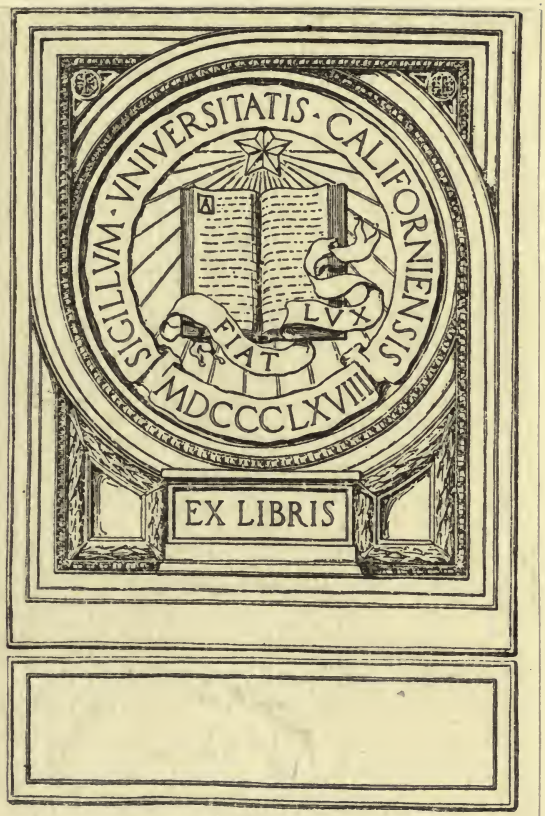
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ÆSTHETIC EDUCATION

ÆSTHETIC EDUCATION

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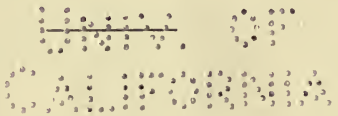
MOTTO:
An æsthetic view of the world for every child



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PREFACE

THIS BOOK maintains that every child should acquire in school a first-hand æsthetic view of the world, as he now acquires an intellectual or a moral view of it.

Our present æsthetic teaching is defective in several particulars: First, in that it is left to specialists alone; second, because, in consequence of this fact, it covers only a part of the world that is beautiful; and, third, because it tends to lead the pupil to look for beauty only at second hand, as in pictures of things rather than in the things themselves.

The first requisite in giving the pupil this first-hand view of the beauties of the world is that the teacher should acquire it himself. To this end, the book attempts to give a direct, non-technical analysis of the meaning and expression of the beautiful as seen in nature and the arts. It shows how and where to look for beauty, not alone in pictures and statues, but also in nature and in the domain of mechanics and of the arts that pertain to daily living.

The second requisite is that the teacher should be able to impart the canons of good taste to the pupil, to lead him to see beauty wherever it exists, to distinguish the pretension of beauty from its reality, and to found and reinforce his appreciation by efforts at artistic creation, in drawing and music, to be sure, but also in language and in those everyday arts that enhance the pleasures of life. Many suggestions as to how these ends may be effected are given throughout the book, and especially in the concluding chapter.

Only the general problem of æsthetic education is discussed. No attempt is made to instruct teachers of music or drawing, though it is hoped that they will find their work reinforced and universalized by what is here presented.

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CHAPTER I

PURPOSE

THE PURPOSE of æsthetic education is the acquisition by every child of an æsthetic view of the world, as he now acquires an intellectual or an ethical view. This does not mean that all things are beautiful, but that all things are capable of being judged as æsthetically pleasing, indifferent, or repulsive. Just as we now endeavor to comprehend intellectually the world about us, whether in the realm of nature, or of institutional life, so we should be trained to perceive almost with the directness of instinct whether a thing is beautiful or not. There is a two-fold advantage in such training; first, that it greatly enlarges the scope of our pleasures; and secondly, that it leads naturally to efforts to increase the beautiful and to diminish the ugly in our environment.

Though there is much literature on the

teaching of the special fine arts, there is almost none on the larger problems of æsthetic education. A hundred years ago Schiller wrote a series of letters on "The Æsthetic Education of Man," but there is almost no subsequent extended discussion of the subject. That Schiller should have urged such instruction on the ground that it contributes to the political education of the people seems surprising, for what has æsthetics to do with politics? Yet the poet's view does not appear unnatural when one considers the function that an appreciation of the beautiful may perform in life. Art, he thinks, mediates between the sensuous and the rational. It is the bridge we must cross in going from animality to rationality. At the time of the Napoleonic wars the peasant, not being a self-functioning member of the state, but resting rather at the level of a gross struggle for the material means for survival, could not be elevated by mere legislation to free citizenship, but must await the slower processes of gradual development. The road from serfdom to liberty, Schiller thought, must pass through the smiling realms of the beautiful. Therefore all men must have æsthetic education.

But, civil liberty having been attained by other than æsthetic means, we need to find other reasons for æsthetic education than those advanced by Schiller. These reasons fall naturally into two groups, the psychological and the social. Without too much anticipation of future exposition, it may be said, first of all, that æsthetic enjoyment is, perhaps above all others, free from selfish desire to exploit or consume that which is admired. A beautiful object makes us glad without at the same time making us hungry; it is as Keats says, "a joy forever." It is true that people sometimes mix æsthetic with other motives, as when they view a beautiful painting, at the same time asking how much it cost, or when seeing a beautiful house, at once desire to own it. But all appreciation that is truly æsthetic stops with the pure joy of contemplation. A beautiful object embodies the emotion that produced it, and should not at the same time stimulate the desire to consume it. Kant says, an object is beautiful "when without exciting selfish desire" it pleases us through its form.

The egoistic and the non-egoistic view of the beautiful may be illustrated by the following lines:

THE WILD ROSE

Had I not found this rose of wildwood grace,
Her life had else in solitude been spent,
Her fragrance wasted and her petals rent;
I'll pluck the rose, ere storms her glows efface.
But pause, rash egoist! dost thou dare hold
That blush and perfumed breath are meant for thee?
Nay, nay! they lure to her yon velvet bee;
She grants him sweets, he brings her grains of gold;
She smiles for him who brings her heart's desire,
Who sips the honied dew that upward wells,
And yet her flushing charms all tongues inspire
To praise the loveliness that in her dwells.
Though not for me her smile and fragrant breath,
Yet both I share, and would not be their death.

The psychological purpose of æsthetic education, therefore, is to promote the pure, unselfish joy of life, to enable us to see and appreciate the beautiful wherever it exists, and when possible to produce it where it is not, but should be.

The social functions of the beautiful are on the one side spiritual and religious, and on the other economic. Bodies of men may enhance their sense of social sympathy by listening to strong or uplifting music, by the common enjoyment of beautiful architecture, painting, sculpture, the acted drama, literature, or by united appreciation of the beauties

of nature. Most men are assisted in their religious life by the sight of beautiful objects, both in art and in nature, by the convincing power of the sermon and of the scripture lesson, or by the soothing and inspiring rendition of sacred music. The economic uses of æsthetic appreciation and producing power are many, pervasive, and wide-spread, for they touch almost every aspect of life in the home and in the community. The opinions of a people made sensitive to the difference between the beautiful and that which is either ugly or æsthetically indifferent indirectly affect every factory in the land, for we constantly discriminate in favor of that which conforms to the standards of good taste. Well-proportioned houses are preferred to those of poor or bad design, while similar tests are applied to furniture and all other articles of household use or decoration. What is true of houses and their furnishings is equally true of clothing, and all other means of personal adornment. The plain is preferred to the ugly, the handsome to the plain, and the beautiful to the handsome. This is not solely a choice between expensive and inexpensive things, the former being beautiful and the latter ugly, for in

many cases the beautiful thing costs no more than an ugly one performing the same function; thus, a well-designed house of given materials and dimensions costs no more than a corresponding one of bad design; one color rarely costs more than another for interior decoration of walls, furniture, hangings, and the like, though of course stuffs undergo wide variation in price. Well-designed garments, hats, shoes, etc., need not thereby be increased in price. When, therefore, a people have high standards of æsthetic perfection in the objects of use, the supply is bound to follow the demand. When we refuse to buy the ugly, something better is sure to be offered. If we did no more than raise the standards of taste among the people by our instruction in school, we should thereby elevate all manufacture from raw materials in so far as the articles are made subject to æsthetic valuation. Things that are screened from sight may still be what they will æsthetically, though there is something yet to be said when the correlation between efficiency and æsthetic quality is discussed. But we do more than elevate taste, for we enhance the power to produce the beautiful, at least in arrangement, so that people can select those articles

of dress or of household use which are harmonious; they can promote the beautiful as they hang pictures, arrange furniture, set tables, cook and serve food, make gardens, plant trees or shrubbery, keep their lawns clean and well mowed, make fences, walls, hedges and outbuildings, trim hats, make dresses, laces or embroideries, or promote beauty in dozens of other ways. These tastes and capacities act and react on individual and community in ways that are powerful and often subtle. They lead to harmonies in color, sound, and proportion, to good taste in decoration, and to a quickened sense of the eternally fitting.

The difference between ugliness and beauty in their effect upon the minds and hearts of the young is adequately expressed by Plato in the "Republic" as follows:

"We would not have our guardians grow up amid images of moral deformity, as in some noxious pasture, and there browse and feed upon many a baneful herb and flower day by day, little by little, until they silently gather a festering mass of corruption in their own souls. Let our artists rather be those who are gifted to discern the true nature of the beautiful and graceful; then will our

youth dwell in a land of health, amid fair sights and sounds, and receive the good in everything; and beauty, the effluence of fair works, shall flow into the eye and ear, like a health-giving breeze from a purer region, and insensibly draw the soul from earliest years into likeness and sympathy with the beauty of reason."

CHAPTER II

MEANS

AS JOHN DEWEY says, men attempt to enhance and perpetuate mental images charged with emotion by objectifying them.[1] An æsthetic sense can therefore first of all be cultivated by creating mental images that are charged with emotion. Sometimes this may be effected by the mere contemplation of beautiful objects, as when one gazes at a sunset or looks upon a work of art. The image may be vivified and the emotion made more intense by reflection upon the deeper meaning of that which is represented. This may be called passive education in æsthetic judgment and appreciation. It is good as far as it goes; frequently, however, children respond but feebly to our most enraptured exclamations over the beauties of nature or of poetry, painting and sculpture. We may think their apperception at fault, and labor tirelessly to kindle the fires of enthusiasm. These are efforts to inject our

[1] "Cyclopedia of Education," article "Art in Education," Vol. I, p. 224.

own conceptions and emotions into our pupil's head; we should seek rather to evoke them.

All great teachers of art insist that, to evoke æsthetic images and to intensify æsthetic emotion in the student, one must not only permit him to objectify his emotion-charged image, but must encourage and aid him to do so. If we would have him appreciate the drawings of others, we must lead him to draw according to his own mental images, however imperfectly. His æsthetic sense may be blunted, however, by drill on technique. If he would appreciate painting, let him mix and apply colors; if he is to enjoy music at its highest estate, let him learn to sing or play; and so on throughout the useful and applied arts. This is good doctrine, but teachers are somewhat loath to apply it to themselves. They argue that it is good for children, but practically impossible for themselves, because they are past the most plastic period of life. Doubtless this is in a measure true concerning many arts. One who has had no youthful training in music or drawing is perhaps more or less incapable of becoming an expert in these arts. But there is surely *something* that he can do artistically; and artistic production in one or

a few arts, fine or useful, will suffice, since one art creates vicariously love and appreciation of other arts. The world is beginning to perceive that artistic production is not necessarily a matter of age, but of disposition and determination. If DeMorgan can begin at seventy-five to write successful novels, why may not a man of sixty-three begin to write poetry? Both have worked and played with words throughout their lives; they have enjoyed and in a sense appreciated the world's masterpieces of prose and verse, and yet who has ever truly appreciated a sonnet that has never attempted to write one?

It was reflections of this kind that led the writer of these pages to try out the theory in his own case. Some of the results of his efforts appear in these pages. These experiments may serve to explain the unusual phenomenon of a didactic writer illustrating his doctrines by his own verse. These verses are intended both as encouragement and as warning to younger teachers—encouragement to try, and warning not to put off trying too long!

A biographical account of the initial stages of the plunge may suggest other and perhaps better methods to teachers who have a mind to try their hand at verse-making.

On an outing with a class in æsthetic education in the spring of 1912 at Cornell, a superb specimen of the white birch was found. The tree was duly admired, and upon returning to the university the writer began to cast about in his mind for expressions that would adequately describe what all had seen. But though impressions were abundant, the right form for them did not suggest itself. Recourse was then had to a volume of "Poetry of the Seasons,"[1] when William Martin's "An Apple Orchard in the Spring" seemed to furnish the right meter and the right spirit. Consequently, by borrowing the meter and the expressions, "Have you seen," and "in the spring" the following lines were evolved:

THE WHITE BIRCH

Have you seen the white birch in the spring,
In the spring?
When the sunlight gleams upon her branches
In the spring?
When her green leaves, young and tender,
Through their soft concealment render
Glimpses of her outlines slender
In the spring.

[1] Compiled by Mary I. Lovejoy. Silver, Burdett & Co., New York.

Have you seen her wave her branches in the spring,
In the spring?
Wave those airy, milk-white branches
In the spring?
As they glisten in the light
Of a day divinely bright,
When to see them is delight
In the spring.

Have you seen the sunbeams glancing in the spring,
In the spring?
Glancing on her leaflets glossy
In the spring?
When the wind sets them in motion,
Like the ripples on the ocean,
And they stir our fond devotion
In the spring.

If you have not, then you know not, in the spring,
In the spring,
Half the beauty of the birches
In the spring.
Past their tops of silver sheen,
In the distance far are seen
Blue-tinged hills in living green
In the spring.

The next attempt was in a different field and without suggestions from the poets. A distinguished educational statesman[1] had just died, and to him it was desired to pay a

[1] Charles Brantley Aycock, of North Carolina.

tribute. The following from Taine's English Literature supplied the motive of the verses:

"You remember, it may be, O King, that which sometimes happens in winter when you are seated at table with your earls and thanes. Your fire is lighted, and your hall is warmed, and without is rain and snow and storm. Then comes a swallow flying across the hall; he enters by one door and leaves by another. The brief moment while he is within is pleasant to him; he feels not rain nor cheerless winter weather; but the moment is brief—the bird flies away in the twinkling of an eye, and he passes from winter to winter. Such, methinks, is the life of a man on earth, compared with the uncertain time beyond. It appears for a while; but what is the time which comes after—the time which was before? We know not."

THE BIRD AT THE BANQUET

Into the banquet hall, deep in the night,
Out of the darkness, into the light,
    Flew a bright swallow astray;
Over the banqueters flooded with light,
Winging his swift course into the night
    Back flew the bird on his way.

Symbol of life for the child at its birth;
Wandering spirit, here on the earth,
    Flutters it trustingly by.
Emblem of death for the man in his might;
Out into darkness, back into night,
    Wings he his way to the sky.

Short though thy stay, O thou flash of delight,
Bird of the banquet, that pause in thy flight
Still in our fancy we see;
Comrade, thy passage, though brief was its span,
Deep writ thy message on the warm heart of man,
Forever remembered must be.

The lesson is that not only should the teacher train his pupils in as many kinds of artistic production as possible, but that he himself should diligently practise the arts he has already learned, and should also try new ones. The latter effort will be worth while, if only for the fresh insight and inspiration it supplies.

CHAPTER III

SCOPE OF THE ÆSTHETIC VIEW

TEACHERS are disposed to regard the fine arts as the peculiar domain of the beautiful, and to confine to this field all their efforts at æsthetic education. Such a procedure omits nature and the so-called useful arts.

The reasons are not far to seek. Factory methods have tended to develop efficiency, indeed, but also uniformity and sometimes plainness, if not ugliness, in their products. Even the constant repetition of an excellent design, say of a chair, makes the mind more or less indifferent to it, since the objectified ideal of the designer becomes lost in the very multitude of its reproductions. The work of the mind and heart is obscured by that of the machine. With the passing of the age of tools, when each object produced was in some sense a reflection of the mind and skill of the artificer, and with the coming of the machine which makes each object a copy of its prototype, it was perhaps inevitable that æsthetic excellence should be more and more

confined to those arts in which the production is individual, and necessarily reflects the emotion and skill of the artist. So much for the elimination of the useful arts from the domain of the beautiful.

As to nature, the case is somewhat different. Nature produces what we consider her beautiful effects chiefly without the aid of man. What indeed have men to do with the glows of sunset, the formation and movement of the clouds, or the autumn glories of the trees? But, if we have nothing to do with the production of such effects, how can they be in any sense an objectification of our emotions? Men have long puzzled over this problem. Nature is so obviously beautiful at times (some say always) that the highest art has often been considered to be the most perfect imitation of nature. To paint a tree or a sunset like the original has often been deemed the height of art. But, in such a case, the beautiful is regarded only at second hand, for the artist's excellence has not been the objectification of his own thought and feeling, but rests solely in the technical excellence of his copy. This reduces art to technique.

Do we consent, however, to this elimination

of nature and the useful arts from æsthetic consideration? Certainly not, and least of all in the realm of nature, for every artist still seeks to emulate her beauties and perfections, even when imitation is farthest from his intentions. Rodin, the French sculptor, declares that nature is so perfect that the artist is never justified in distorting or ignoring her, but must always be true to what she teaches. Yet he exercises a selective privilege, since he admits to his studio only chosen models, and he reduces to permanent form only the striking poses that contribute to his purpose. The result is that though in one sense his statues are true to nature, in another they are entirely foreign to it. The thoughts and emotions of the artist are his own, so that what nature really furnishes to the product is the raw material, ~~or, if one~~ prefers, the separate gems that make up the tiara on the head of the queen of beauty.

~~Then,~~ Since nature is absolutely essential to some of the noblest forms of art, it is evident that she cannot be excluded from æsthetic regard. Even though there should be complete æsthetic neglect of nature at first hand, yet we should be compelled to return to her as a guiding principle in paint-

ing, sculpture and poetry, for which she furnishes so much of form and inspiration. Though man has no hand in the creation of flowers, sun, moon, stars, and ocean, yet these objects stimulate him to artistic creation. How could thought be æsthetically expressed without the help of the beautiful objects of nature? The slightest exercise of the imagination sets mind and heart aglow, and this exercise of fancy may be aroused by anything that varies our ordinary prosaic view of the world. Thus, Mrs. Anna Botsford Comstock[1] writes as follows concerning the California Poppy: "Although this brilliant flower blossoms cheerfully for us in our eastern gardens, we can never understand its beauty until we see it glowing in masses on the California foot-hills. We can easily understand why it was selected as the flower of that great state, since it burnished with gold the hills, above the gold buried below; and in that land that prides itself upon its sunshine, *these poppies seem to shine up as the sun shines down.*" Though these lines are sufficiently poetical already, yet they suggested to the writer the following verses:

[1] "Handbook of Nature Study," p. 66. Comstock Publishing Co., Ithaca, N. Y.

IN POPPY LAND

Poppies shine up as the sun shines down
On the gold-clad hills of our western strand,
And the wealth rolls out as the men dig down
In the rock-ribbed earth or the fertile land,
By the shores of her gleaming sea.

Stars shine out as the sun goes down
'Neath the fading bars of the flame-lit west,
And my hope springs up as their rays beam down
Through the silent space of the realms of rest
On the face of the restless sea.

Love smiles up as the moon smiles down
On the man of deeds and the maid of song,
For the heart's lay swells as the bird's dies down,
And this love is deep as the days are long
Till we sail on her moon-lit sea.

Faith looks up as the night shuts down,
For when hope is bright and her love grows strong,
Then the soul will trust, though the rain come down,
That the storm will pass, as it sweeps along
To be lost in the heaving sea.

Nature has, moreover, claims of her own that may not be disregarded, for if we look at her from her own standpoint, we shall find that she is not a fortuitous and meaningless aggregation of particulars, which we may or may not admire. She is organized life in some aspects, and organized force in

others, and contains her significance within herself. The perfume of a flower was not intended for the nose of a man, however much he may enjoy it, but for the attraction of insects. The perfection of nature's means for the performance of function is surely a proper sphere for æsthetic study and enjoyment.

William Morris and John Ruskin would restore the tool economy that began to disappear at the end of the eighteenth century, for to them a machine-made article was devoid of beauty, since it had not risen from the skill, the creative thought, and the personal affection of the artist-artisan. They thought that the useful arts should not depart from the æsthetic field, although they had actually done so. Emerson, writing in the middle of the nineteenth century, laments this separation of the fine and useful arts brought about by the machine, and says: "Beauty must come back to the useful arts, and the distinction between the fine and the useful arts be forgotten. If history were truly told, if life were nobly spent, it would no longer be easy or possible to distinguish the one from the other. In nature, all is useful, all is beautiful."[1]

[1] Complete works, Concord Edition, Vol. IV, pp. 367–368.

Whether we like it or not, the age of tools is as much gone as that of Napoleon—and it will not come back, the arts and crafts movement notwithstanding. Most furniture will continue to be machine-made. But were Morris and Ruskin crying for the moon? Is Emerson demanding the impossible?

Yes, if what they desired implies that past conditions of production must be restored; no, if they thought that individual æsthetic productivity is entirely or mostly excluded by the existence of the factory. It may be freely conceded that textiles, furniture, implements for house and field, agencies for transportation, and much of our clothing are now and will in the future be made by machines. This fact does not, however, destroy beauty in the useful arts; it changes its direction, and doubtless its scope.

In the past, the ordinary user of furniture, for example, did not produce it for himself, but purchased it from the artist-artisan. Consequently, whatever æsthetic valuation the user placed upon such an article lacked the element of his own creative productivity, and was then, as now, passive and second-hand. In this respect, therefore, except for the variety involved, the modern user of

manufactured articles is in the same psychological attitude as the user of the handmade articles of long ago. Moreover, in many arts, pottery, for example, manufacture has not only cheapened production, but has greatly improved it. Whereas the peasant or poor man in general once ate his meals from pewter, his successor of today may freely enjoy most beautiful porcelain dishes. What could once be afforded by the rich only may now come into general use. In many cases it is good taste that the poor man lacks, rather than the means to gratify it.

But what about the factory workman himself, who finds that the designer has once for all created a form which is endlessly reproduced, and who sees a machine furnishing the skill that was formerly the province of his own hand? Doubtless there is an æsthetic loss here, since for some hours each day he is an artisan rather than an artist. But the machine does not at the worst absorb his attention for more than a third of the day. In his avocations and in his home life there is still abundant opportunity for the cultivation and active use of his creative powers in the realm of the useful arts. In this

respect the factory workman is not worse off than the remainder of his family at home, or than the agricultural or business classes. If modern life is æsthetically barren in its daily living, we have only our faulty education and our perverted ideals concerning the realm of the beautiful to blame.

How the useful arts may be made the source of much pure æsthetic enjoyment will be further discussed in subsequent sections.

CHAPTER IV

CONSTITUENTS OF THE BEAUTIFUL

THE CONSTITUENTS of the beautiful are two: (1) An æsthetic content, called the characteristic, and (2) an adequate expression through a sense medium.

So far as the beautiful product is the objectification of man's thought and emotion, its content may be said to be conception, idea, meaning or significance. This may range all the way from the lightest fancy to the most profound thought, as may be plainly seen in poetry, which compasses the whole gamut of human feeling and conception. A verse would be utterly trivial that contained no idea whatever—a mere aggregation of nonsense syllables, like

> Fee fo fum,
> Fi fol de rol de ray.

That poetry must have a thought content would hardly be questioned, but with respect to painting and sculpture opinion is not so unanimous, for many artists seem to be satisfied if they can produce something sen-

suously pleasing, quite irrespective of any meaning or significance it may express. Thus, in a painting of a dead fish, the form may be correctly drawn and the scales may flash as they would were the living creature dashing through sun-lit water. But of suggestion, except possibly to the angler or to the epicure, there may be little, while of real thought there is perhaps none. The artist has contented himself with the technique of expression without regard to what is expressed. His art, in such a case, seems to descend to a difficult form of photography, in which the process is indeed difficult, but the result still a photograph. He has kept the body of his art, but has discarded its soul, the creations of his own imagination, surely the more precious part.

Here, however, is a painting containing both content and form. It is of The Lord's Supper in a small rural German community. There stands the earnest minister in his black robe, dispensing the bread and wine to his worshipping congregation of perhaps a dozen persons. His assistant looks on with a somewhat professional air, the lawyer observes the ceremony with respect, yet apparently in an analytical frame of mind, but the

peasants in the foreground are entirely absorbed in devotion. They gaze with rapt attention at their leader, or partake of the bread with downcast eyes. An old man sits at the end of the table with wrinkled visage and toil-hardened hands. His bowed head, his closed eyes, and his reverent expression betoken a body at rest and a mind at peace. The meaning, the thought, the significance of the whole are manifest to the most casual observer.

That is the best portrait which best expresses the character of its subject; that the most excellent landscape painting which reveals the truest aspects of nature, and which best portrays the emotions that such scenes evoke in the sensitive observer. Every great piece of statuary is likewise instinct with meaning.

In Lorado Taft's Monument to Columbus, which stands in front of the Union Station at Washington, the figure-head of the ship on which the statue of Columbus rests is a beautiful form called the "Spirit of Discovery."

This is what she means to the writer, and what she may well mean to every teacher:

THE SPIRIT OF DISCOVERY

O pilot of the unsailed seas,
  Thine eyes bent forward on thy quest,
Thy wings outspread to meet the breeze,
  Thy hands still resting on thy breast,
That hope deferred or rising fear
  Chill not the courage of the band
Who, bold to seek, still fail to hear
  The breakers roar on India's strand—
Thy glowing ardor fires the heart,
  Thy crystal vision sees the goal,
Our sun, our star, our sailing-chart,
  Of all research thou art the soul!

Fair guide of youth's frail cockle-shell,
  Of venturous lads, who peer o'er rim
Of their small world, and fain would tell
  What lies beyond their outlook dim;
Thou fount of hope by day, by night,
  To sailors bound to truth's far port,
Though storms assail, give thou the might
  To reach the bay, to pass the fort.
Bright spirit that Columbus led,
  Direct our course on sea, on land,
Lead through the mists till life is sped,
  Give light and strength and guiding hand.

Other elements of æsthetic content particularly prominent in architecture, in the useful arts, and in nature, are those of purpose and function. The expression, *form follows function*, is familiar to the architect, and

means, of course, that the proportions of a structure should answer to its purposes. A "sky-scraper" may be well adapted to business, but it is not adapted to worship. Small, narrow windows were excellent when glass was scarce and militant enemies plentiful, but they may be quite out of place in modern structures where much light is needed, especially since glass is easily procured, and there are no outer assaults to fear. That is a well-designed piece of furniture which performs perfectly its various functions. Chairs should not have wavy or highly decorated legs, since such elaborations are foreign to the functions of those parts.

A first-hand appreciation of the beauties of nature involves not only mere sensuous impression, as the flaming colors of a sunset or of autumn leaves, but adaptation to purpose; not the purposes of men, to be sure, but the purpose of nature herself, as in the coloring of petals or the emanation of odor. He sees most beauties in nature who regards her primarily from her own standpoint, and only secondarily from his own. The daisy or the dandelion may be a plague to the tiller of the soil, but either may be a source of æsthetic enjoyment to one who

views it in relation to itself. Children love the dandelion, even if the lawn-keeper does not.

The means of æsthetic expression, unlike the characteristic, are not subject to question or to subtle distinction, but are plain and unmistakable, for they are the concrete, sensuous embodiment of whatever nature or the artist is seeking to express. Architectural ideas are expressed in wood, stone, brick, or concrete. The sculptor utilizes chiefly marble and bronze; the painter, canvas, oils, pigments, and water-colors; the manufacturer, wood, iron, steel, clay, aluminum, cotton, wool, silk, and the like. The musician employs sounds and the poet words, whether spoken or written or sung. Nature appeals to eye and ear in a multitude of sights and sounds, as from the green of the grass to the blue of the sky, or from the song of the thrush to the roar of the cataract. The most universal means for expressing thoughts and feelings is undoubtedly the written word, sometimes in prose, but most often in verse.

The following lines represent the author's attempt to express in metrical form the sights and sounds and pleasures of winter sailing on Biscayne Bay, Florida:

SAILING ON BISCAYNE BAY

(To Commodore R. M. Munroe)

The waters call! O ho! Come sail
Far out on Biscayne Bay!
The winter's sun is bright and warm,
The air is that of May.
The "Doris" waits; she's headed east
To greet the morning breeze,
And here it comes across the bay
From off the Southern seas!
Now loose the stops, shake out the sails,
We'll start without delay;
Like mullet schools that flash about,
We, too, are out for play.
Upon the taut'ning anchor rope
Let's heave with might and main,
Then out upon her broad expanse
We'll sail on Bay Biscayne.

The anchor's up, the sails are full,
We're off on Biscayne Bay!
Stand by for shoals and orders sharp,
When once she's under way!
'Tis southward ho! we turn, the palms
Appear on Soldiers' Key
Like filmy ghosts; they surely seem
Mirage upon the sea.
Across our bow the silver scales
Are flashing in the sun,—
A school of Spanish mackerel—
Their frolic, too, begun.

Come sing with zest our boating song
And lift the gay refrain:
Farewell to care! to joy all hail!
We sail on Bay Biscayne!

But hold! what shines across our course
Far down on Biscayne Bay?
'Tis yellow sand on "Feather Bed,"
The bank that bars our way.
Then peer ahead to find the stakes
That guide us safely through,
While here the keys that lock us in
Upon our port we view.
Behold the colors of the bay!
All shades of blue and green,
And in the noontide's shimmering air
An opalescent sheen.
The sun declines; we homeward turn
Upon our land-locked main,
Resolved that oft in coming days
We'll sail on Bay Biscayne.

CHAPTER V

THE CHARACTERISTIC

A. KIND OF MEANING

THE CONTENT of the beautiful, or the kind of meaning or significance expressed, depends somewhat upon the art under consideration. In some cases, especially in painting, sculpture and poetry, it is plainly concrete and objective; at other times in these arts it is personal or subjective, while in the case of architecture, nature, and the useful arts it is largely functional. Each of these aspects will be briefly discussed in turn.

1. *Objective.*

The character of individuals may be represented in painting, sculpture, or poetry, whether the personages be real or ideal. In like manner, the artist or poet may represent age, youth, joy, love, friendship, hope, destiny, grief, struggle, conflicting emotions, victory, peace, religious feeling, renunciation, aspiration, and the like. Illustrations will at once occur, such as "The Niobe,"

"The Victory of Samothrace," Rembrandt's "Portrait of Himself," "Breaking Home Ties," "The Sistine Madonna;" David Gray's "In the Shadow," beginning, "Die down, O dismal day;" Alice Meynell's "Renouncement," and innumerable others to be found in poets from Chaucer to Kipling.

The following is an expression of friendship in verse:

TIDES

Tides flow in the hours of morning
With a still, resistless might,
Or they bring our ships with tumult
In the watches of the night.

They ebb in the hours of darkness
Or in those of passing day,
And the boat that rides in the harbor
In silence they bear away.

Friends come on the waves of gladness,
When our life is filled with bloom,
Or they come on floods of sorrow,
When the heart is bowed in gloom.

But whether they come in winter,
Or whether they go in May,
They bring us stores of heart's ease,
Or they bear our cares away.

As long as the tides move inward,
As long as they outward glide,
So long will the flow of friendship
In the tides of life abide.

2. *Subjective, or Personal.*

(1) Poetry and painting frequently reflect the individual moods of the artist, serving as vehicles for the utterance of his thoughts and feelings. A landscape may represent not only the objective facts of nature, but also states of mind; for one may be full of sunshine and cheer, while another is full of depression and gloom. A recent painting by Arthur B. Davies, entitled "The Boy and the Sea," shows a boy sitting at the water-side and gazing out over the bay. The painter has put into the picture just what he conceives that the boy saw, and as he saw it. The foliage at right and left is massive but indistinct in detail, the water in the foreground is flooded with light, but farther off grows hazy and opalescent, while in the distance it fades into an indistinct blur of forms and colors. "President Lincoln's Burial Hymn," by Whitman, is filled with the woe of the writer, the objective facts of nature, such as the hermit thrush, the star, the hands of his

comrades, the sprig of lilac, and the swamp and the cedar trees being used as means to emphasize and give concreteness to his utterance. Naturally, these subjective aspects of art are remote and elusive to youth, whose experiences have rarely yet reached the subjective stage. Consequently, such art should come late, or not at all to the adolescent.

(2) Any object,—scenery, plants, flowers, tools, machines, utensils, etc., may be viewed in its idealized relation to the whole of life.

If the artistic representation of personal moods, of self-utterance and reflection, are remote from the interests of the young, the idealizing of otherwise prosaic facts is psychologically very close to youth, and furnishes a wealth of opportunity for inculcating an æsthetic view of the world.

A cotton crop is beautiful, not alone from the color of the blossoms or from the tropic snow of its opening bolls, but from its relations to the lives and activities of men. Think of the labor and hopes bound up in its cultivation, gathering, ginning, manufacture, and its use to clothe the form of beauty or the back of toil! It keeps millions of men at work, and countless millions of

dollars employed in capital. It supplies the means for food, raiment, shelter, education, culture, recreation, to those who cultivate or manufacture it. It supplies food for cattle and oil for men, and nutriment to growing plants. It sets thousands of wheels in motion, and is carried to the uttermost parts of the earth. It calls, in short, for a poet to perceive and express its beauty.[1]

The same is true of Indian corn. This was the breadstuff of the aborigines. It made possible the settlement and development of the country. With his bag of parched corn, the pioneer could venture into remote regions with some hope of survival. This grain is not only the food of man, but it is the mainstay of the animal life of the farm. Its by-products are many and important. Above all other crops, it is the reliance of the American nation. Poets have sung its virtues, while every household knows them. At all stages of its growth it is interesting and attractive to the eye.

What could be more prosaic than a mere *wheel*? True its rim is circular, returning into itself, and thus becoming a symbol of eternity.

[1] Compare with James Lane Allen's description of a flax-field, in "The Reign of Law."

A hint of the possibilities of relating it to many and important aspects of life is seen in the following lines:

THE WHEEL

On creaking disks of wood the peasant's cart
Sustained its load and onward wound its way;
Beside her wheel Priscilla sang her lay
Of love, and, spinning, won John Alden's heart.
The potter shapes at will from plastic clay
On circling plane his vessels of delight;
The balanced watch ticks off by day and night
The rolling years of life, both green and gray.
Upon their cycles twain, the riders reel
O'er hill and dale like forest deer in flight,
And on resilient tire and spring of steel
The horseless carriage flashes on the sight.
Ah, Mercury! thou sprite with wingéd heel,
Thou'rt left outdone behind the flying wheel.

"The Old Oaken Bucket" is æsthetically viewed in the song, not alone because it hung in the well, but because it was related so intimately to the scenes of its author's childhood. One poet celebrates the hanging of the crane, and the launching of the ship; while another pictures the homely objects about the old-time fireplace—the cat's dark silhouette on the wall, the house-dog outspread on his paws, the apples sput-

tering in a row, the slow-simmering mug of cider, the nuts from brown October's wood, the wide-mouthed fireplace and its roaring fire—all these are made æsthetically pleasing, not because they are described in poetry, but because of the associations they suggest of what life may be, even under pioneer conditions. Whenever the imagination plays about an object, expanding it and relating it to what is significant and vital, then the æsthetic faculty is at work. A tree may be mere fuel for the woodman, or it may be the seat of nature's most subtle processes, or the home of birds and the resort of lovers. Flowers are naturally beautiful from their forms and colors alone, but they take on new beauties when their analogies and meanings in the lives of men are added. What may not hills, mountains, rivers, creeks, waterfalls, forests, prairies, valleys, herds, become to the imaginative observer?

And what inspiration to the teacher to know that with a little encouragement and practice his students may make this humdrum old world of ours burst into beauty, like the ice-storm of the night when lit up by the rays of the morning sun!

3. *Functional.*

From the standpoint of form, architecture began when men first studied proportion; but from the standpoint of meaning it began when adaptation of form to function was first considered. Styles and ornaments may come and go, but these two factors, form and function, are eternal, since they lie at the foundation of the æsthetics of the building art. The significance, or content, of architecture, therefore, lies in the adaptation of form to function. It is a difference of conception which determines that a Greek temple should have low-lying horizontal lines, and a Gothic cathedral long vertical ones. In either case the structure is adapted to its purpose, and could never be mistaken for anything else or fittingly applied to any other use. To use a temple of the Lord as a barrack for soldiers is a desecration, not only to religion, but to art also. A dwelling is as different from an institutional structure as the latter is from a store or an office building.

The function of a chair is to support the body, usually the back also, and often the arms. These functions could be as perfectly performed in antiquity as they can be by the

chairs of today. Moreover, they are hardly subject to ideal development, hence chairs, like clothing and other articles of domestic use, have been influenced by fashion, and improved or spoiled by decoration. About the only modern inventions applied to the chair are the swivel seat for business purposes and the movable back, designed by William Morris and bearing his name. But, in the end, the meaning of the chair as an æsthetic object depends upon how well it fulfills its functions.

The same is true of articles of clothing—hats, for example. A New York milliner is said to have exclaimed, "Hats may come and hats may go, but art goes on forever!" At times the question arises, "Has not art actually gone?" So far as its idea is concerned, the æsthetic value of the hat must be determined by the degree of its functional excellence. To be sure, it must in its variety of shape and decoration harmonize with the remainder of the costume, be of suitable materials, etc. But these matters are to be decided when means of expression are discussed.

Frequently, parts that once had a function but have now lost it are retained as decora-

tions. Thus the two buttons at the back of the dress coat or the "Prince Albert" were once used to fasten back the front bottom edges of the coat, as may be seen in the uniforms of continental officers. This custom is now abandoned, but the button remains as a faint reverberation of the past—as the vermiform appendix, so to speak, of sartorial art. Houses are likewise often afflicted with like remainders, such as towers and arches which have no use, or as narrow windows where wide ones are needed; or distortions of material, as where uniform concrete blocks are treated as if they were bricks, etc.

In higher degree even than architecture and the useful arts, nature finds her true æsthetic meaning in the adaptation of form to function. The elm tree, for example, has a plan or ideal of structure beautifully adapted to the performance of all tree functions—the short trunk, the long, gently-flaring, and elastic branches, with their wealth of foliage. The sugar maple has another radically different plan of organization, but one equally beautiful. The oak, the hickory, the pine, the hemlock, the apple, the orange, has each its individual form of being, which is the most suitable for expressing its peculiar character-

istics, and performing most effectively its life functions. In this sense, all nature is beautiful when at its perfection, as so many artists maintain. The reason why we fail to see beauty in snakes, bugs, and weeds is that we are judging them from the standpoint of our own prejudice, convenience, or profit.

B. EXTENT OF MEANING

The meaning of a bit of nature, an article of domestic use, or a painting or a statue, may be wholly particular or individual. It may mean nothing beyond itself, as in an ordinary photograph of a person, a kodak picture of a house or a landscape, or the bust of a non-representative man. Much of the illustration in current periodicals is of this character, and could not be understood without the legend that goes with it; whereas a work of art with a universal or even a general meaning needs no label to explain it. Most cuts of actresses represent more or less pretty women, posed in sentimental or meaningless attitudes. They are apparently trying to "look pleasant," by gazing at some imaginary moon or star or cloud, or by showing their teeth in way of smile.

Some pictures, however, are wider than their frames, for they convey a general if not a universal meaning. The three gleaners in Millet's picture represent the myriad peasant women of Europe, who toil regularly in the fields. The same is true of all this painter's representations of peasant life and feeling. All great statuary has this same universality of meaning, as in Angelo's "Moses," Rodin's "The Thinker," Lorado Taft's "The Blind," or his "Lions" on the great fountain to Columbus at Washington. The latter seem like sphinxes from the Nile, being utterly indifferent to the tumult going on about them. Their eyes are directed to the far distance, and they seem unconcerned with the fate of nations. Here is what they mean to the writer:

THE LIONS

Twin warders ye from Egypt's desert sands,
Where countless seasons roll with changeless face;
Ye symbolize to men of every land
The deathless fame of him whose fount ye grace.

Ye fan not here a nation's flame,
Or bid her foes beware;
Ye hold in trust a fadeless name
Committed to your care.

Through the endless years
Your watch shall abide,
And your vigil shall be
As time to the tide,
As sun to the sea.

The true artist makes his landscape paintings stand for more than the individual scene portrayed, as may be seen in marine, forest, or other views. The functional meaning portrayed in a great piece of architecture is general for that type, as each Gothic cathedral represents in a way all other cathedrals of this kind; a Greek temple is any Greek temple in its general significance. In like manner, pictures of locomotives, steamships, sailing vessels, docks, stations, bridges, etc., are representative, each of its class.

The nature of artistic production is such that the general must be portrayed by the particular, or at least is most artistically thus portrayed. One may indeed write rhymed philosophy, but it is not poetry unless the sensuous particular is used to symbolize the abstract thought. A deep philosophy of life does indeed underlie the masterpieces of the world, as in Shakespeare's dramas, or Goethe's "Faust," yet

it is the universal shining through the particular that makes it poetry rather than prose.

He is only half an artist who has the thought but is unable to clothe it in artistic imagery, or who has the imagery but lacks the thought. There may indeed be a place for the purely individual in art, as there is a place for photography; yet it can prove but transient in its application, and it is destined to disappear with the event that gave rise to it. But universal meaning in art is timeless, and it always delights the mind that comprehends it, provided of course it is adequately expressed.

CHAPTER VI

MEANS OF EXPRESSION

A. DISTRIBUTION OF PARTS

SINCE the meaning that underlies the beautiful must always find expression through sensuous means, such as marble and bronze in statuary; stone, brick, wood, and concrete in architecture; canvas, pigments, etc., in painting; words and musical sounds in poetry and music; also trees, grass, flowers, and their parts, sunlight, etc., in nature; metals and other substances in the useful arts; and color and shape in all arts and in nature; it follows that the distribution of parts must be a topic of much importance.

Disregarding in large measure the value of the *characteristic*, the ancients dwelt upon the external expression, and seemed to find in this the essence of beauty. The Greeks pointed out that diversity of details if brought to unity forms a higher type of beauty than any single element, say color, could possibly produce. Thus, a pile of marble blocks is not comparable in æsthetic effect to the same blocks suitably arranged and brought to

unity in a temple; just as a single block, however highly polished, is inferior in beauty to the statue that might be hewn from it. The block is simple and massive, possessing few details that can be brought to unity, but is already a unity with only small diversity. A succession of single isolated tones of voice or instrument gives little or no pleasure; but, properly united into a unity, the tones may become agreeable.

"Unity in variety," or "variety in unity," are therefore phrases to conjure with in art. This is particularly noticeable in pictures. If any parts are there merely to fill the space and perform little or no function in the expression of the idea of the picture, then we regard them as superfluous and as obstacles rather than aids to the purpose of the work. On the other hand, where every element has a part to play in the expression of the whole, and where all parts fall into a unity in this expression, we find the æsthetic effect greatly augmented. An illustration may be found in Spiegle's etching entitled "Brewing Mischief."

"What particular piece of mischief the little maid is brewing, it would be hard to tell, but it is easy to see that there is mischief in

the air. The face and pose of the gypsy maid are surcharged with the growing determination to do something that will be a mixture of audacity and frolic; for how can she help it, with all the stimulating influences about her?

"First, there is the cauldron on its tripod. What does it contain? Each may surmise for himself what is in it that brews the spirit of mischief for a maid so tender. Perhaps, among the rest, the impertinent caw of a crow, the saucy whisk of a squirrel's tail, and maybe just a hair from the tail of Old Nick himself. Whatever is in the pot, it is plain that it is mischief that is brewing; for who feed the fire? A lot of brownie imps, as innocently audacious as the little mistress they serve. They bring the brush to feed the fire, and blow the flame that boils the brew that helps the maid to make the mischief.

"And on the other side, what have we? A witch's broom and conical hat; under which crouches a kitten bewitched, ready for a wild charge upon grandaddy-long-legs in front. Finally, in the rear rises the moon ready to give full backing to all mad freaks of the little lunatics in front.

"Everything contributes to the central

idea, the unity of the whole—the fertile mind of childhood, the freedom generated by the outdoor gypsy life, the mischief-brewing pot, the mischievous implets that keep it boiling, the symbolic hat and broom, the frolicsome kitten, and then old Luna herself, who is renowned for infusing the minds of maids, both young and full grown, with a touch of madcap spirits." [1]

This test may be applied to any work of art, and will nearly always reveal the scope of the artist's ideal and his success in presenting it, so far as "unity in variety" is a mark of excellence.

The arrangement of parts of any object that is to be viewed æsthetically falls naturally into three categories, which will now be considered in turn:

1. *Regularity and Rhythm.*

Regularity applies to things arranged in space, or to those which are alike in color and form, while rhythm pertains to movements in time. Windows in large public buildings are likely to be arranged in regular order. Soldiers are uniform in dress and equipment,

[1] See the author's "Art Appreciation." C. W. Bardeen, Syracuse, N. Y.

and they are expected to move rhythmically. The "bones," or pieces of wood, that boys hold between their fingers and rattle, make a rhythmic sound, so do the sticks with which primitive people beat upon wood to make what they conceive to be music. This has been a prominent feature of the so-called music made by peoples in primitive stages of culture at all our great world expositions. Similar effects are produced in clog-dancing, in clapping "Juba" by the colored boys of the South, while all forms of dancing owe most of their charm to the rhythmic accord of the body to the time of the music.

We find rhythm well marked in the recitation of poetry, the swing and beat of music, the periodic movement in the oration, the balance of word and clause and sentence in literary prose, the throb of the pulse, the regular exhaust of the locomotive, the popping of the motorcycle, the movements of the legs and arms in walking or running, the inspiration and expiration of the breath, the alternate fixing and relaxing of the attention, and so on throughout the whole range of regular physical and mental movements.

Just why regularity and rhythm please us, possibly we cannot tell precisely, though

some say they know. It will suffice, perhaps, if we recognize the fact that they do please. Children like to swing, they like rhythmical ditties, even those that are devoid of sense; youth likes to dance, to make or listen to regularly recurring sounds, while all get more or less pleasure from the beat of music or the rhythm of poetry. Dr. Harris[1] finds the explanation in the rhythmical movement of consciousness. This, he says, is the knowing of the self by the self. All art, he thinks, is self-perception and self-expression, which is not far from Dewey's idea that art is an objectifying in sensuous form of the emotion-charged ideas or ideals of man.

Highly cultured races, though retaining their love of regularity and rhythm in many aspects of nature and art, transcend this principle by incorporating it with higher forms of artistic expression. Children and primitive people take what seems to the educated adult a strange pleasure in their manifestation, as may be seen in the examples already cited.

While gratifying the primitive artistic instinct of children for these two forms of

[1] See W. T. Harris, "Psychologic Foundations of Education," pp. 353, 354. D. Appleton & Co., New York.

æsthetic satisfaction as far as need be, it is of course incumbent upon the teacher to lead them to appreciate the higher forms in due time and order.

The regular is found everywhere—in the arrangement of the books in the library, in buildings, in recurring elements in ornament, in placing of furniture and utensils, and of course constantly in the parts of flowers, grasses, trees, and the like. It should be seen and appreciated, but always valued in relation to higher aspects of beauty.

2. *Symmetry and Balance.*

Symmetry is regularity with reversal. The two hands are alike, except that the order of thumb and fingers is reversed. The right glove will not fit the left hand. The same is true of ears, eyes, nostrils, cheeks, arms, legs, feet, ribs, etc. Not one of these would fit into the place of its brother on the other side.

Try to read the time of day from the image of the face of a watch in the mirror. In the same way hold up before the mirror the right glove; the image if real would fit the left hand. So accustomed are we to seeing our face in the glass that we lose the sense of

reversal; but let one try to use the razor or the shears upon the beard for the first time and one becomes acutely conscious that things are "turned around." Similarly, try to trace an irregular figure on paper from its image in the mirror. These experiments convince one very soundly of the fact that the images seen in a looking-glass are reversed.

There is a difference, as Mach[1] points out, between *vertical* and *horizontal* symmetry. The letters d and b are vertically symmetrical, but q and p horizontally. These relations can be seen better in the following order:

d b
q p

Children confound d and b and q and p, but rarely d and q, or b and p. But d and b and q and p are the two halves of a *vertically* symmetrical figure, while d and q and b and p are two halves of a *horizontally* symmetrical figure. The reason the first two are so often confounded is that they produce similar sensations, whereas the latter, being horizontal, do not. Only one taught to see it

[1] See Ernst Mach, "Scientific Lectures," pp. 94, 95. Open Court Publishing Co., Chicago.

perceives the symmetry between a tree and its image in water.

The reason why we perceive one case of symmetry and not the other is, as Mach says, because our eyes themselves are vertically similar, each part of either retina corresponding to its opposite in the other, precisely as if the eyes had a set of symmetrically arranged vision-fingers which receive similar but still symmetrically arranged stimuli. The left eye is like the reflection of the right, "and the light-feeling retina of the left eye is a reflection of the light-feeling retina of the right, in all its functions."

Symmetry is of a higher æsthetic order than regularity, or mere repetition, for it at once introduces a variety which still comes to unity with its counterpart. Failure to find symmetry where it is customary gives an æsthetic shock to the sensibilities, as one may perceive when an eye, a hand, or a leg is wanting, or when, as is sometimes the case with one-handed laboring men, a hook takes the place of the lost hand. A cork leg or foot does not give distress to the observer, since its substance is concealed. The halting step is only a break in rhythm.

Not only in bodies of men and animals do

we find symmetry, but it is common and even inevitable in architecture, since the two sides of a carved doorway, for example, could not change places; it is found everywhere in furniture, in clothing which follows the symmetry of the body, in the form and arrangement of leaves, branches, parts of flowers, etc.

Primitive art, rising above mere regularity, sometimes carries the principle of symmetry to absurd length as in idols, or images of gods. Two faces may be provided, one on the front and one on the back. Salarino exclaims:

> "Now, by two-headed Janus, Nature
> hath framed strange fellows in her time."

Occasionally the arms in front are matched by a pair behind. Such objects are displeasing to us, but it is an exaggerated sense of symmetry that produces them.

The importance of symmetry in what is called balance may readily be seen. A man with only one arm is out of balance; so he would be had he two arms, each the same as the other, i.e., unsymmetrical, even though on opposite sides of the body. What is true of a man is true of a statue. If one arm is

destroyed, the whole is thrown out of balance. It would be better to knock the other off too, as in Rodin's "Man Walking." The loss of the head in a statue is not so important from the standpoint of balance, since there is no other part symmetrical to it. This is seen in the ease with which we accustom ourselves to the view of the "Victory of Samothrace." It is true both arms are missing, but this is a small matter, since the wings remain to restore the balance. Were one of these also missing as well as the arms, it would require distinct effort to ignore the lack. An orator who should make all his gestures with one hand, the other hanging inert or placed in some unnatural position, would appear as unbalanced as a one-armed man. In decorative design, symmetry is a prominent means for securing balance, as where one scroll is set over against another, its symmetrical counterpart. Painting makes use of the same principle. Thus, if two flower-girls are to appear, a more symmetrical balance is secured by having one hold her flower-basket on the right arm, the other on the left, than would be secured by a simple balance of position, the basket in each case hanging from the same arm.

Branches of trees, and leaves on the stem are also balanced by symmetrical arrangement.

The reason why the clipping of ears and tail on dogs is not more repulsive is that the ears still remain in symmetrical balance after mutilation, and the tail has no symmetrical counterpart.

Balance can of course be attained without the aid of symmetry, as in the grouping of windows, the balancing of one sentence, phrase, or word, with another; in the position of tree clumps upon the lawn, or in the balancing of one object over against another of a different character in a picture. This is balance through mere regularity.

3. *Harmony and Grace.*

There is a higher principle of beauty in the arrangement and adaptation of parts than the somewhat mechanical ones of regularity and rhythm, and of symmetry and balance. These are good and even indispensable in their place, but they are not the highest, since they lack in large measure the idea of adaptation to purpose.

Harmony subordinates regularity and symmetry, for, while they are retained, they are

adapted to the functions they are to perform. The fingers are longer than the toes, the hands are larger than the ears and these than the eyes. One admires the trunk of the elephant because he has a good use for it, but an elongated proboscis in an animal having no use for such an organ would seem absurd, grotesque, and even ugly. Moreover, though the hands and arms are symmetrical they may be represented in different attitudes when the accomplishment of a given result necessitates such change. Thus, a violinist uses one hand to hold and move the bow, but with the other he fingers the strings. The symmetrical use of the two hands is better preserved by the pianist. In chopping wood one hand grasps the curved and enlarged end of the axe-handle while the other is free to slide in and out at the different stages of the stroke. The whole human body is free to arrange its several parts in poses, or in changing relations in accordance with any thought, design, or purpose the mind may form. Dejection, modesty, hope, fear, triumph, defiance, in short, any mental state, may be adequately represented by the harmonious arrangement of body, head, and limbs, together with the corresponding expression of the countenance.

The essence of harmony is found in the agreement that exists between the directing mind and the bodily organs that conform to the direction. King Henry admonishes his soldiers to disguise their customary nature with hard-favored rage, to stiffen the sinews, to lend the eye a terrible aspect, to imitate the action of the tiger, to set the teeth, stretch the nostrils wide, and to bend up every spirit to his full height; in short, to adapt every organ of the body to the demonic purpose of the mind when about to engage in mortal combat. This is harmony, but it is too terrible to be graceful.

Harmony and grace attain their greatest perfection in the human body and in its representations, for there is a wide variety in the parts of the organism to be brought to unity in posture and action, while the aspects of thought and emotion to be expressed are numerous in kind and infinite in variety. Furthermore, the meaning to be expressed is immediate and vivid, and is touched with emotions that all can understand and which most can feel in similar situations, whether these situations be real or imaginary.

The Greeks were perhaps the first to feel and express this harmony and grace in their

statuary. At least they were the most preëminent of mankind in the quantity and quality of their artistic productions in this field. Grace results from the perfect equipoise of mind and body, when the mind is not losing itself in passion or violence, but is serene yet forceful, even in quiescence. The soul then fills the body with self-controlling energy, which finds its adequate expression in face, trunk, and limbs.

An example of quiescent grace is found in the Dorian girl clasping her cloak, usually known as the "Diana of Gabii in Latium." It has all the attributes of graceful repose ready to spring into action. The right hand holds the brooch on the shoulder with thumb and finger, while the left grasps loosely the ends of the mantle to be fastened. The right foot supports the body, while the left is so placed as to suggest the easy preservation of equilibrium or a preparation to advance. The head is delicately poised as if awaiting the sound of the horn that shall announce the coming chase. Her garments hang in becoming folds, which, while clothing the form, reveal here and there the smooth curves of the perfect body. We see also the shell-like ear, the charming waves

of the hair with its slender fillet, and the graceful curves of fingers, arms, and bosom.

Another illustration, much more vivid, is the far-famed and much-loved "Aphrodite (Venus) of Milos." Though both arms are missing, this statue must still be regarded as the masterpiece of Greek art in the expression of serene loveliness of form and feature, of sovereignty that has not lost its sweetness. As the figure of Aphrodite stands alone and flooded with light in the Louvre, before the red draperies that form its background, one feels that he beholds the most perfect example of harmony and grace in marble ever vouchsafed to the sight of man.

In the "Victory of Samothrace" we have an example of grace in a statue, not in repose but animated and exultant. This goddess of victory has alighted upon the prow of a Macedonian flagship after a victorious naval battle against Ptolemy of Egypt. The head and arms are indeed lost, but the wings remain. Here we find grace triumphant, rather than quiescent. In every aspect of the poise of the body, even in the very wind-blown folds of the drapery, we find the complete expression of exultation, the sense of being the bearer of good news concerning

the triumph of the Greeks over their own fears and the valor of their enemies.

The modern world seeks indeed for harmony and grace, though it does not always find them. Articles of furniture do not always harmonize with one another, but are often mixed in inextricable confusion. Mahogany alongside mission, oak against wicker, and cane against gilt! The color-scheme of the wall may be inharmonious in itself or with furniture and carpet and woodwork. Few people have imagination enough to select articles indiscriminately and at different times, yet so that they shall be harmonious when assembled in one room; manifold are the inharmonies in dress, in music, and in poetry, while we have abundant man-made inharmonies in nature, as when fires or axes have been allowed to destroy forests, or electric-power plants to dry up waterfalls.

In the living body, the complete domination of the mind over the serving members brings comfort and satisfaction to the person himself and a sense of æsthetic enjoyment to the beholder. This is to be seen in its highest perfection in the artistic dance—"the poetry of motion," we say. But it is also quite as possible and doubtless more important in

daily living. If one could perform the most menial tasks with such smoothness and grace as to awaken the æsthetic joy of the beholder and perhaps also of the performer, such labor would pass from the category of drudgery into that of art.

Awkwardness results when the mind is too confused properly to direct the features, the trunk, the limbs, or the hands and feet, or where the body is so out of coördination with the nervous system as to be incapable of obeying the dictates of the thought. One of the best things about the Montessori system is the training it gives in the coördination of muscle and nerve, enabling the little ones to use their fingers deftly, to walk securely and gracefully, either up and down stairs or upon the floor or the ground, and to carry a dish filled with liquid without breaking the one or spilling the other. The dance is doubtless the most successful means for many aspects of physical training, as it leads away from awkwardness and toward grace. But mental training is equally important, for he who has complete possession of his mind in a given situation can hardly be awkward in it. Only when the mind is placed in new and perhaps embarrassing situations does awk-

wardness result. The jaunty grace of Whittier's "Barefoot Boy" when he is at his play or in familiar occupations may give way to constraint of body and mind under new and surprising circumstances which bring about confusion and self-consciousness.

Most adolescents, when rapidly growing, are more or less subject to embarrassment because of awkwardness. Two dangers should be avoided—arrested development of mental and physical coördination on the one hand, and on the other the precocious acquisition of the graces of polite society.

CHAPTER VII

B. FORMAL ORDERS OF BEAUTY

IT IS to Von Hartmann that we owe a clear exposition of the gradual transition from that which is sensuously pleasing, though mostly devoid of meaning, as, for example, from a mere patch of color, up to that which plainly embodies in concrete individual form a definite content of thought, idea, or significance, as the "Apollo Belvidere" or the "Sistine Madonna." Though these distinctions may cross those of the ancients in their exposition of unity in variety, as may be seen when color or tone harmonies are considered, yet these stages offer so much pedagogical advantage both to teacher and pupil in the appreciation of the beautiful that they are unhesitatingly presented.

According to Von Hartmann there are six more or less distinctly marked planes of formal beauty, or stages of approach to the full concrete æsthetic embodiment of plainly perceptible meaning. Not only do these planes exist of themselves, but they form

indispensable elements when the beauty of any object, however meaningful, is analyzed. It may be questioned in the beginning, as suggested by Bosanquet,[1] whether any æsthetic feeling whatever is not at least dimly related to the significant. "The merest germ of the sense of beauty seems to imply a distinction between stimulus and significance."

Von Hartmann's Six Stages of Formal Beauty will now be considered in turn:

I. THE SENSUOUS AS SUCH

If one may distinguish between what is merely sensuously agreeable and that which is also æsthetically agreeable, one would say regarding smells, for instance, that not merely the fragrance of the rose, but this fragrance when associated with pleasing experience of life, real or imaginary, is æsthetically pleasing. Similarly we may think of the poet's description of the smell of the roses hanging about the broken or shattered vase, the smell of the salt sea, the faint odor of wood or peat smoke about an open fire,

[1] "History of Æsthetic," p. 8. The Macmillan Company, New York.

of newly plowed earth, etc. The agreeableness of the smell of broiling steak to a hungry man is hardly æsthetic, unless perchance it calls up visions of smiling faces about the festal board and is suggestive of emotions other than those of hunger.

The sense of touch also gives rise to æsthetic pleasures, as the velvety touch of the gown, or the petals of a flower, the softness of fur, the smoothness of highly polished furniture; whereas the agreeable roughness of the bath towel after a cold bath is not to be regarded as æsthetic, but as purely physical.

What is true of smell and touch is equally true of sound. Even very simple sounds may be æsthetically pleasing, and their æsthetic value seems to depend upon the closeness of their association to the significant in nature or in life. A single note from a bird may suggest the mate, the nest, the fledglings, and all their beautiful surroundings. The more tones vary and yet harmonize, the greater æsthetic pleasure they are capable of giving, though just why some combinations please while others offend is not so clear.

The most obvious sense impressions that

arouse æsthetic emotions, even when only remotely connected with the significant, is seen in colors and their various combinations. A sunrise or a sunset, the blue of the sky, the shifting colors of the ocean, and the infinitely varied colors in a landscape are all sources of æsthetic pleasure.

Suggestions of the æsthetic value of the colors red, blue and yellow are contained in the following verses. Color harmonies might be described in like manner.

RED

(Sonnet)

The garnet's deep clear red in fire-light play,
The ruby's bright and flashing gleam, beside,
The red hearth-fire, where mirth and love abide,
Compete with reds in autumn's rich array.
Far shine the reds at sea that mark the way—
The beacon lamps, the larboard lights that glide,
But most the blood-red sun that all the tide
Incarnadines and, setting, ends the day.
O rare the flush on sky in morning light,
With streaming crimson bands spread wide and high,
And rarer yet at eventide the sight
When glowing clouds adorn the western sky!
But heaven's great bow has red of brightest hue,
When past the clouds and rain the sun breaks through.

BLUE

There's plentiful blue amidst all the green;
For blue are the jays that chatter and preen,
The bluebells all sway by breezes caressed,
Blue-tinged are the hills that border the scene,
And bluebirds watch over the young in the nest.

In the woods of the North
Where the heart loves to be,
O'er the blue on the ground
Flits the blue in the tree.

O'er waters of blue where soft breezes blow,
With sunlight above and shadow below,
My boat sails the bay, with naught to annoy,
For two that I love sit close as we go,
With laughing blue eyes that mirror my joy.

Far away to the South,
Where the warm tropics lie,
There the blue of the sea
Is the blue of the sky.

YELLOW

Yellow of blossoms that come in the spring,
Yellow of sunlight that autumn days bring,
Yellow the corn and yellow the sheaves,
Goldenrod yellow, and yellow the leaves;
Landscape through haze, when apples are mellow,
Over the earth a mantle of yellow!

Brightest of yellow that ever was seen
Blended with blue is mother of green,
Mother of orange when mingled with red;
But orange or green, though fair, be it said,
Never for cheer can rank as her fellow;
Queen of all colors, the color of yellow!

We delight in the mere flash of the diamond, the mimic fires and sparkling greens and blues of the opal, the sheen of silver and nickel and gold, the lustrous gray of aluminum, as well as in the glories of color with all its tints and shades that are found in textiles, and in all their color harmonies.

It would be a mistake to assume that color is of value only as it appears in painting and in nature. It is of inestimable æsthetic worth in daily living, for it affects dress in all its aspects, as well as the color harmonies of walls and furniture in the various rooms of the house, the dishes and foods upon the table, and the outdoor colors of buildings, walks, flower-beds, foliage, and the like. Some æsthetic joys are the possession of wealth, such as arise from costly works of art in the home, but color itself belongs to all, and the pleasures of color are to be had through training in the power of appreciation and in the production of color effects,

for one color costs no more than another. Nature's gifts are for all who have eyes to see, while it is to the colors of nature that all artists resort for inspiration and instruction.

He who teaches children to see two beautiful colors where they saw but one before, or perhaps none at all, is a benefactor of the race, for he adds to the possession of men treasures to be had without money and without price.

II. THE MATHEMATICAL (PROPORTION)

This category enables us to know how and where to look for beauty in a multitude of things now regarded as of inferior æsthetic worth, or as having no æsthetic value at all. Can there be any beauty in a tool, a machine, a piece of furniture, a dish, or a dwelling-house aside from its sensuous attributes already mentioned? Most assuredly, and the beauty that arises from proportion in connection with the idea of function is far too important to be overlooked.

What constitutes a good piece of architecture? Not material alone, although this is important as giving the sense of permanence and as furnishing agreeable masses of

color; certainly not mere adornment, for this if not well balanced and intimately related to function is grotesque or absurd; but proportion,—proportion of length to breadth and to height,—proportion in number, arrangement, and form and size of openings; of roof and eaves to walls; of chimneys and towers and pinnacles and projections and depressions, to one another and to the whole—it is these proportions above all, when harmonious, that render a structure a true piece of architecture, and it is in these effects, when the form is appropriate to the function, that we find our æsthetic satisfaction. Not only must the parts of a piece of architecture be in faultless proportion with one another, but the structure as a whole should be in harmony with its surroundings. Much architecture, good in itself, is spoiled by the erection of other buildings not in harmony with it in its neighborhood. Even Trinity Church or the old City Hall in New York do not look well flanked by "sky-scrapers." Houses that are appropriate in the hills or mountains may not harmonize with their surroundings if erected in flat countries, just as structures suitable in the tropics are very unsuitable in northern regions.

Architecture, however, has long ranked as a fine art. It is when we come to the mechanical world so closely associated with the useful arts, that we find what may almost be called an undiscovered æsthetic realm, namely the realm of tools and machines and their products. Doubtless the reason why the æsthetic values that such objects possess are so generally overlooked is that people have become accustomed to look for beauty only at second hand, and in such representations as hang on walls or adorn the public museums or comprise private "what-not" collections. Moreover, most observers have never been taught to look for that which really constitutes the beauty of manufactured articles. Lacking the gaud of color and the striking meanings that go with forms which portray human destiny or passion, tools and machines are regarded as mere commonplaces, perhaps not ungainly, but at all events æsthetically indifferent. The beauty of such objects lies in the perfection of their proportions when considered in connection with the functions to be performed. Color and polish and decoration are mere accessories, which may or may not enhance their æsthetic quality. It is sometimes thought that to make the legs of a

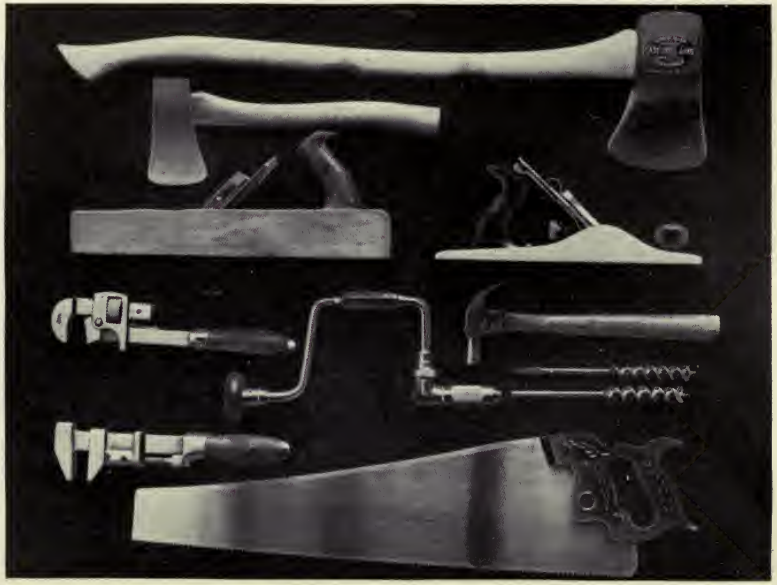

Fig. 1. Illustrations of the beauty of proportion to be found in tools

table beautiful they must be twisted, curved, or carved, but whoever thinks this is looking for beauty in the wrong thing, in mere grotesque adornment, and he overlooks what is of most importance, the sense of balanced proportion with respect to function.

It is now proposed to maintain the following

THESIS

There is an actual, possibly a necessary, correlation between mechanical efficiency and æsthetic proportion. In other words, as a tool or a machine increases in all-round efficiency there is a corresponding increase in the æsthetic quality of its proportions.

To exemplify this proposition adequately it is necessary to distinguish between those tools and implements that have small inner development in complexity of function, and those machines that show increase in the number and complexity of operations.

1. *Tools and Utensils.*

(1) The axe (Fig. 1) has simple functions which have remained almost unchanged, yet it has become more and more efficient

as it has developed from the simple iron wedge of our forefathers, with its round, straight handle. Today the American axe is unquestionably the most beautiful in existence, and it is in all probability the most efficient, though this fact has perhaps not been demonstrated in accordance with the rules of scientific procedure. What has been called the greatest athletic feat ever performed by the human race has been the clearing of the forests from the greater part of the American continent. This process has been going on for some four hundred years. The refinement of the axe as a cutting tool has proceeded slowly but surely all this time. Theory, accident, and experience have stood beside the smith as he has forged the blade, the head, and the eye of the axe. The same forces have influenced the makers of the handle as they have selected the hickory, have shaped it in the rough with axe and drawing knife, and finished it by the open fireside with knife and sandpaper and broken glass. From a straight, round stick it has become what we see, a gracefully curving handle, flat enough to enable the woodsman to hold the blade true, large enough to fit the hand comfortably, enlarged sufficiently at the

end to make sure the grasp yet be no bar to the comfort of the user, and curved enough to secure the maximum of ease and vigor of stroke. The whole constitutes a balanced perfection which is as beautiful in its proportion as it is efficient in its action. The edge of the blade rounds gently at its extremities for ease of entrance to the wood and recovery from it; above these rounded ends of the cutting edge, the blade is made somewhat thinner front and back than through the body of the wedge and for a similar reason, namely, that there may be greater penetration and less binding upon recovery for the next stroke. The head is just massive enough to balance the blade, and is either made square for striking a non-penetrating blow, or is gently rounded as seen in the illustration.

(2) The monkey-wrench and the Stillson wrench (Fig. 1) are different in function, and hence in shape, yet both are highly efficient and at the same time of agreeable form. The adjustable jaws of the monkey-wrench are in general rectangular except as they slope toward the end. The inner jaw at the back is slightly shorter than the outer one, or the head, that it may be less in the way.

The corners of the hammer part of the head are rounded somewhat, that they may not catch or mar. The screw that moves the adjustable jaw has its seat on a projection on the handle that serves at the same time as a guard for the hand. The purpose of this tool is to turn rectangular or other straight-faced nuts, and it is perfectly adapted for heavy work. The handle is long enough to give a good leverage, while the combined wood and metal of the grip give lightness and strength to the tool, and comfort to the hand.

The Stillson wrench is designed for an adjustable grip upon round pipe, hence the rounded head, which must neither catch nor mar. But in this case the movable jaw is subjected to much greater strain than that in the monkey-wrench, while at the same time it must not be rigid, but movable, in order to get and keep a tightening grip upon the pipe. This necessitates the abrupt ending of the threaded shank of the movable jaw, yet the distribution of mass is not æsthetically unpleasing, especially when the jaws are opened somewhat. Though neither of these tools was designed as an object of beauty, yet both show great strength and efficiency combined with good proportions, and with rounding

surfaces where these contribute to the working value of the whole.

A comparison of these tools as now perfected with the clumsier ones of an earlier day will convince the observer that beauty of proportion accompanies increase in efficiency.

(3) The Saw.—The saw, like the axe, has had a gradual development both in efficiency and refinement of form. From a crude piece of thin metal with a notched edge and a rough handle it has become the well-balanced beautiful and efficient tool represented in Fig. 1. It is long enough to give a full stroke to the arm, with a gradually increasing breadth which permits a very thin blade to be free from the danger of "buckling" when obstacles, like knots, are encountered and great force is exerted to overcome them. This progressive width takes the form of a gentle curve, which is the natural outline for steadily increasing strength, and which is also, when not arbitrary, a line of beauty. The heel of the saw is gently rounded, not merely to make it pretty, but to prevent catching and the consequent marring of material. The curve of the back having a legitimate function enhances the beauty of the blade. The handle is well-nigh perfect in fulfilling its purpose,

for it gives an ample grip both in dimension and direction, protects the hand above and below and in front. The notch in the forward wall of the opening looks at first as if it were there for purely decorative purposes, but this is not altogether so, for trial shows that it gives needed space for the projecting knuckle of the middle finger. Neither is the curved outline on the forward part of the handle chiefly for decorative purposes, for the upper, middle and bottom projections are needed for the grip of the rivets on the blade and for the needed strength of the wood, while the two in-flowing curves reduce to its lowest terms the opposition that the handle offers to the passage of the full length of the sawing edge through the object that is being sawed. A few decorative features are present, but though they enhance slightly the beauty of the whole, they by no means make up its chief constituents. The blade is made of so-called "silver-steel," and this when unmarred by use or rust has a beautifully mottled appearance. The quarter-inch longitudinal tracing along the upper edge of the blade is also decorative, as is the slight carving on the handle, though a part of this is also useful; the larger head of the next to

the lowest rivet is ornamental, though this also serves to bear the trade-mark of the maker, and it will endure long after that on the blade has been obliterated by use.

A boy who uses such a saw should be enabled by æsthetic education to take daily delight in the enjoyment and the preservation of its beauty.

(4) The Plane.—Compare the wood plane of our fathers with the more shapely iron plane of today. The former is a long block of wood pierced for the soft iron blade with its steel edge. This is held in place by a wooden wedge, and must be pounded down to its proper position, and pounded sidewise to make it cut equally on either side. The handle is crude, and raised too far above the cutting edge. The tool was fairly efficient and is not ill-looking. The iron plane, on the other hand, is far more graceful in outline, and more efficient in use. The blades are mechanically adjusted and held in place by a shapely iron wedge automatically set. The curved finger at its top is not a decoration, however decorative in effect it may be, but is an automatic lever that holds the blades in place. It is curved over at the top to be out of the way. The adjusting screw behind

the blades occupies a space not otherwise needed and gives neatness and a bit of color to that part of the plane. The handle is set low, as it should be, and furnishes a better support for the hand that must do the hard work. The curve of the sides is not for prettiness, but is high in the middle forward part to hold the blades firm, while it descends on either end to give room for the hands. The bottom is corrugated that the metal may not stick to the wood over which it passes.

(5) The Brace and Bit.—We find here an admirable illustration of the proposition that increase of efficiency in the performance of function carries with it a correlative increase in æsthetic proportion. The brace still universally offered in the hardware stores is one that is fitted to take a bit with a tapering four-sided head on the shank. To accommodate such a bit the head of the brace must either be enlarged to hold the jaws, or else the jaws be made to project beyond the head of the brace, thus producing an unsightly appearance. Moreover, even with the best of gripping appliances on the market, it is difficult to make the bit stay in a line straight with the head of the brace. The result is that only a very skillful hand can bore

a hole at right angles to the plane of the surface of the wood.

The new brace, however, as shown in Fig. 1, receives the perfectly straight and cylindrical shaft of the bit. This shaft has a slot in the end into which the mechanism in the head of the brace fits a corresponding blade or driver. The result is a far more handsome head for the brace, and an automatically adjusted alignment of the bit. With such a tool it is easy, because natural, to bore a hole at right angles to the face of the wood. Some of the old models of the brace had perfectly symmetrical shafts to the crank of the brace, both being at right angles to the line of the bit. This was doubtless for the sake of the symmetry itself. The present bit, it will be observed, has the front shank of the crank at right angles to the shaft of the bit and the head of the brace, but the rear shaft is sloped back, the better to accommodate the arm. This is harmony, with respect to function, and is to be preferred æsthetically to the former symmetry, which is to some extent detrimental to function. As to the nickel-plating on the exposed metal of the brace, it may be said that it is at once decorative and useful, for it tends to make

the tool more agreeable to work with, and of course prolongs its usefulness.

(6) The Hammer.—Hammers are for many purposes, and hence vary greatly in weight, size, and shape. The light domestic hammer shown in the cut is not, perhaps, the most beautiful, but it shows distinct advantages of efficiency and beauty over many of its predecessors. The curve of the claw is graceful, while its effectiveness as a nail-puller is unquestioned. Perhaps the greatest improvement in the modern hammer is the inward projection of the head to hold more firmly the handle, and to reinforce its strength, so that it cannot be so easily loosened or broken. This improvement contributes at once to beauty and to use.

(7) The Guns.—The exhibit in Fig. 2 shows at the bottom two old flint-lock muskets, one, the lower, dating from the time of the Revolution, and the other from 1812. They had a certain efficiency, being deadly at short range, and are better-looking than their predecessors, the fire-lock and the blunderbuss. The two guns above are modern high-power rifles, made more efficient by improvement in metal, the invention of the breech-loader, and the increased force of smokeless powder.

Fig. 2. Flintlock and modern guns

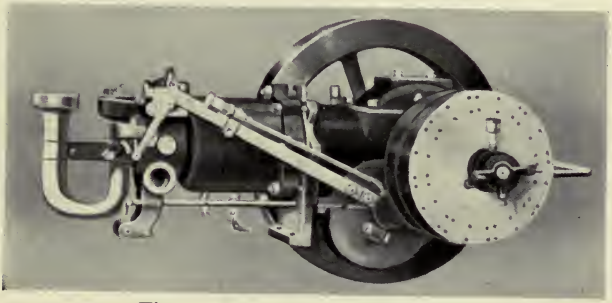

Fig. 3. Early automobile engine

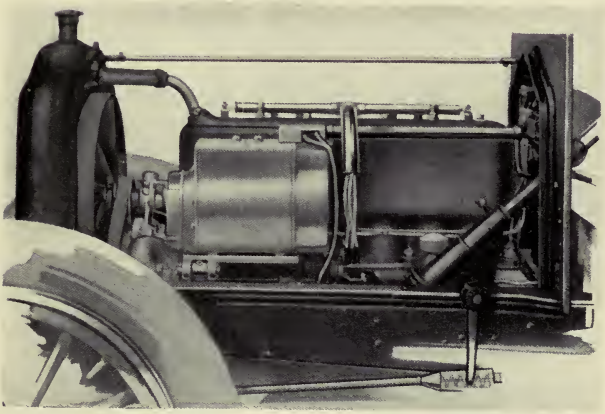

Fig. 4. Recent automobile engine

While the musket had an effective range of say two hundred yards, the modern guns are effective at more than a thousand yards, and can be fired six or more times in as many seconds, while the old muzzle-loaders could be loaded and fired perhaps once a minute. The action of the modern guns, moreover, is instantaneous upon pulling the trigger, while in the flint-lock the gun had to be held steadily in place while the powder in the pan flashed and communicated the flame to the powder in the barrel of the gun. A lively duck could dodge a charge from a flint-lock after he saw the flash, but he would have no such power with a modern piece. Its only flash is that at the muzzle.

There is no need to dwell upon the difference in looks between the old gun and the new. The latter is the perfection of balance, grace of outline and beauty of finish, whereas the old one is not.

2. *Machines Having an Internal Development.*

Tools, as we have seen, have refinement, but, their function being simple, there is rarely any development in complexity of parts. A hammer is still a hammer, an axe an axe, a saw a saw, even after centuries of

use; not so, however, a piece of machinery, say for reaping grain, for traction, for generating or transmitting power, or for printing, sewing, planing, making bolts, screws, nails, and so following.

A machine is submitted to three kinds of test: namely, for reliability, for capacity, and for efficiency.

(1) Reliability.—May the machine be depended upon to do its work smoothly and without vexatious delays? Will a sewing-machine make its stitches with certainty, or is it always missing them, breaking thread, or failing to work at all? When men go out in their automobiles, can they be reasonably certain that they will reach their destination without delay, or return under their own power? Will a reaper or an automatic machine steadily continue to perform its functions until worn out?

(2) Capacity.—How much work will the machine do in a given length of time? Will an automatic machine accomplish as much as could five, ten, one hundred, or one thousand men? How many miles an hour can a locomotive move under given conditions? How many bushels a day will this separator thresh?

(3) Efficiency.—What per cent of the energy applied in a machine reappears in work done? What per cent of the heat-value of coal is realized by a locomotive? Only from three to five per cent, perhaps. What part of the force inherent in falling water can be utilized by a turbine? A very large one, even to ninety per cent or more.

The proposition here maintained is as follows: With every substantial increase in the general usefulness of a machine, as measured by its reliability, capacity, and efficiency, there is a corresponding increase in beauty of proportion.

There are several reasons for this fact. First of all may be mentioned the clumsiness that results from applying a new principle in an old way. Railroad cars, for example, were first made on the plan of the stage coach; automobile bodies only a few years ago were constructed with the horse carriage for a model; gas engines were made like steam-engines, type-setting machines were made to set and distribute type as if they were men, etc. Gradually, however, these unnecessary imitations are discarded, and the machine is so constructed as to be true to its own nature and functions. Then it is simplified, and

made more reliable and efficient, and reaches its maximum capacity. At this stage it is most beautiful. The string of stage-coaches becomes a Pullman car, the horseless carriage becomes a modern automobile body with straight-line construction, and the automobile engine a thing of beauty, as well as a well-nigh perfect machine of its kind. Perhaps the next most important reason for this improvement is the gradual disappearance of those forms of decoration that add nothing to the general usefulness of the machine, such as gaudy colors, meaningless and hence useless curves, twists, protuberances, and the like. The first Remington typewriter stands before me. It is adorned with roses, wreaths, and portraits of pretty girls. At present, however, all these elegancies are represented in the operator, while the machine has shed these excrescences. It is now finished plainly with colors and materials that best promote durability. The beauty of the new typewriter is not to be found in decorative externals, but in harmony of proportions with respect to the functions to be performed. The old machine used a long lever and a string to shift the receiving cylinder! Strings and roses! They do not go well together.

Fig. 5. Puffing Billy, Invicta, and modern passenger locomotive

Fig. 6. Locomotive of civil war times, "The Woodford" of 1862

The correlation between beauty of proportion and mechanical efficiency in machinery may be further illustrated by locomotives and automobile engines.

(*a*) Locomotives.—The early forms of locomotives seem to us grotesque, but they are no more ugly than they were inefficient. This is easy to see in "Puffing Billy" of 1813, or "Invicta" of 1830. By 1837, the English "Hercules" begins to assume something of the form of the present locomotive, though still crude. In Fig. 6 is seen the locomotive of our Civil War days, the "Woodford" of 1862. The big, flaring smoke-stack is a characteristic of that period. It is not so much pictorially as functionally inadequate and ugly, for it serves as a sort of balance to the cab at the other end of the boiler. The forced draught, however, caused by the exhaust steam from the cylinders, makes this great flaring stack quite unnecessary, and hence æsthetically incorrect. Besides, as locomotives have become larger, there is not so much room under bridges for high smoke-stacks. Fig. 7 shows a giant freighter, built by the Baldwin Locomotive Company for the Northwestern Railroad. It has two sets of drive-wheels, and seems the very embodi-

ment of power. Though not perhaps so attractive to the eye as the lighter passenger engine, it is yet a model of clean-cut straight-line construction, where the highest utility corresponds to the greatest beauty of proportion. It contains no ornament except the finish that contributes to utility.

(*b*) The Automobile Engine.—This engine (Figs. 3 and 4) is convincing as a verification of the truth of the proposition that there is a correlation between efficiency and beauty, for it has been developed in the dark, so to speak, since it has always been covered by a hood. Who cares much how it looks, if it is to remain hidden, provided only it does its work and achieves reliability, capacity and efficiency? Its present beauty, and to one with an eye for proportion it has this in high degree, can hardly have been a distinct aim of the designer, though every artist-artisan delights to make beautiful objects, but must have been a natural result of that simplicity of construction that conduces at once to efficiency and beauty. Else why was the automobile engine so crude, unreliable, inefficient and ugly then; and why is it so refined, reliable, efficient and beautiful now?

(*c*) Other Examples.—These may be found

Fig. 7. Giant freighter on the Northwestern Railroad

and analyzed on every hand—the sewing-machine, washing-machines, the piano, organ or graphophone, fire-arms, cartridges, all kinds of motors, plows, harvesters, threshing machines, automobile bodies, wagons, carriages, corn-planters, linotype machines, printing presses, and a host of automatic or semi-automatic machines in factories.

3. *Fashion vs. Art.*

Fashion or art, which? Must we choose between them, or may we retain both, fashion being modified by art, or art directed by fashion?

An answer to these questions is most important in matters of clothing, furniture, tableware, and articles of household decoration, such as wall-papers, rugs, carpets, and the like, and perhaps in domestic architecture; but less so in the other fine arts, which are not so much influenced by fashion.

It should first be remarked that there has been a well-marked evolution in dress and furniture, not to speak of that in the fine arts, which has followed pretty closely the stages in the development of types of thought and social consciousness. This evolution has, doubtless, like evolution in the natural world,

been more or less closely associated with the requisites for survival on the one hand, and with natural fitness and convenience on the other. If men wear trousers and women skirts, it may be assumed that there are good reasons why they should, and it would be foolish to expect that merely æsthetic considerations will ever change these customs. If the plume still adorns the left side of a soldier's head-dress, it is doubtless because on the right side it would hinder the free play of the sword. Its place on the left side being once established, there would seem to be no good reason why it should be transferred to the right, even if the soldier is to use a gun instead of a sword.

But within the stages of this natural evolution there is much room for varieties of form, material and color; and it is here that fashion rages or reigns as the case may be. Our anthropologists tell us that decoration, as by tattooing or the wearing of ornaments, arose from the desire to improve on nature, and serves as a means of distinguishing one naked savage from another, or to enhance the attractiveness of the individual or to lend him distinction. The Seminole women of Florida, as one sees them on the streets of

Miami today, wear around the neck a band of beads that reaches from the tip of the chin to the breast-bone. Herbert Spencer's[1] jibe at English fashionable education in 1860, was that, like savage decorations on a body otherwise naked, it was pursued solely for ornamentation, and to follow the fashion.

Spencer also asserts that the leading motives for following the fashion are two: (1) Respect or reverence for the person imitated, as a king, a courtier, a queen or lady's maid, a general or a statesman; and (2) desire to assert equality with him. One would presumably feel somewhat like a king if dressed like one, as on the stage, or like a gentleman if he wore a gentleman's garb. The maid asserts her equality with her mistress by imitating her hats and gloves, and the style of her dresses.

Fashions at times go to great extremes, as in the largeness or the smallness of hats, sleeves and skirts. At such times they are likely to fall under the condemnation of those who for one reason or another consider themselves the guardians of public morals. The clergy occasionally fulminate against the extremes of dress, and once in a while

[1] "Education," beginning of Chapter I.

some legislator attempts to enact a law on the subject. Such efforts are perhaps more laudable in intention than effective in execution. A Berlin street-car conductor had an eye put out by a long hat-pin, and now an ordinance restricts the length of these pins and prescribes buttons for the sharp ends like buttons at the points of fencing-foils. One man declares that long feathers tickle everybody in their neighborhood, and demands remedial legislation! For a very good reason theater-goers expect women to doff their hats, especially if they are large, during the performance.

At times, obnoxious fashions have been abandoned because of some public display that shed obloquy upon the followers, as when a hangman was dressed in the offending garb, or the victim was executed in it. But it may safely be asserted that an ounce of ridicule in such matters is better than a pound of denunciation. If the fashion can be shown to make its followers ridiculous or ugly, it will be short-lived.

Since fashion is deep-rooted in the social evolution of the race, and is not to be wholly abolished either by fulmination or ridicule, it remains to be asked, what can chasten and

ennoble it? The answer is—art. Though fashions come and fashions go, art must remain. This means that every garb must be æsthetically adapted to the offices it is to perform, and that always it must harmonize with the personality of the wearer in its texture, finish, form and color. Æsthetically considered, a nurse's gown may be as becoming as a ball dress, though it would hardly do to exchange the two, except perhaps in a masquerade. Art always takes into consideration time, place and circumstance. A hunter's outfit, though highly becoming in the forest, would look out of place at a social "function" in the city.

It is said that American women of our wealthier class are the best-dressed women in the world; the reason being that more than any others they modify fashion to meet the varying artistic needs of the individual. Whether true or not, this is good enough to be true. At all events, the æsthetic education given in the schools should endeavor to develop taste and general æsthetic appreciation to a point where they will tend to bring about just this condition of things. If a prevailing style of hat is unbecoming, making the figure look "dumpy," for instance, it

should be ruthlessly discarded. The commercial interest that produced it will be quickly impelled to offer what is suitable for this type of individual. What, in general, holds as to form, holds to a far greater degree of color. In central Africa, where all complexions are black, art might succeed once for all in determining the æsthetic combinations of color that would fit all; but in a country like ours, where it is difficult to make any two complexions match, such a thing is an evident impossibility. The whole gamut of hues, tints, shades, and chroma must be brought into play. The almost infinite combinations of color find ample scope for application. Our pupils must, therefore, be trained most thoroughly in this department of æsthetics.

III. THE DYNAMIC

Dr. Harris says that in Greek art when the form is equal to the content we have beauty. This is always true, provided the content is one capable of exciting æsthetic emotion. The frailest, airiest lyric may be beautiful; so is the stately Hebrew poetry that exalts the Creator. A tiny bit of bric-a-

brac may be so exquisitely executed as to call forth exclamations of delight; or a statue by Michael Angelo may represent the currents of life passing into the newly created body of Adam when touched by the finger of the Almighty. We have seen two leading elements of the beautiful, namely, the sensuous as such, and the harmonies of proportion. A third element, the *dynamic*, is now to be considered.

The word *dynamic* suggests force in action. This alone might not produce æsthetic feeling, but in combination with other elements is capable of doing so, or at least it is capable of heightening the æsthetic effect. In some cases it may border on the sublime, especially when it produces awe or fear, as in the thunderings of Niagara, or the amazing forces at work in a tornado or a storm at sea.

Look for a moment again at the picture of the freight locomotive and see what power is suggested by its two sets of cylinders, its two sets of drive-wheels, sixteen in all, its enormous weight, and its corresponding capacity for producing steam; or imagine this tremendous engine in action, with its seemingly interminable train of laden cars. Without the idea of force actively employed,

the locomotive would no longer excite any interest at all, except perhaps from its fitness for the junk-heap. The same is true of the mighty steamship that plows the waves, the great cranes to be found in steel works, capable of lifting tons of iron bars as if they were feathers, the giant gates in the locks of the Panama Canal. On a smaller scale, nature presents similar phenomena. The active strength of the lion, the tiger, the grizzly bear, the elephant in the jungle, or the great python in the tropical forest, excites in us what Byron called "a pleasing fear," which is only the poet's expression for the effect of the dynamic. In a noble, well-trained horse, the strength found in muscle and bone awaken our admiration, but without the element of fear. We admire the athlete for what he can do, as much as for the symmetry and grace of his form. If his fine physique gave him no dynamic power, our æsthetic appreciation of him would sink to a much lower point.

Even a mountain may be thought of dynamically, as when it is regarded as the source of glaciers, rivers, forests, avalanches, floods, etc. One of the charms of the river lies in its resistless onward sweep to the

ocean, its power to further the ends of man, or, if he violates its laws, to engulf him in its depths.

IV. DECORATION

This is what Von Hartmann calls the *passively teleological*, by which he doubtless means that element of beauty which contributes to the expression of thought or function, but is not actually necessary to it. Observe again the carved scroll on the handle of the saw (Fig. 1). Though the part of it that the fingers close over may increase the firmness of the grip, yet the forward part has no such office and may be regarded as decorative. This decoration, however, is not introduced purely for adornment, but is a natural completion of that which has a purpose. The term *passively teleological* correctly describes it. The scratched band along the top of the blade balances the notched cutting-edge below. It is not *necessary*, in the functional sense; but it is a proper, because an appropriate decoration. It is different from the roses and wreaths on the early form of typewriter. These are put on just to look "pretty," and are therefore extraneous, being in no sense teleological.

There is a difference between pure decoration and construction that is decorative. The one is superficial, intrusive, and hence usually in bad taste; the other is natural, appropriate, and capable of arousing æsthetic pleasure. Examples of decorative construction may be seen in the tools of Fig. 1 and in the guns of Fig. 2. To cite a few: The twist of the bits, the curves of the brace, the network on the head of the brace which aids the hand in tightening the hold on the bit, the delicate curves on blade and handle of the axe or those on the handle of saw or plane, the perfect curved surfaces upon the wood and iron work of the modern guns, especially the upper one.

Over-decoration is the weakness of the vulgar. Consult, for example, the pictures of furniture in the catalogue of any great mail-order house. Here one finds meaningless curves, wriggles and twists on the lines that should be simple in design and correct in proportion; lion claws adorn the feet of a six-dollar rocker; carvings and scrolls, hollows and bumps cover the tortured wood. Add to the atrocities in the frames the worse barbarities in the upholsterings, and one has a spectacle at once terrible, laughable, and

pathetic in its ugliness. What have the American people done that they should suffer these æsthetic tortures? Why should the householder be the victim? Because he is a farmer? But the farmer's automobile, his carriage, his harness, his tools and machines, in so far as they are highly efficient, are beautiful, at least in their proportions.

As before remarked, it is that which undergoes no inner evolution which is particularly susceptible to æsthetic desecration. Almost any chair or sofa will hold the weight of a man, and therefore its inner necessities do not make correct proportion imperative. It is here that ugliness rages with terrible hunger for the striking, the grotesque, the bizarre. And the stuff is not really cheap. Before me is the picture of three pieces, a sofa and two chairs, that are marked at $54.60, and yet each one *wie es nicht sein soll*, an example of vulgar taste utterly inharmonious with the chaste and beautifully plated or solid silver ware or the delicate china in the house that will ultimately contain both. What are teachers for, if they cannot improve the taste of their pupils to a point which will render these monstrosities of decoration impossible?

Let us not delude ourselves by imagining that it is because these things are made by machinery that they are so hideous. The whole matter is purely psychological—an uneducated public to which commerce caters, either with greater ignorance or with a moral culpability whose lightest punishment should be condemnation to live in houses furnished with the æsthetic corruptions they invent.

The decorations on stoves, sewing-machines, rugs, wall-papers, bedsteads, table-coverings, etc., which these houses furnish are of the same order, varying only with the possibilities of distortion. Why should one seem to be walking on a flamboyant flower-bed when one steps upon a rug, or behold a horticultural garden upon the walls? Will the miseries of cold-storage eggs and poultry be alleviated by cooking them upon a stove that is a mass of senseless curlicues, projections and depressions? Such articles should be consigned to the scrap-heap, or hidden in museums along with other instruments of torture.

The barbarities of dress are not so excessive as those described in household articles. The household enjoys no immediate comparisons with the furnishings of other houses which

would tend to make their own odious, but when an over-decorated dress is seen on the street in juxtaposition with a dress that is in correct taste, the contrast is immediate and obvious, and, if the contrast be too great and between people of equal standing in life, it is overwhelming. Pity, contempt, and ridicule here perform their beneficent work of education. But this is pathological treatment, which should be made unnecessary by proper teaching. Children should be trained in school to appreciate and so to use colors and forms that in the high-schools, at least, the taste in dress will be as correct as that in grammatical forms and in pronunciation and diction. A good high-school student is usually able to speak correctly if he so desires, but he may be incapable of making æsthetic combinations.

Crazes for decoration sometimes sweep over the land like epidemics of the grippe, nor are they confined to one country. A German cartoon pictures the women of the household engaged in a passionate effort to decorate everything in it, and all at once—the dishes, the lamp-shade, the baby's bottle and mug, the chairs, tables, and walls, and even the hair and faces of the occupants, those of the

aged and sleeping grandfather not excepted. These exuberances are perhaps not especially harmful so long as they are transient, but when they become a fixed mania, then one may expect to find the houses of such people a jumble of incongruous decoration, nothing escaping and nothing agreeing with the rest. An uneasy sea is as conducive to good digestion and peace of mind as is such a house. Its jangled disharmonies are as glaring to the eye as similar discords on the piano are to the ear.

On the other hand, decoration that really has a purpose and that conduces to the æsthetic value of the article in question, even though passively, may be a pure and constant source of pleasure. Let us then make a bonfire of all meaningless, foolish, or atrocious decorations of the mail-order houses, and replace them by what is fitting, chaste, and beautiful, and a part of the world will be thereby transformed from a nightmare of ugliness into a dream of beauty. Not only will the resulting objects be more beautiful, but they will be more lasting and no more expensive. One color costs no more than another, a good design in construction or decoration is not more expensive than a bad

one. It is materials alone, or almost alone, that should make the difference in cost; and often cheap textiles, for example, are almost as beautiful as much more costly ones. To see the effect of ease of comparison on taste, contrast the wholesale production of furniture and household articles with the similar production of men's clothing by the great manufacturing firms. The latter strive for simplicity, fit, and correct proportion, while the former establishments are guilty of all the æsthetic sins there are.

Æsthetic display in shop windows is potent in the æsthetic education of the public. When beauty is used to enhance the attractiveness of the inexpensive, as it is now used to exalt that of the costly, then teachers will find it easier to mark out in the minds of their pupils the metes and bounds of good taste in decoration.

V. THE VITAL

The vital as an element of beauty has close relations to proportion and force, for the vitality of a man, animal, or plant is largely measured by powers of accomplishment, while a clumsily built animal, like the alliga-

tor or the hippopotamus, seems not only devoid of effectiveness because of defective proportion, but to be also for this reason feeble in action. This impression is of course heightened by seeing these creatures in captivity, where the characteristics of their native haunts are lacking. In other words, vitality to have æsthetic value must not only be present, but it must also seem to be present, that is, the object must look the part it is expected to play.

The strong horse that can carry a man on his back a hundred miles a day; the bulldog that can for a mile circle a rapidly moving street car and at the same time bark continuously with the sharp explosiveness of a motorcycle; the lion or tiger or grizzly bear that can kill an animal larger than itself with a blow of the paw; the python that can crush and swallow a deer; the fox that can race all day before the hounds, which can in turn follow him all day, waking the woodland echoes with their deep, bell-like baying,—all of these and many more arouse our æsthetic admiration because of their vitality. We admire the plants of vigorous, thrifty growth, even if the farmer and the horticulturist do not always love what Bailey calls the "willing

growers," like the dandelion, the burdock, or the morning-glory.

Children should be taught, especially in their nature-study, to recognize and appreciate the vital as an element in the beauty of the plant and animal world, and, conversely, to seek to develop this element in themselves, not alone from motives of efficiency, but from those of beauty as well. What girl really believing that vitality is a strong constituent of her own beauty, would from lower æsthetic motives deliberately reduce it? There are relative values in the æsthetic, as well as in the intellectual or the moral world. Health is more beautiful than illness, strength than weakness, skill than clumsiness, and vitality is an indispensable element in the beauty of living creatures.

VI. THE TYPICAL

This quality of beauty is especially applicable to objects in nature, but is not confined to them; for a gun, a weapon, an ornament, a coin, a cathedral, a temple, a tool, a machine, a piece of pottery, a rug, a vase, a statue, etc., may be a type of its class.

A perfect type of almost any plant, animal,

or thing may, because of this fact alone, awaken our admiration. Even if we should not particularly like foreign races of people or particular stages of their development, yet a painter or a sculptor will at once command our admiration when he places before us a perfect specimen of any one of them, be he savage or civilized, or white, yellow, or black in color. Lorado Taft's colossal statue of Black Hawk, the celebrated Indian chief, which stands upon a bluff of Rock River near the author's boyhood home is an example.

ON THE COLOSSAL STATUE OF BLACK HAWK

Majestic symbol thou of rude mankind,
When each his ends still fondly sought to gain
By passion's sway, or sacrifice and pain,
Before the dawn dispelled the night of mind.
These fertile farms that broaden on the sight,
Where now the households pass their busy hours,
Were once wide plains bedecked with prairie flowers,
Or swept by autumn fires that lit the night.
Thou stand'st for him who taught his martial band
In camp, in ambush, and in battle's rage,
To hold their hunting-grounds with heavy hand
'Gainst swarming foes who sought their heritage.
Of that departed host, Black Hawk alone
Is not forgot—is now enshrined in stone.

A type, however, is really a type only when it embodies in adequate form the essential characteristics of its class. He would not be a typical savage who had lost his decorations, or his muscular vigor, or his rugged and implacable expression, or if he showed any deficiency in the qualities of his race. A type must, therefore, be complete, and is consequently æsthetically agreeable. The characteristic features then become a necessity of complete and hence artistic expression. An Arab chief acquires, because of this perfection, a dignity, grace, and loftiness of bearing that might be lacking in any particular chief encountered upon the desert. The latter might be squalid with dirt and rags, but the type must be the Arab at his best. A naturalist rejoices in a perfect specimen of any class or order of being, not, it may be, reflecting that his pleasure is mostly æsthetic. When the Greek found the typical athlete, he wrought his form in marble and called it a god.

CHAPTER VIII

IDEAL UNITY OF CONTENT AND FORM

UNDER this topic one might discuss the history of art, and show what the content and the form have been at different periods and among various races of mankind. Egyptian art is unique, so is that of China or Japan. Classic art is one thing and romantic another, and both differ in some respects from the art of today. When art is free, it is the spontaneous expression of the thought and feeling of a people. Whenever it ceases to be such an expression, content and form are thrown out of balance with respect to present life. A belated or foreign piece of artistic expression, say a Madonna of the time of Raphael, may be in accord with a former age, but is not likely to be in accord with our own. It is for this reason that attempts to develop the æsthetic nature of children by relying upon the art of other periods usually fail. It is practically impossible to give children a consciousness that is foreign to their elders. When the art of any period is an expression

of the daily thought and feeling of a people, then it will be potent with their children, but not otherwise. The place for romantic and classic art is in historical correlation, and they should not be presented until the student has an apperceiving basis for them, namely, in the high school, and in connection with historical studies of the period in question.

One concession should doubtless be made at this point, namely, that when the art of a given period expresses thought and feeling that are of lasting rather than transient interest to mankind, then the art that gives adequate expression to this phase of human experience is always valid, and may always be taught in its appropriate setting. An example is found in tragedy, which has flourished at only two periods, once in Athens for perhaps three-quarters of a century, and once in England and France for about twice that length of time. But so universal is the tragic element in life that the young of every age are deeply affected by it. Hamlet and Macbeth still have power to stir the depths of emotion; nor are they likely soon to lose it.

A few practical aspects of the relation of form to content may be now considered:

1. *Form without content.*

The "dead fish" already mentioned illustrates the point. The artist may busy himself so intensely with the manner of expression that the thing to be expressed may be diminished, or perhaps almost ignored. A piano-player may become so wrapped up in technique that he leaves the soul out of his playing, or may play that which is largely devoid of thought and feeling. His music then becomes an elaborate display of dexterity in finger movements, and the artist makes himself a rival of the playing-machine. Painting and sculpture may in similar manner be a species of photography, in which clothes, wrinkles of the face, and transient expressions may be recorded, but in which a revelation of real character is lacking. Thus, George Bernard Shaw tells how a number of artists have attempted to make a statue of him, but without doing more than to make a fairly adequate expression of his clothes and his reputed character. He says also that it was not until Rodin molded a bust of him that his actual character stood revealed. The result seems to have left Mr. Shaw with mingled feelings, in which admiration for the artist is tempered by a

bit of dismay at the nakedness of the exhibition of his own real self.

2. *Form inadequate to content.*

An artist was once painting a picture of an old wooden bridge. A rural bystander reproached him for wasting his time, saying that half a mile down stream there was a new iron bridge that would be worth painting. The artist smiled and went on with his work. He saw in the old wooden bridge what the farmer did not—its past and the life associated with it. Generations of men had used it. The past life of the community was bound up with it, children had angled for fishes from its convenient support, lovers had leaned over its friendly railing as they tried to read in the placid depths below what the future had in store for them. For such a wealth of meaning the old, decaying wooden bridge was much better than the new iron one, however perfect its proportions or however brightly it might be painted.

A poetic thought needs an adequate poetic expression. If the conception is airy and fanciful, the verse must answer to it. Puck's speeches certainly would not sound well in sonnet form, for they need expression as

swift, ethereal, and audacious as the sprite himself.

Neither does philosophy nor abstruse thought gain anything from a rhythmic expression, however perfect the rhyme or the measure. Much of Browning's verse is to some as hard to read as is the "Critique of Pure Reason." What æsthetic pleasure can such persons hope to have from it?

However impressive an artist's ideals, they fall quite flat if his expression is not adequate. A putty face on a statue carries with it a corresponding impression to the beholder, even though to the artist his effort may mean celestial beauty. His product needs interpretation, like the daub of color entitled "The Israelites Crossing the Red Sea." "But where are the Israelites?" was asked. "Oh, they have gone over." "Then where are the Egyptians?" "Oh, they have gone under!"

3. *Inadequacies of Material.*

It has been well said that material dictates no forms that shall be constructed from it, but only forbids those that are not in harmony with its qualities. A watch-chain whittled from wood may be a curiosity, but it is evident that wood is not well adapted

for such a purpose, being too frail and too clumsy. A set of ivory furniture is to be found in the Berlin museum. There is a large silver arm-chair, whose front legs rest upon silver lions, to be found in Castle Rosenborg in Copenhagen. Leather has been made from human skin, drinking vessels from skulls; chains, bouquets, etc., from hair; rooms have been furnished throughout with porcelain, the walls also being covered with this material; the statue of Ada Rehan, the actress, at the Columbian Exposition was cast in silver; at fairs it is not uncommon to see figures in butter representing persons or animals; boys have from time immemorial built snow forts and snow men; one man built a house from beer bottles, and so on. These are for the most part freak constructions, and are never taken seriously as being anything else.

4. *Imitations.*

These are of two sorts, the legitimate and the illegitimate, which are often hard to distinguish, since what is at first considered æsthetically bad may in time be transformed into what is good and commendable. In our early colonial architecture, Greek forms

of columns, pilasters, etc., which were always constructed of marble or other stone, were imitated in wood. Long familiarity with such structures has rendered them tolerable, and in some cases admirable, where there have been important modifications to suit the nature of the material used. Recently concrete blocks have been cast to imitate stone, even to the rough surfaces left by the mason in fitting the stones for use in the wall. Buildings erected from such imitation stone have been lamentable failures from an artistic standpoint, since the regularity in the size of the blocks made the structures look like the block houses constructed by children, except on a larger scale. The ugliness of the imitation contributed further to the inartistic character of the result. As soon, however, as men began to treat concrete, not as an imitation of stone, but as a material to be handled in accordance with its own qualities, forms of great beauty began at once to emerge. The Hotel Ponce de Leon, at St. Augustine, Florida, made of concrete, is considered one of the most beautiful in the world; yet the marks of the planks out of which the "forms" were constructed are plainly visible on all the outer walls. At

first architects imitated wood or brick houses in the distribution of window-space, etc., in their monolithic structures, but with ill artistic effects; but when they studied these matters in accordance with the nature of the new material, many houses of great beauty were produced. Miami, Florida, for example, has undergone a rapid development in the artistic use of concrete, the materials for which are there abundant. The new station of the Pennsylvania Railroad in New York City is constructed of concrete, and impresses the beholder no less by its beauty than by its magnificence.

Celluloid, at first a bad substitute for ivory and linen, has developed perfectly legitimate uses of its own. Glass and paste and cheap stones are used to imitate diamonds, but always to the disgust of the judicious. A thin veneer of fine, hard woods over inexpensive lumber has long been a favorite device for those who would have fine-appearing furniture at small cost.

The æsthetic bearings of veneer are susceptible of debate. Why object to it? It certainly deceives no one, since the grainings do not correspond with those of solid woods, and are often put on as if a cross-

section of the log were used longitudinally, so that a drawer front looks frail and as if a sturdy push would break it in two in the middle. But how can beauty in wood-texture be more than skin-deep anyway? The surface is all that one can ever see. If this is agreeable, why concern oneself with how the interior would look if it could be seen?

Again, mahogany is scarce and expensive. Why should one person possess solid furniture made from it, when by cutting it into veneer sixteen times as many people could enjoy it? Is there not something unethical about furniture that wastes what otherwise might be utilized for higher purposes? The same questions arise when we consider silver-plated ware for the table, or "filled" watch-cases in which a sheet of gold covers some baser metal in the interior of the case. Silver-plated spoons of good quality are now warranted for fifty years. Why then should anyone object to them? They last long enough, while at the end of this period they can easily be replated, when they are as good as new. Indeed, solid silver knives would be well-nigh worthless for cutting purposes, the underlying steel being necessary for strength and for holding a cutting edge.

Yet, notwithstanding this plausible defense of veneer and kindred processes, the mind is not satisfied. The things do not seem quite genuine; in many cases they pretend to be more than they are, and are suggestive of deception, if not of a kind of fraud. This seems especially so with wood veneers. It would not be far wrong to say that all mere imitation is æsthetically displeasing as soon as it is discovered. New forms of roofing are allowable if effective in keeping out moisture, but they should not try to imitate other roofing substances, such as tile, shingles, or slate. It is not so much the novel material as the more or less transparent fraud that people object to. Asbestos may make a much better roofing than cypress shingles, but it ought to stand on its own merits, and not seem to be something that it is not. Yet even here an educational transition seems sometimes to be needful, owing to the conservatism of taste. New steel Pullman cars are often painted on the inside to imitate mahogany and rosewood, the idea being that the patrons, who are used to these effects, would be psychologically disturbed if a battleship gray, for example, were used. The car might seem "cold" and forbidding. In time, how-

ever, the steel construction will be frankly acknowledged as such, and further imitation will be distasteful.

Not being able to command marble for our statuary, shall we be content to use plaster of Paris? Perhaps. The surface effects of the two substances are not comparable. The marble is soft, yet brilliant, mellowing and modulating light and shade; it is pure and altogether lovely in its reflection of light. Plaster of Paris is the reverse of all this, for it is chalky, dull, and lifeless. Painted or varnished, it is but little if any more pleasing. Why then put up with it at all? The answer is simple: It reproduces the form correctly, even if it disappoints the eye in the aspect of light and shade and brilliancy of finish.

New substances like aluminum, linoleum, asbestos, etc., first used as imitations, quickly win a place for themselves because of their inherent qualities, and often render articles beautiful which before were ugly. Compare an aluminum cooking vessel, for example, with one made of cast-iron. The aluminum utensil is light, clean, attractive in color, and practically everlasting, while the other is the the reverse of all these, except perhaps in the matter of durability.

CHAPTER IX

SUGGESTIONS ON ACQUIRING AN ÆSTHETIC VIEW OF THE WORLD

A. THE ATTITUDE OF MIND

GRANTED that before the creation of a work of art there is in the mind of the artist a content of artistic thought or feeling, and that for its realization this content depends upon being expressed through sensuous means; what, it may be asked, is the state of mind in the individual necessary for this expression? The answer is, that this content must fall into forms that give him pleasure. We may go far before we find a complete explanation of all the psychological causes of this gratification, but some readily suggest themselves. Every piece of art creation is an expansion and realization of the self, not only in its purely individual, but also in its social aspects. "A thing of beauty is a joy for ever," sings Keats, but we need to ask, to whom? To all beholders as well as to the producer. It is a long time since the soul of Phidias thrilled

with the production of his statuary, but what remains has always thrilled the beholder, and will continue to do so as long as it exists.

Schiller conceived this pleasure of creator and beholder as an expression of the play impulse. The artist, playing, enshrines his thought in marble, language, or tones. The joy he feels is a spontaneous product that springs from his creation, as laughter bubbles from the mouth of a child in happy play. Defective as this theory may be, it is yet suggestive to the teacher who would arouse the æsthetic life of the child to full expression. Like play, art creation feels itself free from economic necessity; for though the artist may hope to sell his wares, yet the sale is an after consideration. In so far as he is a true artist, he is trying to express his soul, rather than feed his body. Again such creation is like play, in that it seeks an ideal representation of the truth or the reality that forms the background of significance for the work of art. This is as true of the axe as it is of the statue of Apollo. Psychologically art production is like play, also, in that its ends are immediate rather than remote. The end of economic toil lies not in the toil, but in what the toil produces—the comforts of life

for those for whom one works; but the end of play is the playing itself. While the play goes on, its end is *being* realized; when it is done, its purpose *has been* realized. The same is true of artistic labor, for the self is being realized, the joy is being experienced as the work proceeds; when it is finished, the artistic "play" and its pleasure have been experienced. Hereafter even the artist has the æsthetic pleasure, not of the man producing, but of the man observing.

The conclusion from these considerations is that artistic education is a labor of pleasure, not of pain; that the young worker should be exalted by love of what he is doing, not depressed by painful routine or spurred on by compulsion of any sort whatever. When he sings he should do so from a full heart; when he draws or paints or moulds, he should feel his own inner being flowing out into the object of his creation.

This attitude of mind should be maintained so far as possible in the second-hand process of appreciating what has already been produced. The individual, in some degree at least, should feel the same sensations of artistic satisfaction that accompany production; he should feel his spiritual self

expand, as he finds in a poem forceful expression of feelings and views of life that he has perhaps dimly felt, but which he has not been able to formulate in full expression.

Do we need to study the meaning of a work of art? Undoubtedly, but we should not turn such study into drudgery or divorce it from its other half, the sensuous expression that makes it beautiful. Should we revel in the beauties of the expression, as in poetry or painting? Most assuredly, but not to the exclusion of the significance that transmits life and meaning to these otherwise inert or lifeless forms.

It is said that ignorant preachers sometimes work their more ignorant congregations into an ecstasy of religious fervor by swaying back and forth, and exclaiming *Oh! Oh! Oh!* with all degrees of pathos, of horror, or of hope. Exclamatory æsthetics is in no sense superior to exclamatory religion. Both lack the content of significance; indeed, exclamatory æsthetics is rather the worse, since the *Oh's* of religion might be considered a species of instrumental music, playing upon the feelings, although not enlightening the understanding; whereas most art worthy the name

has a distinct content that may be formulated more or less adequately in language.

Hence, not tears in the production or in the appreciation of the beautiful, but rich, full and abiding pleasure!

B. CONCERNING NATURE

The first basal idea in the appreciation of nature is that of significance. This takes two chief forms, as follows:

(1) That of *function* in organic objects, as in flowers, structure of plants and animals, modes of growth, and the like.

(2) That of the action of natural forces, as in the fall of water; the formation of ice and snow; the weathering of rocks, hillsides, mountains; the action of waves, avalanches, volcanoes, earthquakes, etc.

Naturally, the place to acquire this insight is in the nature-study and science classes. When the circulation and the forms of water, for example, are once understood, the pupil is then in condition better to get a first-hand appreciation of the æsthetic value of the wonderful phenomena of nature connected with them—the forms and movements of clouds; the fall of the rain; the spring, the

rill, the creek, and the river; the foaming cascade; the majestic onward sweep of the waters; the crystals of snow and ice. He is, moreover, by this first-hand æsthetic view of nature in better condition to appreciate the literature and painting that draw so freely upon them.

The second basal idea in the æsthetic appreciation of nature has to do with two things, as follows:

(1) Adaptation of form to function, as already explained in previous sections. This includes, of course, regularity, symmetry, harmony, unity in variety, proportion, etc.

(2) Colors.—The colors of nature are worth studying, not only for the direct first-hand pleasure they yield, but also for the bearing they have upon the use of colors in the arts, especially in interior decoration, and the color-harmonies of clothing. Two things especially are to be observed: (*a*) That bright and obtrusive colors always have a background of subdued color, also that these brilliant displays are not constant, but periodic and brief. (*b*) That this sober background is subject to constant variation, due to the wind, the season, and the ever-varying quantity and quality of light.

Taking up the matter of the color background first, we observe that this changes with the season. Compare the fresh, tender greens of early spring with the darker ones of summer, and the browns, russets, yellows, and reds of autumn, and, finally, with the dark wood-colors of winter. The eye has been so developed that we can find pleasure in all these stages, except perhaps the last, to which for one reason or another most persons are not sensitive. Perhaps the massiveness of the sensations from the white of snow dulls us to minor harmonies of landscape colorings. We notice, further, that our color background of whatever season undergoes perpetual change. It is not one unvarying mass of green like a wall, but to the eye that has been taught to see, it reveals the most varied scene of beauty. The wind tosses the branches of a tree, and its whole aspect changes, for every leaf, like a mirror, reflects its bit of light at a new angle or from a different surface. When a breeze sweeps over a grainfield, the eye is greeted by great billows of colored light. Even the close-clipped lawn, which might be presumed to have but one color, is subject to variation with every change of sunlight,—at dawn, midday or

twilight, or when the vagrant summer clouds cast their moving shadows upon it. Though subdued in comparison with the brilliant but transient blooming-time, the colored background of nature deals in colors of a purity that art cannot rival, besides having the charm of infinite variety. These facts attest the advantage of enjoying color at first hand; also the unnecessary and lamentable loss when men are indifferent to the most impressive beauties of nature.

We know what biological purpose the brilliant colors of blooming-time serve, but what æsthetic lesson do they teach? Evidently this: Brilliant colors need a soberer background. A bright red dress, like a bed of flaming red flowers, might be a decorative object upon a green landscape; but it would be less pleasing in a closed compartment. Even there for festive occasions and a brief flash of display it might be in good taste, as a moment of sunlight sometimes illuminates a storm-cloud, but as a permanent fixture it might have the same irritating effect upon men that it often has upon animals. Similarly a room whose walls are so obstrusive in color that there is nothing brighter to relieve and adorn them becomes painful in its over-

excitement of the nerves of sight. The masses of color in houses, as in fields and forests, should be subdued, however pure and rich they may be. They then form a background against which pictures and their frames, mouldings, and other decorations may appear to advantage. The same principle holds for dress. If the whole is a flaring decoration to a room, it sacrifices its own inherent beauty and suitableness, and is nothing more than a flower-bed on a lawn. The dress of a person, like the person himself, should be individual, having its own contrasts, variety, and unity. A dress may have decorations, but it should not degenerate into a decoration for a compartment or a landscape.

Art teachers know how to teach children and older persons to distinguish, mix, and balance colors; even primary pupils produce more or less natural color effects in landscape representation, and they make designs also in color. Teachers know about color harmonies and contrasts, about hue and value and chroma, intensity, purity, tints, shades, etc. This work is begun in the kindergarten, but it is never complete until the great first-hand color-lessons of nature herself have been learned and applied.

C. CONCERNING THE USEFUL ARTS

Here again we have the two fields, creation and appreciation, with their mutual relations. Appreciation is always brightened and quickened by efforts at construction. A problem in the latter involves the questions of general suitableness, the function and consequent form of each part and its relation to the other parts. It is here that free-hand and mechanical drawing are of supreme importance, for they are plastic to the touch of the young artist, and designs may be changed again and again before they assume the shapes that are to be fixed in solid materials.

Not only may appreciation be furthered by efforts at construction, but both may be greatly aided by comparison, arrangement and rearrangement of articles already produced, such as the furniture of rooms, pictures for its walls, household implements for kitchen and pantry, dishes, silverware, linen for dining-room and other tables, for bathroom and chambers. Not only should these objects be examined in isolation, but they should be seen in their proper relations when in actual or ideal use. Every large school

should have supplies of such articles and places in which they can be used. The pupils, perhaps in groups, should have frequent opportunities to experiment with them, trying the effect first of this and then of that display. Criticism of teachers may lead to improvement, until in the end the kodak may be called upon to make a permanent record of what has been accomplished. On special occasions it may be quite possible to have public exhibitions of such examples of good taste, when the often meager supplies of the school may be supplemented by others borrowed from homes and stores.

When the resources of a neighborhood are utilized to their utmost, then pictorial illustration may be called upon to supplement them. Opening two or three recent magazines, I find, among dozens of other helpful pictures, the following: A woman watering her flowers; a maid in handsome kitchen costume stirring up a batch of biscuits; another still more attractive polishing a mirror; another making a cup of bouillon; a model bathroom; one side of a kitchen, showing arrangement of stove, cabinet, and sink; arrangement of wash-tubs in a laundry; a revolving "silent waitress" for the dining-

room table; mission furniture; new electrical apparatus for the table; man in his easy chair; craftsman houses; model candle shades; handsomely dressed young lady with her hand in her hair, apparently just waiting for "something"—very beautiful, she ought to have it; a dining-room table set for afternoon tea, with chairs and other accessories at hand; washing-machines in use; a parlor scene; girls in attire that need not be discussed; spoons; roast of beef, with accessories, cooked in a paper bag; a vacuum-cleaner; aluminum ware; lamp-shades; cut-glass; pretty girl with a poodle advertising a massage cream; beautiful costumes; old gentleman at table, evidently well pleased; well-dressed girl at piano; equally well-dressed young men, thinking about their clothes; plenty of automobiles; girl with conical broad-brimmed hat, ornamented with a feather duster, such as Seminole Indians wear; automatic pistols, warranted to kill everything in sight; "fairies" of the soap-kettle; holeless socks; bookcases; men at lunch in a parlor-car; a family enjoying a Victor record; books, engines, mattresses, eye-glasses, kodaks, etc.

All these things are represented in the advertisements. In the body of the magazines

are shown many works of art from daily life, illustrating how people look and behave in diverse trying or delightful situations. Some of the art is atrocious, some of it just bad, but much of it is good. It is also a kind of art that people are willing to pay for. It is said that a Chicago artist commands a salary of thirty thousand dollars a year for his cartoons. Such illustrative material is abundant and may be had for the asking.

However earnest or practical the vocational preparations of the young may be, whether they pertain to the house, the shop, or the field, they always have their æsthetic side, so that he who attains an æsthetic view of this part of the world has, without money and without price, one of the purest sources of joy known to man.

D. THROUGH POETRY

That poetry properly selected and presented is one of the greatest agencies for the acquisition of an æsthetic view of the world, is not only asserted by those who should know, but is almost self-evident upon reflection; for that is just what poetry itself is—an æsthetic view of the world. Poetry

takes the truth of human experience and clothes it in sensuous forms that appeal to the soul through eye and ear and fancy. Consider for a moment its cadences, its rhythms, its rhymes, its figures of speech, its appeal to color and form and action in nature; the mirror that it sets before the mind, in which one can behold all that he ever thought or felt or imagined, or can be led to think or feel or imagine; its musical play upon every emotion that moves across the stage of consciousness; its gleams of fancy, the fires of its patriotism, the ardor of its love, the intensity of its feeling concerning the important things of life and death. What is there lacking to stir the fluid depths of youthful thought and feeling? What more glorious instrument of vision into the world of beauty could be imagined?

Yet with all these advantages, poetry as taught, though it always reaches a few, still often fails to reach the many. Girls are disposed to be rather fond of poetry at all times, but boys are generally unresponsive to it; youths are more susceptible, especially when they begin to fall in love, but most of them soon forget it, ignore it, or condemn it, as the case may be. They are likely to

class it with perfumes, frivolities, sentimentalities, and a general flabbiness of mental make-up. Others have a theoretical respect for it as for most art, but are not moved by it. One economic philosopher declares that the Sistine Madonna always makes him think of poverty and its miseries, since the bare feet convey these suggestions to him. He goes to sleep if Shakespeare is read to him; he has for poetry, in short, absolutely no response, except that of impatient discomfort of mind. He wishes this were not so, but regrets to say that it is.

Teachers of English literature should be the first to discover the difficulties in this situation and to overcome them. It may be that the layman can make no suggestions that will be helpful, but a few may be ventured:

I. POETRY VS. POESY

In the first place, should we not, especially for the adolescent distinguish between *poetry* and *poesy*? Poesy, often called *gentle poesy*, attempts to make up by saccharinity for what it lacks in substance; it changes sentiment, which is wholesome and natural,

into sentimentality, which is artificial and unwholesome. It revels in such adjectives as *sweet, soft, gentle, sad, wan, languorous;* it conjures up romantic or impossible scenes, as silly as they are artificial; it has often a surfeit of classical allusions, which are intended to sweeten the poem, but which only sicken the reader. *A gentle knight is pricking o'er the plain; a love-lorn maid is praying to the moon; tears are being crystallized, pierced, strung on a thread and worn for amulets,* and so on. Healthy-minded youth interested in realities properly rejects what is here derisively termed *poesy.*

II. PSYCHOLOGICAL SEQUENCE

Should we not be on guard against mere psychological sequence in verse, where one thing suggests the next, and this the third, and so on until both writer and reader are exhausted? It is comparatively easy for a writer to acquire what is called a "fatal facility" in making such rhymes. The psychological sequence, like the garrulity of extreme age, is helped on by similarities in sound, irrespective of sense. If such a writer has at the end of a line the word *years,* we

are pretty sure to find in the next the word *tears*, not because there is anything to cry about, or because the writer feels like crying, or because he wants to make the reader cry, but just because *tears* rhymes with *years* and no other word like *beers* or *biers* or *gears* or *smears* or *bears* or *here's* seems to fit in. So *tears* it must be, and the lachrymal glands are pumped whether they be full or empty. Pope's "Essay on Criticism" abounds in such examples—"the cooling western breeze" is matched by "whispers through the trees." The lachrymose out of place appeals to youth even less than the saccharine.

In English poetry, where the form is so elastic, those poems should be selected whose thought gives the unity that is necessary for an artistic whole. A modern writer confesses that he never can read Keat's "Endymion" through, but that he takes it up anywhere and submerges himself in its idyllic dreams much, it would seem, as the Chinaman smokes his opium! Irrespective of the merits of this poem, it is plain that "Endymion" and its like are not suitable for youth. The pipe dream is not for them, first because they do not care for it, and second, because at their stage of life it is not wholesome.

III. TOO MUCH FREEDOM

English verse appears to have but one universal rule—its lines must scan. If rhymes are used, they must be actual and not pseudo-rhymes. After these two things are attended to the bars are down. There may be as many feet in the line, or as many lines in the verse, as the fancy of the poet may suggest. The feet may be uniform throughout or varied and from line to line, the only requirement being that the tongue of the reader be not everlastingly tripping because of non-rhythmical order.

The sonnet, which was once Italian, but which has been English as well for some three hundred years, is about the only old verse form in which we acknowledge any restrictions except those mentioned. It must have fourteen iambic pentameter lines divided into two quatrains and one sestet. The orthodox Italian manner of rhyming is as follows: Two rhymes in the quatrains, arranged as follows: a b b a a b b a, while the sestet has three rhymes arranged c d e c d e. But Shakespeare and many other English writers ignore the Italian imperative, and rhyme in any order they please, a common

order being a b b a a b b a—c d c d e e. Some have alternate rhymes from the beginning with a couplet at the end. Other combinations are also practised. But owing to its compactness, the logical order of its unfolding, and its stately movement, the sonnet is hard to read and harder to write. Thousands of sonnets have been written, yet few of them are thrilling or greatly impressive or superbly beautiful. Each person doubtless has his favorites. Among those the writer loves most are Alice Maynell's "Renouncement," David Gray's "In the Shadows," Christina Rossetti's "Remember," and all but the first quatrain of Wordsworth's "The World Is Too Much With Us."[1]

The consequence of turning the young loose on English poetry[2] is that they are like mariners at sea without a compass, especially if any of them essay the writing of verse. About all they can do is to try to imitate something they like, provided it seems suitable to the type of thought they wish to express.

[1] Maynard's English Classic Series, No. 192. Maynard, Merrill & Co., New York.

[2] See Burton E. Stevenson's "Home Book of Verse," with its three thousand seven hundred and forty-two pages of short poems. Henry Holt & Co., New York.

There is, however, a set of verse-forms now thoroughly naturalized in English, although not much used except for the last thirty years, that were borrowed from the French in the early part of the nineteenth century. The French borrowed them from the troubadours of the twelfth and thirteenth centuries, when these forms were at the height of their popularity and perfection.[1]

Whatever may be thought of these forms, either as to their poetic quality or as to the range of their availability for English use, they have the great pedagogical advantage of definiteness as to rhymes and the number of lines to be used. They are all short, most have but two rhymes, nearly all have refrains whose position and length are determined by rule, while the number of lines is absolutely fixed. Nobody ever heard of a *triolet* that contained more or less than eight lines. If it had such variations it would not be a triolet.

IV. THE NEW DEFINITE VERSE FORMS

It is the writer's purpose to illustrate each of these new forms by verses of his own,

[1] For a full account, see Gleeson White's "Ballades and Rondeaus." Walter Scott, London.

not at all because of any merit they might be suspected to have, but rather as an encouragement to the teacher to try them himself and to encourage his pupils to do the same. Nobody will seek to identify a verse-writer with a poet, but because we may not now have, or ever attain poetic power, is no good reason why we should not have the satisfaction of playing with words in new and most charming ways. The author has not had so much fun since he last sailed on Biscayne Bay as he has experienced in writing these verses, in the effort to make expansive and elusive thought and sentiment fit the frames that have been furnished for them.

But whether or not teacher or pupil attempt the writing of these verses, which are as strictly limited in conditions as are propositions in geometry, his knowledge and appreciation of verse cannot but be enhanced by a study of them. Furthermore, whether successful or not, the attempt to keep within definite rules will give an insight into the technique of verse that could not easily be attained in any other way. These various forms will now be described briefly and illustrated.

1. *The Ballade.*

This is perhaps more than any other the parent form. It consists of three stanzas of eight lines each and an *envoy* of four lines. The last line of each stanza and of the envoy is a refrain. In a ballade with a double refrain, the first refrain is the fourth line of each of the stanzas, while the second is at the end as before, and the two refrains form the last two lines of the envoy.

A variation of the ballade consists of three stanzas of ten lines each and an envoy of five. The rules of the ballade are as follows: (1) The same set of rhymes in the same order they occupy in the first stanza must repeat throughout the remaining stanzas. (2) No word once used as a rhyme may be used again for that purpose in the whole length of the poem. (3) Each stanza and the envoy must close with the refrain. For the eight-line ballade, but three rhymes are allowable. The sequence is as follows: a b a b b c b c, for each of the three verses, and b c b c for the envoy. The sense of the refrain must dominate and express the meaning and spirit of the whole; it is the soul for which the body of the stanzas exists.

The envoy was originally a sort of invocation or dedication of the poem to the prince or dignitary to whom it was addressed, but now it seems more a summary of all that has been presented. Those who wish to try the ten-line ballade are referred to the Gleeson White volume before cited. It contains copious illustrations.

Here is a ballade with double refrain, suggested by that of Mr. Austin Dobson's on "Prose and Rhyme."

PLAY AND WORK

(Ballade—Double refrain)

When as boys we sigh though the sun is glowing,
And the school drags on with the clock's delay,
And the muscles twitch with the pains of growing,
Then it's hip! hurrah! we are off for play.
But though squirrel scold or fox-hound bay,
Be we white or black or Christian or Turk,
When the school-bell rings, with its tinkle gay,
Then it's come, lads, come, let's bend to the work.

When as youths we list to the cry, "It's snowing!"
And our lore-fed minds would their pains allay,
And the thought of home is the sum of our knowing,
Then it's hip! hurrah! we are off for play.
But when sports are done and the cost's to pay,
When action allures though its tasks may irk,
And our zeal comes back as the tide to the bay,
Then it's come, lads, come, let's bend to the work.

When as men we long for the breeze that's blowing,
For the thrush's song or the salt sea spray,
As a balm for strife and a rest from sowing,
Then it's hip! hurrah! we are off for play.
But though yacht entice with its sails of gray,
Or the mountain trout in the pool still lurk,
When the far call comes that we must obey,
Then it's come, lads, come, let's bend to the work.

ENVOY

Our respite from toil shall come when it may,
Then it's hip! hurrah! we are off for play;
But duties of life the brave never shirk,
Then it's come, lads, come, let's bend to the work.

2. The Rondeau.

The most popular form of the rondeau is that of Voiture. It is written throughout on two rhymes, being composed of thirteen rhymed lines and two unrhymed refrains. The lines are now nearly always of eight syllables in length, while the refrain generally consists of the first half of the first line. The thirteen lines are grouped in three stanzas, the first having five lines, the second three, and the third five. The refrain occurs at the end of the second stanza, and at the close of the poem. The usual order of rhyme is a a b b a— a a b (and refrain)—a a b b a and

refrain. The refrain is not counted in making up the thirteen lines. It is in the use of the refrain as an integral and inseparable part of the stanza that the chief neatness and the chief difficulty of the rondeau lies. It should be as natural as the Amen at the end of a prayer. In general the rondeau is suited to light and spontaneous sentiment, but it permits the graver sort as well. The whole must be a unit, rounded out and complete. The following illustration is offered:

MY OPALS

(Rondeau)

In fitful gleams, not false but true,
My opals shift their tints of blue,
And fan their reds to mimic fire,
Whose flames leap out and then retire,
As glints of green their lights renew;

But restless still, there comes to view
The deep, the bright, celestial hue;
'Tis thus these gems their truth attire
In fitful gleams.

I fain would think—ah! if you knew—
From those who gave comes good in you,
These fairy beams that I admire,
That flash and glow and then expire,
Are constant still, though ever due
In fitful gleams.

3. The Rondel.

Rondel is merely the old form of the word *rondeau.* Though the forms for the rondel vary somewhat, the most accepted one is that of two rhymes, fourteen lines, with a repetition of the first two lines as a refrain at the end of the first eight-lined stanza, and at the close of the second stanza of six lines. It is well suited to spirited description, while its success depends largely upon the first two lines. The following is an illustration:

I LOVE TO SAIL

(Rondel)

I love to sail on Biscayne Bay
Across the white-caps running free,
To taste the salt of flying spray,
And feel the sunshine over me;
From time's gray brood of cares I flee,
And then it is that in my play
I love to sail on Biscayne Bay
Across the white-caps running free.

Yes, o'er the brine I onward sway,
Till years and griefs are lost at sea,
And things that were are things that be;
Is it not plain why I should say,
I love to sail on Biscayne Bay
Across the white-caps running free?

4. The Roundel.

The roundel is also a modification of the roundeau and not a distinct form. It consists of three triplets with a refrain taken from the first line and placed at the end of the first and third stanzas. Again but two rhymes are allowed. They are arranged as follows: a b a (and refrain)—b a b—and a b a and refrain. Next to the triolet, this is perhaps the easiest poem for the beginner to use. If the first four syllables are happily chosen, the poem is naturally and easily written. Two illustrations are offered:

IN TENDER GRIEF
(Roundel)

In tender grief we think of her who died
These many years a-gone; her life, though brief,
Was filled with love; we now the time abide
In tender grief.

"*Ich liebe dich*," a sigh, and then relief;
How could she find the way across the tide
That stretches endlessly beyond the reef?

The years have flown; we work and play, yet hide
Deep in our hearts our fondly treasured sheaf
Of memories, and live through days that glide
In tender grief.

SLEEP, SWEETHEART, SLEEP

(Roundel)

Sleep, sweetheart, sleep; the sun's low down the west,
Across the lawn the drowsy shadows creep,
So in your crib like bird in downy nest,
Sleep, sweetheart, sleep.

Your pussie lies in slumber soft and deep,
The fluffy chicks have snuggled down to rest;
Lie still, dear one, nor through your eyelids peep.

Awake? Then lay your head upon my breast,
I'll rock, and sing your lullaby, and keep
You safe; then in my arms thus closely pressed,
Sleep, sweetheart, sleep.

5. *The Villanelle.*

White says the villanelle has been called "the most ravishing jewel worn by the Muse Erato." This may be true; it is certain that it takes as much grinding as a diamond to make it acceptable, and even then almost everything depends upon the refrains and their use. The following examples are offered with some reluctance, in the hope that they may challenge the reader to better them. As in most of these types, but two rhymes are allowed. The poem consists of five triplets

and one quatrain at the close. The first and third lines of the first verse must be used alternately to form the third line in the remaining triplets, and both must be used to conclude the quatrain at the close. In all there are, of course, nineteen lines. White offers many examples, and says that the villanelle is a favorite and widely used form of verse.

THE PARTING OF ROMEO AND JULIET

(Villanelle)

Ah, cruel hour when sings the lark!
But sweet to hear the nightingale;
The time is ours while holds the dark.

Juliet, farewell; for look and hark!
The rays of dawn light up the dale;
Ah, cruel hour when sings the lark!

It cannot be; for list! we mark
The unseen voice that thrills the vale;
The time is ours while holds the dark.

Sweet Juliet, no; behold! the spark
Of day still brighter glows, though pale;
Ah, cruel hour when sings the lark!

O stay! else love is lost like bark
On stormy sea without a sail;
The time is ours while holds the dark.

But fly! I see thee pale and stark!
For day draws near, which we bewail;
Ah, cruel hour when sings the lark!
The time is ours while holds the dark.

THE SENIOR'S FAREWELL

(Villanelle)

Farewell to college joys that fly,
That in their flight still dearer grow;
Good-by, to thee, Cornell, good-by.

I love the bells that chime on high,
But now their mellow tones ring low
Farewell to college joys that fly.

The fading glows that light the sky
To me the parting signals show;
Good-by to thee, Cornell, good-by.

O days of work and play, ye lie
Entwined with all I love below;
Farewell to college joys that fly.

Good-by, dear friends, for whom I sigh,
Whose hearts are warm through ice and snow;
Good-by to thee, Cornell, good-by.

Though other scenes the world supply,
And tides of friendship ebb and flow,
Farewell to college joys that fly,
Good-by to thee, Cornell, good-by.

6. The Triolet.

The triolet is a single stanza of two rhymes and eight lines, of which the first is repeated as the fourth, and the first and second together as the seventh and eighth. "It is well fitted for epigrams, and the weight of its significance rests upon the fifth and sixth lines, while the perfection of its execution lies in the skill with which the third line is connected with the fourth, and the final couplet with the line preceding it." If one has wit and ingenuity, there is a good opportunity to apply them in the triolet; and, in any case, it is a form to invite trial and to reward diligence. Grammar-school pupils should be able to write it with ease and growing success. A few illustrations follow:

A Quartet of Triolets on

WHAT HOLDS THE WORLD UP?

"It is Atlas, I think,"
Said Doris to Mabel.
"He must want a drink!
It is Atlas, I think,
He won't let it sink—
To hold it he's able.
It is Atlas, I think,"
Said Doris to Mabel.

"It's not Atlas at all!"
Wee Mabel replied.
"God carries this ball;
It's not Atlas at all,
For he'd let it fall,
If ever he tried.
It's not Atlas at all,"
Wee Mabel replied.

"'Tis Nature must hold it,"
Small Winifred said.
"I've often been told it,
'Tis Nature must hold it;
But how she has rolled it,
Does puzzle my head.
'Tis Nature must hold it,"
Small Winifred said.

Harry answered the lass,
"O, it holds itself up!
The inside's of gas,"
Harry answered the lass;
"It's a big rolling mass,
And it's *got* to stay up!"
Harry answered the lass,
"O, it holds itself up."

THE NEW AND THE OLD

"There's nothing new under the sun,"
Except what's made and that which grows;
Then this old saw of Solomon,
"There's nothing new under the sun,"

Must be reset, and thus must run:
"New things from old," for everyone knows
There's nothing new under the sun,
Except what's made and that which grows.

7. The Circle.

The Circle is a variation of the foregoing forms which the author ventures to offer as suitable for the description of events that move in cycles, such as the circulation of water, the procession of the seasons, etc. In harmony with the thought, the poem also returns into itself. This result is effected by the arrangement of the rhymes, and by the repetition of the concluding line of each stanza as the first line of the next. In reading the poem, therefore, one may begin with the second or any succeeding stanza, as well as with the first, for, since both thought and form return into themselves, there would be no break in either by so doing.

The rules for the circle are as follows:

1. Three or more stanzas of six lines each.

2. As many rhymes as there are stanzas, the first rhyme reappearing in the last stanza.

3. The last line of each stanza to form the first line of the next. The last line of the

last stanza, however, is the same as the first line of the first stanza.

4. The rhyming scheme is as follows:

(*a.*) For three stanzas: a b a b a b—b c b c b c—c a c a c a.

(*b.*) For four stanzas: a b a b a b—b c b c b c—c d c d c d—d a d a d a.

The following is an illustration:

THE SPIRIT OF THE SEA

(Circle)

In fleecy clouds that drift on high
And cast their shadows on the ground,
In mists that gather as they lie
Serene and white, and landward bound
To pour their waters from the sky,
The spirit of the sea is found.

The spirit of the sea is found
Incarnate in the winds that blow
And rains that fall with muffled sound;
And when these waters homeward flow
They ply again their ceaseless round;
From sea they come, to sea they go.

From sea they come, to sea they go—
The rains descend, the floods sweep by,
While from the ocean's plane below
The vapors rise to typify
The spirit of the sea we know
In fleecy clouds that drift on high.

BOOKS

RECOMMENDED FOR COLLATERAL STUDY

1. *History of Art* (Architecture, Sculpture and Painting).

REINACH, S.

Apollo. An illustrated manual of the History of Art throughout the Ages. Brief, scholarly and inexpensive. Charles Scribner's Sons, New York.

2. *Theory of Æsthetics.*

GORDON, KATE

Esthetics. Brief, clear and interesting.

3. *History of Æsthetics.*

1. BOSANQUET, BERNARD

A History of Æsthetic. This is perhaps the best and most scholarly history of æsthetics to be found in English. Though not an easy book to read, it is valuable for reference and gives much satisfaction to those who have read somewhat in philosophy. The Macmillan Company.

2. KNIGHT, WILLIAM

Philosophy of the Beautiful. 2 Vols. Volume I gives a concise and readable history of æsthetic theory from the earliest times. Volume II is an exposition of the nature of beauty, and an

application of this theory in the several fine arts. Both books were prepared for extension classes, hence are written in popular style. However, they are not superficial, but will well repay reading and study. Charles Scribner's Sons, New York.

4. *Color.*

VANDERPOEL, EMILY NOYES

Color Problems. A Practical Manual for the Lay Student of Color. The several chapters treat of color-blindness, color theories, color qualities, contrasts and complements, color harmonies, historic color, nature color and special suggestions. There are one hundred and seventeen color plates. As a first book in the study of color it is worthy of the highest praise. Longmans, Green & Co., New York.

5. *Decorative Arts.*

Read John Ruskin's chapter on the Nature of Gothic and the office of the workman therein in the second volume of the *Stones of Venice*; and William Morris's pamphlet on The Decorative Arts; their relation to Modern Life and Progress. London, Ellis & White.

6. *Development of Dress.*

WEBB, WILFRED MARK

The Heritage of Dress. An illustrated account of the development of dress. The McClure Company, New York.

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