that the artist is more interested in the effect of his statue than in any meaning he has to express through it.

Painting, like literature and music, is an open field for the sentimental, and sweet, sentimental creatures are almost as common in
painting as in life. A typical painter is Greuze, whose sweet young girls, all sentimental, have been amazingly popular. That his work is


Fig. 199.-Jean Goujon (ca. 1500-1568). Water Nymphs from Fountain of the Innocents (1547-1549).
Marble. Height: about 8 feet. Paris, Square of the Innocents. (Giraudon.) sentimental one can see by comparing it with the realistic work of Chardin or the romantic work of Fragonard.

The Madonnas of Murillo belong in the same general class as the girls of Greuze, in being sweet and sentimental. A less admirable work is The Virgin of Consolation by Bouguereau. The figures are artificially posed; the virgin, the mother on her knee, and the child lying at her feet are all designed primarily to produce a certain effect. If this is compared with any of the great paintings of the Madonnas or any of the great Pietas, the difference is clear; in them, as, for example, the Avignon Pietà, the artist is expressing an emotion he feels, not striving to show one he does not feel.

The sentimental is confined to the imitative arts. The architecture and the furniture of certain periods show an interest in decoration that we can hardly call sincere. It is as though the artists were more interested in the decoration of the house or the table than in the house and the table. And yet we do not call this work sentimental.

Mechanical Work. The second way in which insincerity is found in art is in what, for want of a better term, we will call mechanical work. This is a general term to cover all varieties of work in which the artist has nothing to say, and hence he follows an accepted pattern. At its worst it is hack work that is produced almost as one would make


Fic. 200.-William Adolphe Bouguereau (1825-1905). Virgin of Consolation (1877). Oil on Canvas. Size: about 14 feet by 11 feet 3 inches. Paris, Luxembourg. (Braun, Inc.) a quilt or a cake, according to a formula or recipe. A certain result is desired, and certain elements are put together to produce that result. Any intelligent schoolboy or girl could tell what ingredients to put together to make the regulation cover or the regulation story for any one of the popular magazines. He could write a recipe for a detective story, for the verse in the daily paper, or for a cinema of any one of the standard varieties. He could write one or two hundred messages for Mother's Day telegrams or verses for Christmas cards. And, with a little practice, he could make tunes or pictures with equal facility.

With efforts of this kind there is not usually much cause for alarm; the product is poor and will deceive no one. But if the artist has a certain amount of technique, works of this kind frequently pass as art, and we have the best seller that runs its course in a year or a day, the


Fig. 201.-School of Avignon. Pieta (ca. 1471).
Tempera on wood panel. Size: $631 / 4$ by 85 inches. Paris, Louvre. (Metropolitan Muscum of Art.)
popular tune that everyone sings for six months, and the painting that is greatly admired and then hung in the attic.

School Work. Kin to this, but much better, is school work of all kinds. An artist creates something that is good; it is recognized as good, and it has an influence over other artists of the time. Soon there arises a "school" of artists who are carrying on the tradition of the master. Especially is this true in the visual arts. We have a school of Botticelli, a school of Scopas, a school of Cézanne. The work of the school has all the obvious manifestations of the master; at the first glance it is mistaken for his work, and it is only on careful study that one can distinguish the work of the school from that of the master.

School work is not to be confused with the copy. A copy is a duplication of the original as nearly exact as the copyist can make it; often the copy can hardly be distinguished from the original. School work does not pretend to be like the original, and there is no intention of deceiving anyone. But it is the work of a person who does not have ideas of his own and who leans too heavily on his masters. This does not mean, either, that the greatest masters have not gone to school to


Fig. 202.-Leonardo da Vinci (14521519). Madonna of the Rocks (ca. 1482). Oil on canvas. Height: 6 feet 6 inches. Paris, Louvre. (Alinari.)


Fig. 203.-Bernardino Luini (ca. 1465-1532). Holy Family (undated).
Oil on wood panel. Size: $275 / 8$ by $243 / 4$ inches. Milan, Pinacoteca Ambrosiana. (Metropolitan Muscum of Art.)
others. Raphael went to school to Perugino, and Shakespeare was much influenced by Marlowe. The real artist, however, has something to say for himself, and his work is not just an imitation of his master.

School work picks up the obvious characteristics of the master and, because it is more nearly obvious, is at first glance easier and more attractive than the original. Many a person likes first the winsome Madonnas of Luini and later learns to like the Madonnas of Luini's master Leonardo.

## 3. Complete

To say that a work of art is complete is to say that it has unity, that it is whole, finished, perfect.

In defining organization we quoted Aristotle's dictum that a work of art is like a living organism. In an organism such as the human body every part is essential, and no part has any life except in the combination of the whole; so in the work of art every element is essential, and no one can be said to exist apart from the whole. Each part is necessary, and each part goes to make the perfect whole. In talking of completeness as a characteristic of great art we need only to repeat what has
been said of organization and extend it to cover all phases of a work of art, style and meaning as well as organization. It demands not only that every part be necessary but that every part seem inevitable; there should be no accidents, no guesses in a work of art. If the curtain of a play rises to disclose a man on the stage doing accounts there must be some good reason why he should be doing accounts. In literature every word should be just the right word.

Not poppy, nor mandragora
Nor all the drowsy syrups of the world, Shall ever medicine thee to that sweet sleep Which thou ow'dst yesterday.
-Othello, III, iii, 330-333.
In this speech, every word is perfect; if a single word is changed the effect is lost. But every word is not perfect in the last stanza of Wordsworth's She Was a Phantom of Delight. The word machine is unpleasant, though one knows what Wordsworth meant in using it.

And now I see with eye serene
The very pulse of the machine;
A Being breathing thoughtful breath,

1) A Traveller between life and death:

The reason firm, the temperate will, Endurance, foresight, strength, and skill;
A perfect Woman, nobly planned
To warn, to comfort, and command;
And yet a Spirit still, and bright
With something of angelic light.
The opening lines of Keats's sonnet Bright Star give a sense of largeness and spaciousness that is not carried out in the poet's desire to lie forever on his "fair love's ripening breast."

> Bright star, would I were steadfast as thou art-
> Not in lone splendor hung aloft the night
> And watching, with eternal lids apart, Like nature's patient, sleepless Eremite, The moving waters at their priestlike task Of pure ablution round earth's human shores,
> Or gazing on the new soft-fallen mask
> Of snow upon the mountains and the moors-
> No-yet still steadfast, still unchangeable,
> Pillow'd upon my fair love's ripening breast,
> To feel forever its soft fall and swell,
> Awake forever in a sweet unrest,
> Still, still to hear her tender-taken breath,
> And so live ever-or else swoon to death.


Fic. 204.-Rembrandt Harmensz van Rijn (1606-1669). Dr. Tulp's Anatomy Lesson (1632). Oil on canvas. Size: 65 by $861 / 2$ inches. The Hague, Mauritshuis. (Metropolitan Museum of Art.)

And the magnificent expectation of Sidney's sonnet With How Sad Steps, $O$ Moon, is not fulfilled in the rather petty question about the lady's ungratefulness.

In the two examples just cited there is a sense of incompleteness because the ending of the sonnet does not live up to the promise of the beginning. There is the same sense of failure when all the parts of a composition are not of the same degree of excellence or of the same style. This criticism has been made of the Slow Movement of Chopin's Sonata in $B$ flat minor. Into the middle of the slow movement, which is a funeral march, Chopin has introduced a lyrical passage that, in the opinion of certain critics, is not in harmony with the solemn cadences of the funeral march. Another case in point is Rembrandt's painting of an operation, Dr. Tulp's Anatomy Lesson. It is a question whether the parts are sufficiently congruous to make a unified whole.

We notice completeness also in the amount of detail. Modern architecture is too bare. Indian architecture leaves the impression of too great detail. Even a painting like Holbein's George Gisze seems a little cluttered. The great funeral march that constitutes the Slow Movement of Beethoven's Third Symphony is too long; conductors

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Fig. 205.-Michelangelo (1475-1564). Tomb of Guiliano de' Medici (ca. 1523-1533). Marble. Height: about 20 feet. Florence, San Lorenzo, New Sacristy. (Alinari.)
usually omit parts. Ravel's Bolero might be stopped sooner, or it might go on longer; it is not inevitably complete just as it is without any change or alteration.

There is a sense of incompleteness also about work that is too active. In all the other arts as well as in music we want to come to a full stop. The book we like best leaves us quiet and at peace, not jumping up to fight dragons or change the world; we may change the world because of it, but the book should seem final. The figure that seems about to walk out of the picture frame, the statue that seems ready to step off its pedestal leave one constantly making a mental adjustment and hence lacking in a sense of perfect unity and rest. Superb as are the tombs of the Medici, they fail in that one always feels that the figures are about to slide off their diagonal couches.

One of the greatest appeals of art is in its sense of completeness. Life is necessarily incomplete, unfinished, chaotic; we know a little here


Fig. 206.-Visitation (ca. 1215-1275), detail of North Porch of transept, Chartres Cathedral.
Stone. Height of figures: about 6 feet. Chartres. (Houvet.)


Fro. 207.-The Virgin (fourteenth century). Stone. Life size. Paris, Cathedral of Notre Dame. (Alinari.)
and a little there, but never the whole, and we do not understand. In life, as Landor says, we "see, and know not why, thorns live and roses die." But in art we do know and understand. In life the story never ends; in art the story ends, and we can see how the various parts fit together. Art is not a chaos; it is regular and formulated; it has meaning; it is complete, finished, ordered.

## 4. Of a Certain Magnitude

Magnitude is concerned with the scope or the range of a work, whether it is shallow or deep, important or unimportant, great or trivial. There are many things that in themselves are good and true, fine and excellent but that do not belong to the class of the finest and highest. Interest in food, for example, is good, it is essential, but it does not rank as a high emotion. The Bible story of Esau, who sold his

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position for something to eat, is famous as an example of the person who sacrifices the higher for the lower. The love of one's country and sense of duty to one's country are higher and nobler emotions than love of food.

Evaluations of this kind are an inevitable part of the appreciation of art. We judge whether or not we know that we are judging. The Humoresque of Dvořák is pleasant and charming, but one would never call it great or wonderful, whereas one would use just those adjectives of Beethoven's Ninth Symphony. The figures of Ann and Mary in the Visitation from Chartres Cathedral are beautiful or grand; the figure of the Virgin from Notre Dame is sweet and graceful but not grand. The cathedral of Reims or Chartres is a building of greater magnitude than the Palace of the Medici.

If we compare these poems by Herrick we know that To Daffodils is a greater poem than To the Virgins, to Make Much of Time.

## To Daffodils

Fair Daffodils, we weep to see You haste away so soon;
As yet the early rising sun
Has not attain'd his noon.
Stay, stay,
Until the hasting day
Has run
But to the even-song;
And, having prayed together, we Will go with you along.

We have short time to stay, as you,
We have as short a spring;
As quick a growth to meet decay,
As you, or anything.
We die
As your hours do, and dry Away,
Like to the summer's rain;
Or as the pearls of morning's dew, Ne'er to be found again.

To the Virgins, to Make Much of Time
Gather ye rosebuds while ye may, Old Time is still a-flying;

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And this same flower that smiles to-day, To-morrow will be dying.

> The glorious lamp of heaven, the sun, The higher he's a-getting, The sooner will his race be run, And nearer he's to setting.

That age is best which is the first, When youth and blood are warmer; But being spent, the worse and worst Times, still succeed the former.

> Then be not coy, but use your time, And while ye may, go marry; For, having lost but once your prime, You may forever tarry.

Differences in magnitude may be traced to differences in the kind and the degree of the emotions involved. Some emotions are admittedly of a nobler kind than others. Love is higher than hate; forgiveness is higher than revenge. The positive emotions are higher than the negative; the constructive are higher than the destructive. Within the constructive positive emotions some are higher than others. Love of one's wife is higher than love of pleasure, and love of truth is higher than either. All that a man hath will he give for his life, but there are emotions that make a man lay down his life.

The degree of emotion is also important, for any emotion felt very keenly becomes powerful. A low emotion, if felt very keenly, is more important than a high emotion felt only slightly. The love of food we have said is a lower emotion than the love of truth. And love of truth has made many a person endure the pangs of hunger, even starvation, but hunger has also made many a person sacrifice truth. And even a bad emotion assumes a certain greatness when it is felt greatly. We do not like Iago, but we have respect for a man who can hate so much.

The greatest magnitude occurs when we have a great emotion felt greatly. And so we say the greatest art must arouse a noble emotion in a high degree. By common consent, art that does this is called the sublime. If we try to define the sublime we can'only say it arouses the greatest emotions at the highest intensity. We can, however, be more exact in defining its effect on the individual. The sublime arouses in one a feeling of astonishment, rapture, and awe; in comparison with

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its greatness one feels his own littleness. But, paradoxically, the attempt to share the greatness of the sublime makes one greater than he was before. Take, for example, Plato's account of the death of Socrates. Before the greatness of Socrates we feel petty and yet our attempt to understand his greatness makes us greater than we were.

Crito, when he heard this, made a sign to the servant; and the servant went in, and remained for some time, and then returned with the jailer carrying the cup of poison. Socrates said: "You, my good friend, who are experienced in these matters, shall give me directions how I am to proceed." The man answered: "You have only to walk about until your legs are heavy, and then to lie down, and the poison will act." At the same time he handed the cup to Socrates, who in the easiest and gentlest manner, without the least fear or change of color or feature, looking at the man with all his eyes, . . . as his manner was, took the cup and said: "What do you say about making a libation out of this cup to any god? May I, or not?" The man answered: "We only prepare, Socrates, just so much as we deem enough." "I understand," he said: "yet I may and must pray to the gods to prosper my journey from this to that other world-may this then, which is my prayer, be granted to me." Then holding the cup to his lips, quite readily and cheerfully he drank off the poison. And hitherto most of us had been able to control our sorrow; but now when we saw him drinking, and saw too that he had finished the draught, we could no longer forDear, and in spite of myself my own tears were flowing fast; so that I covered my face and wept over myself, for certainly I was not weeping over him, but at the thought of my own calamity in having lost such a companion. Nor was I the first, for Crito, when he found himself unable to restrain his tears, had got up and moved away, and I followed; and at that moment, Apollodorus, who had been weeping all the time, broke out into a loud cry which made cowards of us all. Socrates alone retained his calmness. "What is this strange outcry?" he said. "I sent away the women mainly in order that they might not offend in this way, for I have heard that a man should die in peace. Be quiet then, and have patience." When we heard that, we were ashamed, and refrained our tears; and he walked about until, as he said, his legs began to fail, and then he lay on his back, according to the directions, and the man who gave him the poison now and then looked at his feet and legs; and after a while he pressed his foot hard and asked him if he could feel; and he said, "No"; and then his leg, and so upwards and upwards, and showed us that he was cold and stiff. And he felt then himself, and said: "When the poison reaches the heart, that will be the end." He was beginning to grow cold about the groin, when he uncovered his face, for he had covered himself up, and said (they were his last words) -he said: "Crito, I owe a cock to Asclepius; will you remember to pay the debt?" "The debt shall be paid," said Crito; "is there anything else?" There was no answer to this question; but in a minute or two a movement was heard, and the attendants uncovered him; his eyes were set, and Crito closed his eyes and mouth.
-The Phaedo, Tr. by Jowett.
The source of the sublime is always a greatness of power, One feels the sublime in the ocean, in a fierce storm, in a mighty waterfall,


Fio. 208.-Michelangelo (1475-1564). The Entombment (ca. 1550).
Marble. Height: about 7 feet. Florence, Cathedral. (Metropolitan Museum of Art.)
whereas there is no sense of sublimity in a small pond or a trickling stream, a creek through a pleasant meadow. Byron's verses on the ocean express the sublimity of nature.
> $\|$ There is a pleasure in the pathless woods, There is a rapture on the lonely shore, There is society where none intrudes, By the deep Sea, and music in its roar: I love not man the less, but Nature more, From these our interviews, in which I steal From all I may be, or have been before, To mingle with the Universe, and feel What I can ne'er express, yet cannot all conceal.

> Roll on, thou deep and dark blue Ocean, roll!
> Ten thousand fleets sweep over thee in vain; Man marks the earth with ruin, his control Stops with the shore; upon the watery plain The wrecls are all thy deed, nor doth remain A shadow of man's ravage, save his own, When for a moment, like a drop of rain, He sinks into thy depths with bubbling groan, Without a grave, unknell'd, uncoffin'd, and unknown.
> -Childe Harold's Pilgrimage, Canto IV.

The sublime is not, however, limited to nature, though it is probably felt in nature more easily than in other sources; there is the even greater sublimity of spiritual power: the power of the Mass in $B$ minor by Bach, of the Entombment by Michelangelo, the power of Socrates, who drinks the hemlock and bids his followers pay a small debt, even as he is feeling the numbness pervade his body; the power of Othello when he stands before his judges and says:

Soft you; a word or two before you go. I have done the state some service, and they know 't.
No more of that. I pray you, in your letters,
When you shall these unlucky deeds relate,
Speak of me as I am; nothing extenuate,
Nor set down aught in malice. Then must you speak
Of one that lov'd not wisely but too well;
Of one not easily jealous, but being wrought
Perplex'd in the extreme; of one whose hand,
Like the base Indian, threw a pearl away
Richer than all his tribe; of one whose subdu'd eyes,
Albeit unused to the melting mood,
Drop tears as fast as the Arabian trees
Their medicinal gum. Set you down this;

> And say besides, that in Aleppo once, Where a malignant and a turban'd Turk Beat a Venetian and traduc'd the state, I took by the throat the circumcised dog, And smote him, thus.
-Othello, V, ii, 338-356.

The sublime ordinarily demands a great protagonist in the sense of a person who is noble or powerful; it seems more natural to think of great emotions in great persons, kings, queens, and people in authority. Hence the tradition, kept by Shakespeare, that the heroes and heroines be of noble birth. But greatness of rank is not essential; the highest emotions can be found even in the simplest subjects.

True magnitude does, however, usually mean size of presentation. The very small can arouse great emotions but rarely and with difficulty. A very short poem or a very short piece of music is over before one's emotions have had time to be fully aroused. A very small painting, the carving on a ring, or a statuette has the same difficulty; it may be precise, exact, even perfect, but it is not sublime. This does not mean, of course, that a poem or a statue is greater the larger it is; obviously that is nonsense; but it does mean that those works which are on a diminutive scale do not usually reach the greatest heights. The poems of Emily Dickinson have a fierce intensity and a nobility of subject and feeling that are worthy of the sublime, but they are not sublime; they do not have time enough. The very beautiful little ivory statue known as the Snake Goddess is another case in point; it is too small to arouse the emotion of sublimity.

The sublime is necessarily short-lived; it is only for a short period of time that one may feel a very great emotion. The person who is living among mountains will find them beautiful at all times, but it is seldom that he finds them sublime. Moreover, a very great emotion cannot be hurried; it takes time to arouse a very deep emotion. Therefore, music and literature, being time arts, attain the sublime more easily than do the visual arts, because in them the artist has time to work up to a high pitch. On the other hand, one may get visions of the sublime from a great cathedral, a great statue, or painting.

It is only in the quality of sublimity that there is any real inferiority of the industrial arts. They may be as great as any of the other arts in every other respect; they may be just as well organized, just as sincere, and just as complete; but they are not sublime. One cannot imagine a spoon, a chair, or a piece of cloth that would arouse the great emotions

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Fig. 209.-Nike Loosening Her Sandal (end of fifth century b.c.), from Temple of Athena Nike.
Pentelic marble. Height: 3 feet 2 inches. Athens, Acropolis Museum. (Alinari.)
of the Cathedral at Amiens or Piero della Francesca's Resurrection. An exception is a great machine, such as a huge furnace; but, being a machine, it is subject to man and hence is inferior to man, whereas that which is sublime is superior; man feels inferior before it.

The sublime has been dwelt upon as the type of the highest magnitude; below the sublime are various other stages. Professor Bradley, in his essay on The Sublime, distinguishes five modes of beauty or degrees of magnitude. They are: pretty, graceful, beautiful, grand, and sublime. The pretty is at the opposite end from the sublime; it is pleasant and agreeable, but it arouses no very high or strong emotions. The other stages grow successively more difficult as they mount the scale. The pretty is the easiest and the sublime the most difficult. The sublime is above the senses; it is so great that it is at war with the senses, though


Fig. 210.-Fra Filippo Lippi (ca. 1406-1469). Madonna Adoring the Christ Child (before 1435).
'Tempera on wood. Size: $491 / 2$ by $451 / /$ inches. Berlin, Kaiser Friedrich Museum (Metropolitan Museum of Art.)
they strive hard to take it in. The feeling of the sublime therefore is necessarily of short duration because one cannot sustain so intense an emotion for a long time. The grand is less rare, and with the beautiful and the lesser emotions there is no difficulty; they are at one with the senses. There is complete unity between the object and the response of the senses to them; therefore, one may feel these emotions at all times.

Fancy is a special class in that it implies a combination of elements that are not usually put together, the juxtaposition of unrelated objects. It corresponds exactly to the usual use of the word fanciful; for instance, the music Deems Taylor composes for the garden of


Fig. 211.-Giotto (1266-1336). Madonna Enthroned (ca. 1304). Tempera on wood. Height: 10 feet $81 / 2$ inches. Florence, Uffizi. (Metropolitan Museum of Art.)
insects and the talking flowers in his Through the Looking Glass is like its subject-fanciful. A little song like Shakespeare's Where the Bee Sucks is pure fancy, as are some of the strange types of architecture one sees in Barcelona. The fanciful is always one of the lower modes; usually graceful, it may also be beautiful or pretty. It is never grand or sublime.

In order to judge magnitude it is well to make comparisons. For example, let us take the draped figure of Nike Loosening Her Sandal, from the temple of Athena Nike on the Acropolis. In comparison with the draped figures from the Parthenon commonly known as The Three Fates, this figure seems slight; at best, pretty or graceful. Or let us contrast Madonnas: the Madonna by Giotto is very great; the simple austerity of her expression moves one with a sense of the grand, if not of the sublime, whereas the Madonna of Fra Filippo Lippi is, in comparison, only graceful or pretty. The Cavalleria Rusticana belongs to one of the lower modes; Beethoven's Ninth Symphony, to one of the higher. Of the two poems by Herrick cited early in the chapter, To the Virgins would probably be classed as graceful; To Daffodils, as beautiful.

## References

Bradley, A. C.: "The Sublime," Oxford Lectures on Poetry, 1909.
Bulley, M. H.: Art and Counterfeit, 1925.
Untermeyer, L., and Davidson, C.: Poetry-Its Appreciation and Enjoyment, 1934.

## Questions

1. How does the statement in this chapter that the meaning of art can never be translated into other terms differ from the statement made earlier that no medium can ever be translated into another medium?
2. Look up Rodin's statue The Burghers of Calais and the description of it in Gsell's book The Art of Auguste Rodin, pages 85 to 88.
3. Let each person in the class select a different artist and study the various criticisms that have been made of his work over a period of time. Notice the characteristics that are commented on as well as the degree of praise and blame.
4. Compare a history of art, music, or literature of today with one of twenty, fifty, or a hundred years ago. What differences do you find in the subjects given stress?
5. Try to prove from your own experience the statement that the comic is not the greatest art. Does the comic in life arouse the deepest emotions?
6. Study Byron's early poems for examples of sentimentality.
7. Cite examples of sentimentality from your own thinking. Did you, as a child, like to imagine yourself dead? How does this type of thinking compare with the quotation from Oscar Wilde? Compare it with Keats's Ode to a Nightingale.
8. Find in a magazine or newspaper work that you would call mechanical.
9. Study the "school" of any great painter.

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10. Do the same for an artist in another medium.
11. Name some work of art that does not seem to you complete.
12. Test the unity of a work that does seem to you complete by omitting some part.
13. Would you make the criticism of incompleteness of the other sonnets of Keats and Sidney?
14. Do you know art that suffers from being too active? Too detailed? Too bare of details?
15. Choose ten poems, ten paintings, ten pieces of music, ten statues, and ten buildings that you like very much; rank each as pretty, beautiful, etc.
16. Do you find that most artists keep a certain rank in their work?
17. Compare three Greek conceptions of Venus: the Medici Venus, the Venus of Melos, and the Venus of Cnidus.
18. Compare any works on the same subject as to their magnitude.
19. Go back over the examples you have studied in this volume to judge their magnitude. Do you agree with the commonly expressed opinion that the late Greek statues are of little real value?

## XXIII

## "That Untravell'd World",

> I am a part of all that I have met;
> Yet all experience is an arch wherethro'
> Gleams that untravell'd world whose margin fades For ever and for ever when I move.

-Tennyson, Ulysses.
In concluding the study of art we pause for a moment with the person who asks, "What is all this to me? What am I to do? How am I to go on? Is art to be shut within the margins of this book, limited to the classroom, or is it to be an arch through which 'gleams that untravell'd world whose margin fades for ever and for ever when I move'?" It is in answer to such questions that this chapter is written, and it is addressed not to the student who is going to carry on advanced work in the arts nor to the artist who will continue to create as God shows him how but to the everyday person who enjoys art and who wants to know how to proceed.

## 1. Experience

First we repeat what we said in the introductory chapter to this book: the distinguishing element in the humanities is experience, appreciation. All art depends on experience, and if one is to know art he must know it not as fact or information but as experience and appreciation. The essential characteristic of experience, however, is that it is personal and individual. It cannot be borrowed or lent, bought or sold; it can only be had. No one can get it for another. The master may tell the pupil what experiences are worth while, he may tell him how to go about getting them, but the pupil must have his experiences for himself. Therefore the first rule for anyone is: live; enjoy art; get all the pleasure you can from art. Other people can compose and play music for you, but no one can listen to it for you; others can paint pictures and carve statues for you, but no one can
look at them for you; artists can create art for you, but you must enjoy it for yourself.

The obvious means for getting experience in art-reading books, looking at pictures, listening to music-need no explanation, but there are a few special points that deserve comment, as, for instance, the matter of practice in the arts. Too often work in the mediums of art is left to the artist, but one does not need to have any illusions about his ability to produce a masterpiece in order to try his hand at a sonnet, a landscape, a song, or a clay model. Work in the arts is one of the good and pleasant activities in life, and it is just as foolish to miss that pleasure out of modesty as it would be to refuse to play golf unless one could claim to be a champion. The amateur has fun, and usually he learns a new appreciation of the work of others.

In the works of others one should be on the alert for the unusual opportunity; the music that is performed only rarely, or the play that is not often on the boards. Even if one takes advantage of all the opportunities offered him, he does not have many chances to see the plays of Shakespeare or Molière or to hear music such as the cantatas of Bach.

Especially important is it that one utilize every opportunity to know art in the original. Records, radios, books about art, and reproductions are all good: for some purposes they are better than the original, but there is something in the original that is lost even in the best reproduction. Whenever possible, therefore, one should hear musicians and orchestras, see plays, and visit museums. It is wise to keep a note of the location of buildings, paintings, and sculpture so that when one is in any city, he may know what is to be seen there.

It is a good plan, also, to cultivate a hobby in the arts. It may be records or prints, modern sculpture or old glass, newspaper clippings about French paintings or learned articles about Coptic textiles. The re-creator of art, like the creator, works best within limitations, and within a sufficiently restricted area anyone can succeed. Although a large collection of phonograph records costs a great deal of money, even a limited budget will be adequate for the records of a single pianist or composer. Painting and sculpture are now beyond the means of most people, but prints are within the reach of everyone. And if one is discriminating and uses care and foresight, he can build up a collection that is both interesting and valuable.

A collection, however, should be a living one; it should remain always a collection in the making. When an object ceases to give you
pleasure get rid of it. Do not be afraid to discard; sell, set aside, or give away the book or the record that has ceased to be of interest to you. Do not let your prints or even your glassware get in the class of that which you no longer see because you are too familiar with it.

Besides, your reactions will not always remain the same; as your collection grows you, too, will grow. Tastes change. The impression of any work is modified by greater experience. The music you like very much the first time you hear it you may not like at all the twentieth time. The picture that fails to impress you the first time you see it may seem very great when you know it better. You learn to like what you formerly disliked and sometimes to think less highly of what you formerly liked. There is a time when Tschaikovsky, Luini, and the Rubaiyat of Omar Khayyam in Fitzgerald's translation represent the highest there is in art; then, without ceasing to enjoy the old favorites, one progresses to more difficult, more severe, and more rewarding artists.

## 2. Authority

No one can possibly know all the art in the world; he cannot read all the books that are printed or hear all the music that is composed and played in any one year; he can hardly know all the pictures and statues in any one of the great galleries, much less in all of them. Therefore, he must use the opinions of others to help him decide what is for him worth looking at and listening to, to tell him what has been thought good and what poor, what has been reckoned supreme and what mediocre.

For the knowledge of the old a minimum essential is a number of the standard histories of art, music, and literature, with books on special periods and individual men. For knowledge of the new the most easily available help is found in magazines and newspapers. Several of the daily newspapers have book-review magazines; almost every metropolitan newspaper has a section devoted to the arts, and there are, in addition, independent weeklies and monthlies that carry only news of books, art, and music. These differ greatly in value; some maintain a higher standard than others. All vary in the quality of their work; each has some good and some bad reviews. But any one of them is better than nothing, and to the person who wants to cultivate the best they are indispensable.

With the new, of course, one can never be certain that he has the very great. The verdicts of art depend on time, and until time has
passed no one can say that any particular work of art will endure. The older artists are more rewarding in that one knows more definitely what is really great, and if one forms his taste by them he knows better how to judge the moderns. One should not, however, limit himself to the old; the person who is alive now wants to know what is going on in the world. Tastes differ, and each one must make his menu to suit his palate; but it is obviously a mistake to cultivate the old without any attention to the new or to cultivate the new without any attention to the old.

## 3. Sincerity

A third suggestion for the student of art is: Be honest, but be humble. Be honest with yourself; be sincere in your judgments of art. Do not deny a pleasure you have had nor pretend one you have not had. The only value of art to any individual is the experience he gets from it. Moreover, almost any reason for liking art is a good reason, and any liking of art is for something good in it. This statement sounds heretical, but ordinarily it is true. A work of art, like an individual, is seldom entirely good or entirely bad, and what one likes is usually the good and not the bad. It is just as it is with friends; you may have a friend who is a liar and a horse thief, but you do not like him because he is a liar and a horse thief; you like him for other reasons. And a liking even for the inferior is better than no liking at all.

Only, it must be a real liking; it must be an honest opinion. It may not be determined by what other people think or what one judges it wise to say and think. No real appreciation can come of pretending to like what one does not really enjoy. As much good as the histories and criticisms of art have done, they have also done harm in setting up standards to which the timid give lip service. Dante, Shakespeare, Bach, Beethoven, Phidias, Giotto, and Rembrandt have been judged great for so long that everyone must recognize their rank among the great masters, but one should not claim to know their greatness until he has himself felt their power.

Neither should he pretend to enjoy the art that he recognises as inferior. Everyone has times when he honestly wants and needs the less good in art; the sentimental story, the melodramatic cinema, the music that has only marked rhythm as its appeal are just what he craves, and at those times he should have them. But there are other
times when he puts up with them, saying, "It's all right, I guess," or "It's what other people like, and it's good enough for me," and there is a deliberate catering to lower tastes, a conscious letting down of standards, and as such the judgment is not quite honest.

One should be sincere in his judgments of art, but at the same time he should be careful not to confuse the issues; he should recognize the bases on which judgments rest. There are many reasons for liking or disliking a work that have little or nothing to do with its value as art. One of these is the stereotyped reaction--reacting to the type rather than to the individual piece. Often we say we like something when we have never paid any attention to it and do not know it at all. We know we like popular music or Madonnas or pretty girls or mystery stories, and we react to the type without any consideration of the particular example. Real liking, however, is of necessity liking for the individual. We may like Madonnas as a class, just as we like girls as a class, but we must know the individual as an individual before we can say we like this girl or that Madonna.

Another type of confused thinking arises from the failure to distinguish between the pleasure got from a work of art and that which comes from something associated with it. In the spring after the Armistice of 1918 a group of five Americans who had been in the army spent a long day climbing Mt. Pilat in southern France. They got down from the mountain too late for the train and were forced to spend the night in the village at its foot. After supper they walked out toward the mountains and sang There's a Long, Long Trail A-winding. At least one of that party cannot hear that tune now without thinking of spring in France, moonlight on the mountains, and peace after war. And so he likes the song, but he would have liked any other song at that time and under those circumstances. His is not a liking for the song itself but for the memories it arouses.

With these precautions, the individual should stand firm in his convictions. He should not be afraid to say what he likes and what he dislikes. Honesty and sincerity are just as important in the critic as in the artist himself. With sincerity, however, should go humility. Honesty is essential, but sometimes honesty alone tends to produce a closed mind; hence the need for humility, the kind of humility that reminds one he has much to learn and keeps him expectant. "Before a picture, as before a prince," said Schopenhauer, "everyone must stand waiting to see whether and what it will speak to him."

## 4. The Great Masters

A last suggestion for the beginner in art is: Give yourself a chance at the best. It may be that you are a person of mediocre abilities and superficial interests, and it may be that the highest is far beyond you, but give yourself a chance.

Strangely enough, we never think the best is too good for us in material things. With clothes, apples, automobiles, or houses, we feel quite certain that we are worthy of the best, whereas with art we are afraid; we protest that we are not "highbrow" and that art is too good for us. This is especially noteworthy because access to the arts is, in general, comparatively inexpensive or even free. In the public libraries one can get the best books without any cost; museums are free on many days; some of the best musicians in the world broadcast, and one may get their programs by turning on the radio. If we are afraid of the best in art it is not because it is out of reach.

For this hesitancy in claiming the best in art one reason may be that we get so much pleasure from the art we know that we cannot conceive ourselves getting more from a higher art. But more is just what we would get: a great pleasure, a deeper experience. Since any experience of art gives a sense of heightened living, the greater art gives greater pleasure, a more intense sense of living.

A more important reason for our dread of the best is that, being great, it cannot be grasped easily or at once. Therefore we do not get the immediate satisfaction we get from lesser art; we are perhaps repulsed, and we put it aside. This is a situation that must be faced. The very great in art, as in everything else, is difficult; almost anything worth doing is difficult; it cannot be attained easily or without hard work. The prophecies of Isaiah and the book of Job in the Old Testament are among the supreme examples of literature, but it is doubtful if anyone can get very great pleasure from them without study. No one can ever know the Mass in B minor or the Divine Comedy on a single hearing or a superficial reading; they need concentrated attention. The person who gives them this attention will not necessarily like them; in art, as in life, one must count on a certain number of failures. But no one can know if he will like the great works of art until he has given them the necessary attention.

Fortunately, there is little difference of opinion with regard to the very great. About the lesser works there are many and various judg. ments; one prefers this and another that, but as we approach those
few masterpieces that can be called supremely great, the differences melt away. Hence we may approach them with greater assurance that, though they demand work, they will bring their reward, and the work will not be in vain. Fortunately, also, the rewards of art, like the rewards of goodness, are open to everyone. Appreciation of art, like virtue, is not reserved for the learned but is free to the honest and sincere.

## 5. Art and Life

Art is not something separate from life but, being experience, is itself a way of living. All life has two phases, the active and the contemplative, and there is a rhythm of alternation between them. One follows the other as day follows night. To the contemplative phase belongs primarily the storing up of feelings and ideas; and to the active stage, the translation of those feelings and ideas into words and deeds. The experiences of each phase influence the other. What is thought and felt in the contemplative stage changes what is done and said in the active, and what is done and said in the active in turn reacts upon what is thought and felt in the contemplative. In this rhythm of alternation values as perceived by any one individual necessarily change and shift. In everyone who is alive the process takes place inevitably, all the time. The man who is developing does not leave these changes only to the unconscious processes of time or the haphazard influences of everyday, but he subjects them to constant checking; he is constantly on the alert to see that his standard of values does not drop below his own knowledge of the good.

Art, as we are considering it from the point of view of the critic who re-creates rather than the artist who creates, belongs to the contemplative phase; the quiet storing up of feelings that influence behavior in the more active phases. In a world that is always confused-and our time is no exception-we cannot stress too much those humanities that so fill us with the love of the truly great that when we go into the active phases of living we carry it with us toward the ideal of a life that is itself serious, complete, and of a certain magnitude.

## References

[^39]The Saturday Review of Literature, New York.
The Art Digest, New York.
The Art News, New York.
Magazine of Art, Washington.
Modern Music, New York.
The Musical Quarterly, New York.
The Musical Times, London.

## Bibliography

The bibliographies are intended to be suggestive rather than exhaustive. The books listed at the end of individual chapters give suggestions for further reading on special topics. The books named here are of a more general nature. In this list are included also those books to which the authors are esperially indebted either for the formation of attitudes or as convenient books of reference.

## Encyclopedic Works

Elson, A.: The Book of Musical Knowledge, 1927.
Eirskine, J., ed.: A Musical Companion, 1935.
Gramophone Shop, Inc.: Encyclopedia of Recurded Muıic, 1936.
.. . -: Record Supplements.
Harvey, P.: The Oxford Companion to Classical Iiternture, 1937.
----: The Oxford Companion to English Literature, 2d ed., 1937.
Roos, F. J.: An Illustrated Handbook of Art Histury, 1937.

## Atsimetics

Croce, B.: Aesthetic, tr. by D. Ainslic, 2d ed., 1022.
Dewey, J.: Art as Experience, 1934.
Langfeld, H. S.: The Aesthetic Attitude, 1920.
Mather, F. J., Jr.: Concerning Beauty, 1935.
Ogden, C. K., Richards, I. A., Wood, J.: The Foundations of Aesthetics, 1922.
Parkhurst, H. H.: Beauty, 1930.
Stein, L.: The A. B. C. of Aesthetics, 1927.
Torossian, A.: A Guide to Aesthetics, 1937.

> Гhe Vistial. Arts

Barnes, A. C.: The Art in Paintıng, 1925.
Blake, V.: Relation in Art, 1925.
Bodkin, T.: The Approach to Painting, 1931.
Bulley, M. H.: Art and Counterfeit, 1925.
Carpenter, R.: The Esthetic Bares of Greek Art, 1921.
Collins, M. R., and Riley, O. L.: Att Appreciation, 1932.
Fletcher, B. F.: A History of Architecture on the Comparative Method, 10th ed., 1938.
Gardner, H.: Understanding the Arts, 1932.
--: Art through the Ages, 1926.
Read, H.: Art Now, 2d ed., 1936.
Rindge, A. M.: Sculpture, 1929.
Valentine, C. W.: Introduction to the Expermental Psychology of Beauty, 191,
Wölflin, H.: Principles of Art History, tr. by M. D. Hottinger, 1932.

## Literature:

Alden, R. M.: An Introduction to Poetry, 1909.
Bagehot, W.: Literary Studies, Vol. II, "Wordsworth, Tennyson, and Browning; or Pure, Ornate, and Grotesque Art in English Poetry," 1864.

## THE HUMANITIES

Butcher, S. H., ed.: Aristotle's Theory of Poetry and Fine Art, 1920.
Dudley, L.: The Study of Literature, 1928.
Eastman, M. Enjoyment of Poetry, rev. ed., 1921.
Hazlitt, W.: Lectures on English Poets, Lecture I, "On Poetry in General," 1818.
Krutch, J. W.: Experience and Art, 1932.
Lowes, J. L.: Convention and Revolt in Poetry, 1919.
Murray, G.: The Classical Tradition in Poetry, 1927.
Richards, I. A.: Practical Criticism, 1929.
--_: Principles of Literary Criticism, 4th ed., 1930.
Music
Gray, C.: The History of Music, 1928.
-: Predicaments, or Music and the Future, 1936.
Hadow, W. H., ed.: The Oxford History of Music, 1932.
Lambert, C.: Music Ho! 1936.
Landowska, Wanda: Music of the Past, 1924.
Locke, A. W.: Music and the Romantic Movement in France, 1920.
Morris, R. O.: Contrapuntal Technique in the Sixteenth Century, 1922.
Spaeth, S.: The Art of Enjoying Music, 1933.
--: Great Symphonies, 1936.
Tovey, D. F.: Essays in Musical Analysis, 5 vols. 1935-1937.
The Dance
H'Doubler, M. N.: The Dance and Its Place in Education, 1925.
Sachs, C.: World History of Dance, 1937.
Selden, E.: The Dancer's Quest, 1935.
Shawn, Ted: Fundamentals of a Dance Educatıon (pamphlet), 1937.
---: Dance We .Must, 1940.
Periodicals and Newspapers
The Christian Science Monitor, Boston.
The London Times, London.
The New York Times, New York.
The New Yorker, New York.
Time, New York.
The Saturday Review of Literature, New York.
The Art Digest, New York.
The Art News, New York.
Magazine of Art, Washington.
Modern Music, New York.
Musical America, New York.
Musical Courier, New York.
The Musical Quarterly, New York.
The Musical Times, London.

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[^0]:    Columbia, Mo.,

[^1]:    Where are the songs of Spring? Ay, where are they?
    Think not of them, thou hast thy music too,-
    While barred clouds bloom the soft-dying day, And touch the stubble-plains with rosy hue;
    Then in a wailful choir the small gnats mourn
    Among the river sallows, borne aloft
    Or sinking as the light wind lives or dies;
    ${ }^{1}$ Amy Lowell, John Keats, Vol. II, p. 331.

[^2]:    ${ }^{1}$ George Moore, Héloise and Abélard, pp. 93-94; 60. By permission of the publisher, Liveright Publishing Corporation.

[^3]:    ${ }^{1}$ Rev., IV, 7.

[^4]:    ${ }^{1}$ Poems and Ballads of Heinrich Heine, tr. by Theodore Martin.
    ${ }^{2}$ Heine's Book of Songs, tr. by John Todhunter.
    ${ }^{8}$ Poems and Ballads of Heinrich Heine, tr. by Emma Lazarus.

[^5]:    ${ }^{1}$ Lavignac, Music and Musicians, p. 34.

[^6]:    ${ }^{1}$ Leopold Stokowski, "New Vistas in Radio," Atlantic Monthly, January, 1935.

[^7]:    ${ }^{1}$ Albert C. Baugh, A History of the English Language, Chap. II.
    2 "Chinese Language," Encyclopaedia Britannica, 14th ed., Vol. V, p. 569.

[^8]:    ${ }^{1}$ Warren, H. C., Elements of Human Psychologv, p. 72,

[^9]:    ${ }^{1}$ In studying color we run into many contradictory theories and terms. The physicist studies color as colored light, and his theories are based on the behavior of light. The psychologist is concerned only with the appearance of colors, and for his theories he experiments with flat colors on a disk that is rapidly revolved. The artist, on the other hand, is intrested in colored pigments, and his theories are based on the way pigments behave. With the three different approaches to the study there have grown up many contradictory theories and, in particular, a large and contradictory terminology of color. The differences, however, are of no real consequence in an elementary study of this kind.

[^10]:    ${ }^{1}$ Warren, H. C., Elements of Human Psychology, p. 71.

[^11]:    Wood wind: 2 flutes, 2 oboes, 2 clarinets, 2 bassoons.

[^12]:    ${ }^{1}$ A. C. Bradley, Oxford Lectures on Poetry, p. 20.

[^13]:    ${ }^{1}$ By permission of The Marmillan Company, publishers.

[^14]:    ${ }^{1}$ This and the preceding sentence are used by Fowler as examples of unrhythmical prose. Article on Rhythm, Modern English Usage, p. 505.

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[^18]:    ${ }^{1}$ E. E. Cummings, here's a little mouse, published by Liveright Publishing Corporation.

[^19]:    ${ }^{1}$ P. 116.
    ${ }^{2}$ By special permission of Mrs. John E. D. Trask and The Pennsylvania Company.

[^20]:    ${ }^{1}$ Ibid.
    ${ }^{2}$ The Web and the Rock, p. 39-40, Harper \& Brothers, publishers.

[^21]:    ${ }^{1}$ Practical Elements of Rhetoric, pp. 35-36.

[^22]:    ${ }^{1}$ Reprinted with the permission of Houghton Mifflin Company, publishers.
    ${ }^{2}$ From Trees and Other Poems, by Joyce Kilmer, copyright, 1914, by Doubleday, Doran \& Co., Inc.

[^23]:    ${ }^{1}$ Phaedrus, 264 C; Poetics, XXIII, I. Cf. Butcher, Aristotle's Theory of Poetry and Fine Art, p. 189.

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[^31]:    ${ }^{1}$ Wölfflin, Principles of Art History, p. 3.

[^32]:    Abercrombie, L.: The Epic, 1914.
    Coleridge, S. T.: Biographia Literaria, 1817.
    Erskine, J.: The Kinds of Petry, 1924.
    Flaccus, L. W.: The Spirit and Substance of Art, rev. ed., 1931.
    Ker, W. P.: Epic and Romance, 1908.
    Lucas, F. L.: The Decline and Fall of the Romantic Ideal, 1936.
    Murry, J. M.: The Problem of Style, 1922.

[^33]:    ${ }^{1}$ For this comparison I am indebted to Friend and Hefter's Graphic Design, p. 205.

[^34]:    ${ }^{1}$ James Henry Breasted, The Conquest of Civilization, Plate IX, p. 98.

[^35]:    ${ }^{1}$ Ibid., Fig. 61, p. 96.
    ${ }^{2}$ Ibid., p. 60.
    ${ }^{3}$ Ibid., p. 64.

[^36]:    . . . 'tis not so deep as a well, nor so wide as a church-door; but 'tis enough, 'twill serve,

[^37]:    ${ }^{1}$ From Poetical Works of Christina Rossetti, reprinted by permission of The Macmillan Company, publishers.

[^38]:    ${ }^{1}$ From Collected Poetical Works, reprinted by permission of Harper \& Brothers, publishers.

[^39]:    Periodicals and Newspapers:
    The Times, "Literary Supplement," London.
    The New York Herald Tribune, "Books." The New York Times, "Book Review."

