FORM

(A STUDY OF ITS RELATION TO AESTHETICS AND TO LIFE)

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UNITY IN DIVERSITY.

In approaching most branches of knowledge it is possible to master the basic principles by a study of the established authorities. Such authorities will be found to be in agreement upon a central core of fact and theory. Their differences will generally be discovered about the growing edge of their subject, or in matters where the accepted theories are to be applied to specific problems. The beginner must of necessity preserve an attitude of proper humility and exercise his critical powers only on the controversial fringe of the subject.

In Aesthetics there are writers of eminence, but since these writers disagree with one another with remarkable completeness they may hardly be termed authorities. Croce, Santayana, Dewey, Clive Bell, and Eric Gill all have vital and valuable things to say, but the common ground of agreement between them is, at least superficially, very small. These men all have minds of great range and penetration, they are sensitive, they know beauty and thrill to it, they express themselves cogently and they come to different conclusions.
The beginner has thus practically no body of accepted theory upon which to build. He is compelled therefore to take the advice of Herbert Spencer, and look for the common assumptions, whether implicit or explicit, upon which all are agreed. Where, as in this case, the area of disagreement is so extensive, the common assumptions will be found to be very general and of extreme simplicity.

There is one principle which runs like a thread through Aesthetic theory from the very earliest times, that of Unity in Diversity or Unity in Complexity. Not always stated in these words, it recurs at least implicitly in Aesthetics from the time of Aristotle to the present day. It provides the central principle in the Aesthetics of a religious mystic like Plotinus, plays an important part in the theories of the expressionist Croce, and is refined and qualified but not denied by the pragmatist Dewey.

Here, apparently, is a principle of considerable validity and generality, one which should provide an excellent starting point for our study.

E.F.Carritt summarizes the position of Plotinus thus: "Physical beauty then will be the unification of the formless multiplicity of matter by the unity of some essential character". Plotinus himself in the Enneads says," For everything that is formless, though its nature admits of form and essential character, so long as it is devoid of rationality and essential character is ugly and excluded from the divine and rational. That is the absolutely ugly.
But a thing can also be ugly if it be not completely mastered by form and rationality, but when essential character has been added to a thing so as to make it one by organizing its parts, it confers system and unity of plan and makes the thing coherent. For, since essential character was one, that which was formed by it had to become one, so far as the multiplicity of its parts allowed. Beauty is then enthroned upon the unity thus created, conferring itself both upon the parts and upon the whole.  

The following quotation from Aristotle is not quite so explicit, but the insistence upon unity in a whole of diverse parts is obvious enough. "For an animal or anything else made up of parts to be beautiful it must not only have these parts ordered, but must have a certain magnitude. For beauty consists in proper order and size. So neither could very small creatures be beautiful since our perception of them becomes confused as it approaches instantaneousness, nor again could a very large one, say a thousand miles long. For here we do not see it all at once, but its unity and wholeness escape our eyes. Just as a beautiful physical body or living thing then, must have a certain size, namely one that can be easily comprehended at a glance, so a plot must have a certain length, namely, one that can be easily remembered."  

1 Philosophies of Beauty p 55  
2 ibid p 32
The principle is specifically stated once again in Francis Hutchison's little treatise on Beauty and Virtue published in 1725. "The figures which excite in us the ideas of Beauty seem to be those in which there is Uniformity amidst variety. There are many conceptions of objects which are agreeable upon other accounts, such as Grandeur, Novelty, Sanctity and some others which shall be mentioned hereafter. But what we call Beautiful in objects, to speak in the mathematical style, seems to be in a compound ratio of Uniformity and Variety."

Croce accords this principle a very important place in his theory. "What is art? I reply in the briefest and simplest terms that art is vision or intuition. The artist produces an image or a dream and those who appreciate his art turn their eyes in the direction he has indicated, look through the keyhole which he has opened and reproduce in themselves that image.---But it may be asked, what place can there be in man's mind for a world of pure imagination, without philosophical, historic, religious or scientific truth, without even moral or hedonistic value? What can be more futile than to dream with our eyes open, in a life that needs not only open eyes but open mind and active spirit. Mere imagination, we have no very flattering names for the man who lives upon that, we call him dreamer, and

---Beauty and Virtue Francis Hutchisons p. 17
often as not idle dreamer. — In truth, intuition is the creation of an image, not of a mass of incoherent images produced by calling up old images and letting them follow one another at random, or at random combining them together—a man's head with a horse's body—as in a childish game. It is to express this difference between intuition and fantasy that the ancient poetics chiefly used the idea of Unity, requiring that every work of art should be simplex et unum, or the allied idea of Unity in Variety according to which the manifold images should find a focus and be absorbed in one complex image. What we admire in genuine works of art is the perfect imaginative form in which a state of mind clothes itself; that is what we call the life, the unity, the fulness of a work of art. What offends us in false or faulty work is the unresolved discord of different moods, their mere superimposition or confusion or their alternation, which gets but a superficial unity forced upon it by the author, who for this purpose makes use of some abstract idea or plan. — What gives unity and coherence to intuition is feeling. Intuitions are truly such because they represent feeling and only thence can they arise."

Croce's position might be summarized somewhat in this way: Art is expression of feeling. Expression means its embodiment in some sensible medium. This embodiment is the work of the creative imagination which imposes Unity upon the complex elements involved. Garritt rather pithily puts it, "Emotionally coherent imagination". Unity in diversity is thus an essential part of his theory.
The very widespread authority of this principle is shown by its unquestioned acceptance by a noted psychologist in connection with certain problems of human conduct. Wm. McDougall used these words in his, "Social Psychology". "Not all admiration is aesthetic admiration, but, if the object that we admire on account of its strength or excellence of any kind presents a complex of harmoniously organized and centralized relations and activities, the mere contemplation of it pleases us, in so far as we are capable of grasping the harmony of its complex features".

As a principle in musical criticism the significance of the Unity in Diversity concept has been realized very completely and stated most cogently by Sir Henry Hadow. "Now the highest type of formal perfection which our minds are capable of conceiving is that of Unity in Diversity. The discovery of this principle in nature as a whole was the main problem of Greek philosophy, its discovery in different departments of nature is the entire problem of modern science. Knowledge is the unification of isolated facts under a single law. Truth, which is the correlative of knowledge finds its climax in the existence of law and the interrelation of facts. More especially is this the case with that particular form of unification which we call organic, that is, in which the details are absolutely diverse.
in character, but all play interdependent parts in one single economy. The organism is not only our supreme example of physical structure, it is the type of all human society and all natural order.

Again, our great evolutionist philosopher has told us that an organism must possess three main attributes. First it must be definite, clear in outline, complete in substance and filling with unbroken continuity the fixed limits by which it is circumscribed. Secondly, it must be heterogeneous, composed that is of a plurality of parts each of which has its own special function and no two of which are interchangeable. Thirdly it must be coherent, holding this plurality in exact balance and equipoise so that each part, incapable by itself of maintaining the whole body, is yet essential to the due health and efficiency of the others. Illustrations of this principle are the primary facts of biology. They may be traced in steady gradation from the earliest and most rudimentary forms of life until they culminate in the ordered complexity of the human frame.

And a line of similar development runs through all political history from the primitive tribe to our present civilization.

—When we speak of a great picture, a great poem, a great novel we mean one that groups its diverse elements around a central principle, one in which variety is never chaotic and unity never monotonous."

"Studies in Modern Music.
Modern Composers. Sir H. Hadcock. p 34."
This last quotation is somewhat double edged. It shows the significance of Unity in Diversity, not only as a principle in Aesthetics but in every aspect of life. Unity in diversity is a characteristic of all wholes but not all wholes have an aesthetic appeal. An old Model T Ford is a complex whole, has unity in diversity, but few I think would claim that it is particularly beautiful. John Dewey remarks: "There is an old formula for beauty in nature and art: Unity in Variety. Everything depends upon how the preposition "in" is understood. There may be many articles in a box, many documents in a safe, many figures in a single painting, many coins in one pocket. The unity is extraneous and the many are unrelated. — There is nothing more diverse than furniture scattered about a side walk waiting for the moving van. Yet order and serenity do not emerge when these things are forced together in the van. They must be distributed in relation to one another as in the furnishing of a room to compose a whole".

The concept thus requires to be qualified and refined. As it stands it covers too much ground. It is true, I believe, that all aesthetic objects are characterized by Unity in Diversity but many wholes are far from beautiful. It is only as Unity in Diversity becomes a factor in that highest of all types of Integration, Form, that it plays a part in Aesthetics.

1. Art as Experience. p160.
EXCELLENCE AND PERFECT FITNESS.

Excellence and Perfect Fitness are two closely related Aesthetic principles with a history almost as venerable and as persistent as Unity in Diversity. They have, moreover, the advantage of being clearly and directly supported by everyday experience. There is an element of high excellence, an approach to perfection in any object or action to which we give the name beautiful. A young painter is reputed to have shown one of his works to Whistler with the remark, "Do you not think that it is a tolerable picture"? Whistler's reply was, "Sir, did you ever eat a tolerable egg?" If a work of art is not clear in conception and sure in execution, if in our judgement it falls short of remarkable excellence we feel that it does not justify its existence. An aesthetic experience is certainly bound up in a very intimate way with a judgement of complete 'rightness' and remarkable excellence.

Particularly in the simpler crafts is this principle obvious. Craftsmanship is simply a continual striving after perfection and masterly workmanship is invariably an ingredient in the beautiful product. Slovenly workmanship and aesthetic appeal are utterly incompatible. They never have and never could live together. And this is just as true of the fine arts, although of course it does not tell the whole story. "The chief conscious concern of the artist
is therefore with labour in the interest of perfection"\(^1\) says Max Schoen.

Perfect fitness is of course a particular aspect of excellence but one with such great aesthetic significance that it is often stated alone. "After all, perfect aptitude, unobtrusive efficacy of service, are qualities so delightful, so life enhancing that if you cannot call them beauty, you must invent another name"\(^2\) writes Basil de Selincourt in the London Observer. John Dewey says, "In some sense the typical shape of even a utensil and tool indicates that the meaning of the whole has entered into the parts to qualify them. This is the fact which led some theorists like Herbert Spencer to identify the source of beauty with efficient and economical adaptation of parts to the function of the whole. Indeed in some cases fitness is so exquisite as to constitute visible grace independent of any thought of utility".\(^3\) I might mention a racing yacht, or a well bred Clydesdale horse as illustrations.

Socrates appears to have been a very uncompromising supporter of this principle. Xenophon reports the following dialogue in his Memorabilia. The speakers are Aristippus and Socrates.

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1. Art and Beauty, p. 72.
2. London Observer. Date unknown.
Arist. But how can a thing, unlike what is beautiful be beautiful?

Soc. Why, because a man who is a beautiful runner is unlike another who is a beautiful wrestler, and a shield which is a beauty for defence is as different as possible from a javelin which is a beauty for speed and power.

Arist. You answer me just as you did when I asked whether you recognized anything as good.

Soc. Then do you think that good and beautiful are two different things? Don't you know that whatever is beautiful is also good from the same point of view.

Arist. Why then is a dung basket a beautiful thing?

Soc. Of course it is, and a golden shield is ugly if the one be beautifully fitted to its purpose and the other ill.

This same homely, somewhat earthy quality appears in a remark attributed to Socrates in Plato's Hippias Major. "But my good man, what about a beautiful porridge pot? Has that no beauty then? --- If the porridge pot is turned out by a good potter, smooth and round and well baked like some of those beautiful two handled porridge pots, the lovely six pint size— if that is the kind of porridge pot in question we must allow it to be beautiful".

1 Philosophies of Beauty p.1

2 ibid. p.5
More recently Bishop Berkeley has argued at some length that perfect fitness is the foundation of beauty. His argument in The New Alciphron is in the form of a Socratic dialogue between Euphranor and Alciphron. Since, however, the former unfolds the entire argument, while the latter interpolates conventional expressions of agreement, it will make for easier reading to allow Euphranor to develop his reasoning without interruption.

"Alciphron after a short pause said that beauty consisted in a certain proportion or symmetry pleasing to the eye.

Euph. Is this proportion one and the same in all things or is it different in different kinds of things?

Alc. Different doubtless. The proportions of an ox would not be beautiful in a horse. And we may observe in things inanimate, that the beauty of a table, a chair, a door consists in different proportions.

Euph. Doth not this proportion imply the relationship of one thing to another? And are not these relations founded on size and shape? And to make proportions just, must not those mutual relations of size and shape in the parts be such as shall make the whole complete and perfect in its kind? Is not a thing said to be perfect in its kind when it answers the end for which it was made?
Euph.(cont) The parts therefore in true proportion must be so related and adjusted to one another that they may best conspire to the use and operation of the whole. The beauty, therefore or symmetry of a chair cannot be apprehended but by knowing its use, and comparing its figure with that use, which cannot be done by the eye alone, but is the effect of judgement. It is therefore one thing to see an object and another to discern its beauty". The argument is developed still further in the following extract. Euphranor is still speaking: "Tell me Alciphron, is there not something truly decent and beautiful in dress? Are any likelier to give us an idea of this beauty in dress than painters and sculptors whose proper business and study it is to aim at graceful representations? Let us then examine the draperies of the great masters of these arts. Cast your eye on those figures (said he, pointing to some prints after Raphael and Guido that hung upon the wall) what appearance do you think an English courtier or magistrate, with his Gothic succinct plaited garment, and his fall bottomed wig; or one of our ladies in her unnatural dress, pinched and stiffened and enlarged with hoops and whalebone and buckram, must make among those figures so decently clad in draperies that fall into such a variety of natural and easy folds with so much dignity and simplicity, that cover the body without encumbering it, and adorn it without altering its shape?
And what do you think this proceeds from? Whence is it that the Eastern nations, the Greeks and the Romans, naturally ran into most becoming dresses; while our Gothic gentry after so many centuries racking their inventions, mending and altering and improving and whirling about in a perpetual motion of rotating fashions have never yet had the luck to stumble on anything that was not absurd and ridiculous? Is it not from hence— that instead of consulting reason, use and convenience they abandon themselves to irregular fancy the unnatural parent of monsters. Whereas the ancients considering the use and end of dress made it subservient to the freedom, ease and convenience of the body and, having no notion of mending or changing the natural shape, aimed only at showing it with decency and advantage.—In effect have we not learned from this digression that, as there is no beauty without proportion, so proportions are to be esteemed just and true only as they are relative to some certain use and end, their aptitude and subordination to which end is, at bottom, that which makes them please and charm.

Another eighteenth century writer, Thomas Reid, expresses similar opinions more briefly and with an important modification, pointing out that our response to excellence and perfect fitness may be direct rather than the result of conscious ratiocination. "A work of art may appear beautiful to the most ignorant, even to a child. It pleases but
he knows not why. To one who understands it perfectly, and perceives how every part is fitted with exact judgment to its end, the beauty is not mysterious; it is perfectly comprehended; and he knows wherein it consists, as well as how it affects him. Internal taste ought to be accounted most just and perfect when we are pleased with things that are most excellent in their kind. In some cases, that superior excellence is distinctly perceived, and can be pointed out; in other cases, we have only a general notion of some excellence which we cannot describe.--- In every species, the more perfectly any individual is fitted for its end and manner of life, the greater is its beauty".

Today these same principles have a very doughty champion in Mr.W.R.Lethaby. His opinions may not have the systemization of Philosophy and at times he confuses that of which he approves with that which he finds beautiful. But he is a man passionately engaged in trying to open people's eyes and make Beauty an active and powerful principle in civilization and he does show, with sanity, clearness and strength wherein lies the beauty of simple things. His opinions have great pragmatic validity, they work in daily life, which cannot always be said of some of the more impressive systemizations. His comments are worth quoting at some length, if for no other reason than to show how vital and aggressive the attitude of Socrates towards beauty still remains in the modern world.

Philo{}sophies of Beauty p 100
"Art is high competence in doing what is worthy to be done". Art is the element of good quality in all production. Beauty in art is evidence of high humanity in work. Appreciation of beauty should be one with our judgement of essential quality. Design is not some curious contortion of form or some superadded atrocity, but it should rather be conceived as the fitting of means to ends in the production of works which are good each in their own order. "Beauty is a necessary function of fitness; Beauty is the smile of Health. "Style in a reasonable and universal sense—inter-penetrates the whole texture of a work, it is clearness, effectiveness, mastery. "We confuse ourselves with these unreal and destructive oppositions between the serviceable and the aesthetic, between science and art. Consider any of the great forms of life activity, seamanship, farming, housekeeping—can anyone say where utility ends and style order, clearness and precision begin?

1. Form in Civilization, W. R. LeMaitre, p 38
2. p 167
3. p 50
4. p 145
5. p 13
6. p 9
INTRODUCTION TO FORM

Allowing the principles of Excellence and Perfect Fitness to modify the principle of Unity in Diversity we come very close to the concept of Form. The Unity in Diversity principle simply means, unless we read into words more than their ordinary meaning, that Beauty is a quality of wholes. Now certain kinds of very excellent wholes make such an appeal to us that we get intense pleasure out of merely contemplating them. We neglect, for the time being, to consider them from the point of view of their utility, we do not consider what practical benefits they may bring to us. Rather we delight in, "the thing in itself". Such objects have Form, and such delight is the elementary Aesthetic experience.

Now the nature of Form is not the easiest thing to define. Particularly in the modern world with its machinery and its countless materials from which things may be made, many very cheap effective and serviceable things are far removed from Form. If we define Form as the quality of a whole excellently adapted to its function we can quickly think of many objects which satisfy the definition but which are far from being beautiful, which give us no pleasure to contemplate as "things in themselves".

A very valuable definition so far as the works of man are concerned is: "the perfect embodiment of an idea in a sensible medium", but that would involve us in endless controversy as soon as we tried to apply it to natural
forms, since it implies the existence of a planning intelligence as the moving force of the universe. A short thesis in Aesthetics is not the place to make far reaching assumptions regarding the nature of the Absolute. The closest approach that I can make to a satisfactory definition is this: Form is the intrinsic excellence of Wholes. The word intrinsic is important. So many of our efficient and serviceable modern products are not beautiful because all manner of extrinsic considerations control their shape, ease of manufacturing, cheapness, sales appeal and the like. It is only when an object is made with a singleminded regard for intrinsic excellence that Form emerges.

This definition also raises the question of the meaning of Excellence. A few important points may be established immediately.

Excellence is not a subjective value but an objective quality of wholes. In its universal sense it is practically synonymous with survival value. The wholes which have survived the vigorous pounding of natural forces, the organisms which have succeeded in the struggle for existence, the things discovered and made by man which have earned the right to persist have qualities which are excellent in a fundamental and permanent sense. Coherence, stability, resilience, harmonious functioning of the parts in the
interest of the whole, economical adaptation of means to end are excellent properties of Wholes apart altogether from the changing opinions of man. They are the fundamental conditions of persistence in a universe which destroys very ruthlessly.

One thing can be said quite confidently; there is no Form in the absence of these Universal excellences.

However, an abstract treatment of this topic will not take us very far. It is necessary to consider the nature of Form by studying examples and discovering their peculiar characteristics. It will, moreover, be wise to choose simple examples.

Much of the confusion in Aesthetics is due, I believe, to the fact that it has been founded too frequently upon the Fine Arts and the works of Genius. Such works are immensely complicated. They are the products of unusually rich and talented personalities. To commence the study of Aesthetics with them is rather like attempting to discover the basic laws of chemistry from a study of the coal tar derivatives. The simple elementary manifestations of Form must provide our starting point. From them we may gain some insight into its nature and its laws which may then be applied, with some hope of success to more complicated cases.
As John Dewey says: "The sources of art in human experience will be learned by him who sees how the tense grace of the ball player infects the onlooking crowd, who notes the delight of the housewife in tending her plants and the interest of her goodman in tending the patch of green in front of the house, the zest of the spectator in poking the wood burning on the hearth and in watching the darting flames and crumbling coals." And further: "The intelligent mechanic engaged in his job, interested in doing well and finding satisfaction in his handiwork, caring for his materials and tools with genuine affection is artistically engaged. The difference between such a worker and the inept and careless bungler is as great in the shop as in the studio."

Lethaby expresses a similar point of view with characteristic vigour. "Beauty has been ground to dust in contradictory theories of Aesthetics. Indeed some books on this simplest and sweetest thing, Beauty, must make the animals glad they have not learned to read.---This art about which such elevated yet confusing things may be said when it is considered at its remoter end as genius, emotion, and poetry, at its nearer end is just good workmanship, quality, skill, fitness and rightness in all things done and made.

1 Art as Experience p 5.
2 Art as Experience p 5.
3 Form in Civilization p 16.5.
Form in Sport.

("Fortunately people are artists who know it not—bootmakers (the few left) gardeners, and basket makers, and all players of games. We do not allow shoddy in cricket and football, we reserve it for serious things like houses and books, furniture and funerals)"

The idea that Form should be considered in its simplest and best known manifestations leads us directly to the consideration of sport. Here the movements of the expert inevitably display a smooth harmonious coordination, a logical, intrinsic unity and a fine economy which make them truly delightful to watch. Here are examples of Form which appeal to, which are understood by, nearly everyone.

Watch the real golfer as he makes his stroke. The man is perfectly poised and controlled, his body acts as a strong, coherent, sensitively adjusting whole, the action is smooth, effortless and accurate. So much is obvious to the observer. The player can tell you more. A perfect shot is the perfect expression in action of an idea. The shot is imagined before it is played. To have the 'right idea' is absolutely necessary if progress is to be made in any sport. The perfect shot in golf or tennis, the running of
a perfect race, is a victory for 'Mind!'

The actions of the runner, the jumper, the swimmer and the tennis player all rise to the level of 'Form'. Think of the rhythmic grace, the economy of motion, the smoothness and the perfect timing of a first rate tennis player. Notice the assurance and accuracy with which he makes his shot, and the intelligence with which he plans it. Here is, "The perfect embodiment of an idea in a sensible medium"; here is an example of "Intrinsic excellence" in a very complicated "Whole". We are not misusing language when we call such an experience Beauty, our appreciation is the true Aesthetic delight in "the thing in itself".

Now the mind in achieving these excellent results is not too aggressive or domineering. It is victorious over the ineptitude of the untrained body partly as the result of discovery. It is necessary to discover how to let each part of the body make its characteristic contribution in its own way. The natural functioning of the muscles must be used together with the natural rhythms of the body. Relaxation and a sense of freedom must be retained. There is no violence in Form. The problem is, paradoxically, control through freedom. Motions which give the freest and most efficient play to the muscles but which at the same time can be accurately controlled and coordinated must be discovered. The function of the mind is not that of a ruthless dictator but that of a tactful coordinator, knowing precisely what it wants but willing to study carefully each part of the whole so that it may make its characteristic contribution.
in its own way. Any coach will agree that a little intelligence and understanding is more effective than a great deal of mechanical practice.

Of course training, practice, determination are necessary. But in sport, as in any other activity resulting in Form, it will be found that sensitive responsiveness to reality must work harmoniously with persistent determination.

To summarize, the characteristics of Form in sport are these: A complex series of motions must be completely Unified by an Idea; the actions must be perfectly coordinated and must utilize the natural rhythms of the body and the natural characteristics of its parts; it must be harmonious and free from strain and as a result give that sense of ease, that effortless effectiveness which is characteristic of expert play of any kind.

Form in sport must not be confused with formalism. Form is essentially a personal thing and must be discovered afresh by each individual. Instruction is valuable but it has to be assimilated and adapted by the individual. The usual experience is something like this: the instructor tries to describe the right way to perform the action; the pupil feels clumsy and hopeless in his attempt to imitate. He goes home and at the back of his mind the instructions are at work. He visualizes the action made according to the instructions, imagines the kinaesthetic sensations, and in thought the thing becomes reasonable. The next day his
attempts to put the new idea into practice are much more successful. This process of imaginative mastery in which one makes a new idea one's own always leads to slight personal variations which are healthy and necessary. Any attempt to remove such personal peculiarities is unhealthy and leads to a rigid formalism, which, while aping Form is truly its antithesis.

Formalism is the imposition of a superficial regularity and smoothness. Form emerges inevitably as a result of internal necessity when the problems of a certain kind of action are fully solved. When we find people upholding discipline and decrying intelligence we know that Formalism rather than Form is their aim.

The traditional English love of discipline had the result, for some years, of imposing an academic formalism upon the sport of rowing. Real coordination and effectiveness were sacrificed to the rather showing qualities of, "a straight back" and a, "smooth finish". (I am not at all sure that this is not the reason that Oxford so consistently loses the Boat Race.) I have a vivid recollection of a race between two scullers, one very stylish and the other rather inexperienced. The former with back splendidly straight and making never a splash came smoothly down the course while the latter, rocking and splashing drove home four lengths ahead. The stylish oar was the victim of Formalism which imposed a
external regularity upon his movement. Style here had not grown out of expert ability to row, it had been cultivated at the expense of real rowing ability. The movements of the novice had not yet become smooth and easy. He lacked experience, but he was on his way to the discovery of his own characteristic style. With the development of a little more skill the balance would improve, the discordant movements would be eliminated and he would attain real Form.

It is worth noting at this point that the difference between real Form and Formalism can only be noticed by the discriminating. The fact that the 'stylish' oarsman pleased the eye of the uninitiated is quite significant. (Insincere practitioners of any art gain the applause of the multitude by surface polish, imposed orderliness and slickness) Form in any aspect of human effort is not discerned without sensitive attention and a measure of understanding. The cultivation of taste is simply the development of ability to see and appreciate essentials, to perceive the reality of Form and not to be misled by superficialities.
FORM AND STRUCTURES.

Form is not an imposed extrinsic regularity, it is a logical intrinsic coordination emerging inevitably from the function of the whole and the nature of the parts. The whole, moreover does not abuse or violate the parts, it uses them by allowing them to be most effectively themselves. Where we find arbitrary arrangement, where we find extrinsic considerations controlling the organization of the parts, or where we find parts abused in the interest of the whole we have something less than Form.

Of the objects made by man only a small proportion attain Form. Quite the most numerous are mere Arrangements. The things which are fairly simple to make, the ordinary routine objects are generally of this nature. Ease of manufacture rather than intrinsic excellence is the controlling consideration in their making. The shape is not inevitable, is not the logical outcome of the properties of matter and the function of the object. Those things, however, of which we make intense demands, that must stand up to the most exacting circumstances or operate with absolute precision are likely to have Form since nothing but the highest degree of intrinsic excellence is good enough.

The ordinary bridge carrying a railroad over an ordinary river with level banks is seldom beautiful. A more or less
monotonous succession of fabricated girders has no great 
Aesthetic appeal. But consider any of the great bridges 
which reach, in a single span across a great distance; the 
San Francisco new bridge, the bridge across the Sidney 
Harbour, the Quebec Bridge or the bridge illustrated in 
fig 1. These have Form. They have line which emerges 
inevitably from the properties of the materials, the distance 
to be spanned and the loads to be carried. The demands 
made upon the structure are so great that the designer 
is compelled to reach out to the extreme limit of efficiency.
Every piece of steel must contribute the maximum of strength 
for the minimum of weight, every element must make the 
greatest possible contribution to the strength of the whole. 
Under these conditions no artist can be called in to 
design the lines of the bridge, nothing can be considered 
but the greatest possible efficiency. Yet structures of 
thrilling beauty are the result.

Now the essential difference between the great bridge 
and the routine bridge lies in the fact that the former is 
completely, thoroughly, radically designed, "completely 
possessed by Form and Rationality" while the latter is put 
together from standardized parts which will work well enough.

The shape of many units in an ordinary structure 
have no complete and logical connection with the various
stresses to which it is subjected. Consider the very simple case of a short bridge girder supported at each end and carrying a uniformly distributed load. The application of a little matriculation Mechanics shows that the bending moment at the middle is greatest at the end. Assuming the girder is designed so that its shape will be for the most part uniform, certain considerations which have nothing to do with the intrinsic push cheaper, in the case of a simple job, to use a uniform girder strong enough to take at every point the maximum stresses which occur only at one. It is only in a difficult the purpose and be easier and cheaper to make. It is these intrinsic considerations which result in most of our structures being aesthetically uninteresting. They are not completely mastered by Form and Rationality, and are therefore,
stresses to which it is subjected. Consider the very simple case of a short bridge girder supported at each end and carrying a uniformly distributed load. The application of a little matriculation Mechanics shows that the bending moments at each end are zero and rise to a maximum at the middle. The less important shearing stresses are greatest at the ends and disappear at the centre. Now if the girder is designed in accordance with these considerations its shape will be found to be quite pleasing and interesting. However, certain considerations which have nothing to do with the intrinsic excellence of girders comes into play. It is much cheaper, in the case of a simple job, to use a uniform girder strong enough to take at every point the maximum stresses which occur only at one. It is only in a difficult job that the form of the structure is developed logically from the nature of the forces involved.

When we speak of the economy, the efficiency of Form these terms must be construed from the point of view of the "thing in itself". The economical and efficient girder is that which gives the greatest strength for the smallest amount of material. An entirely different girder may serve the purpose and be easier and cheaper to make. It is these extrinsic considerations which result in most of our structures being aesthetically uninteresting. They are not "completely mastered by Form and Rationality", and are therefore,
It is, by the way, very difficult to find an ugly ship.

So it is necessary to leave the field of high achievement and search among the vessels which look "not in", (although I am beginning to wonder if the other member didn't call...)

*Sidney Harbor Bridge, Sidney, Australia.*
according to Plotinus, ugly. (It is rather striking that the words of a religious mystic should receive such direct confirmation from modern engineering).

In all the things made by man, where the very highest peak of efficiency, the highest level of attainment of any kind, is demanded, the object produced is likely to have Form. Consider the racing yacht, the high speed airplane, fine scientific instruments and precision tools, great liners. These are all beautiful. The owner of a yacht aims to win races. If an ugly yacht would do so we should not have to wait long until it made its appearance. That it has not done so yet is an indication of the very close connection between Form and high efficiency. The search for, "the one best way" eliminates on the one side all weakness, ineffectiveness and crudeness and on the other, all caprice, meaningless decoration and arbitrary 'originality'. It also prevents the introduction of elements which, "will do", which are "good enough". It compels singleminded sincerity in making and prevents slovenliness and poor workmanship, as it does ostentation and vulgarity. The art of the maker must be Fine since anything less will lead to failure.

It is no accident that the modern transport plane, the great new Zeppelin, or one of those excellent sailing ships which race each year from Australia with grain, are beautiful. It is, by the way, very difficult to find an ugly ship. To do so it is necessary to leave the field of high attainment and search among the vessels which just, "get by". (Although I am beginning to wonder if the sales manager didn't call
an "artist" to design the upper works of the "Normandie", intro-
ducing an element of plutocratic vulgarity and heaviness
of line which the arduous nature of seagoing has hitherto
prevented.) If Naval Achitecture should ever reach such a level
that the sea ceased to be a dangerous adversary ships could
quickly become as vulgar as Victorian mansions. It is the
remorseless and incalculable quality of the sea which has
compelled great ships to retain their clean thoroughbred line.

The art of making some particular class of object
is likely to pass through three stages. The first stage
is one of crudeness due to unsolved problems. Destructive
forces are withstood without being eliminated, discordant
elements are tolerated so long as the whole will work. Not yet
has the one best way been discovered; there is integration
but not economical and efficient integration, the parts
are not yet completely harmonized in the service of the whole.
At this stage, utilitarian values are supreme, if the thing
will work, if it serves its purpose, it is considered success-
ful. The early airplane, the Model "T" Ford, the first
steamships illustrate this phase.

The second stage brings us to the emergence of Form.
Better methods are continually being discovered. The good
craftsman never rests content with imperfection, is never
satisfied with something that just gets by. He seeks
continually the highest excellence intrinsic to his product, for its own sake, and because his pride and affection are engaged. (A truly artistic attitude, by the way) Out of this search emerges Form. An early English Gothic Cathedral, a modern transport plane, a fine ship, typify this stage.

A third stage, one of decadence may then develop. When the technical difficulties have been mastered, when the actual problems of construction cease to be a challenge, cease to demand the whole energy and thought of the maker extraneous considerations begin to creep in. Singlemindedness and sincerity are no longer exacted by the conditions of the work; caprice, arbitrary decoration and "Art for art's sake can now appear. Victorian architecture, late Gothic cathedrals particularly on the continent of Europe and some of the latest automobiles illustrate this stage.

The conditions of the unselfconscious creation of Form appear to depend upon a rather delicate equilibrium between the ability of man and the difficulty of the problems he is called upon to solve. Form is the symbol of man's victory, it is evidence of his complete success in embodying his idea in the medium with which he works. But it must be a victory not a walkover. The task must be difficult enough and significant enough to call forth the entire energies of the maker, intelligence warmed by emotion and harness to executive skill. Form is evidence of the very highest kind of human
achievement, evidence that the imagination of the maker has discovered the solution to all the problems involved and that the difficulties of execution have been satisfactorily overcome. I am inclined to believe that much of our delight in Form is a kind of sympathetic rejoicing with the maker in his victory. There is always an element of the paean of praise, in Aesthetic emotion.

Gothic architecture, while still meeting and solving technical difficulties was healthy and produced forms of great beauty. How might the walls be made so that they could support the strains of a great roof and at the same time allow the introduction of windows. The solution of that problem led to the flying buttress, itself a delight to the eye. The great Gothic arches were the solution of a problem in Statics rather than in Aesthetics. The arrangement of the roof beams in Westminster Hall is a perfect example of splendid Form emerging inevitably from the solution of a quite difficult engineering problem. "The great mediaeval buildings are, all the best critics unite in telling us, the solution of problems of how to throw stones high into the air and balance them there. A great French castle was not designed as beauty, it was developed along a line of experiment as surely as the great ocean liners have been so developed. — The essential construction was conceived by any of the great masters as a problem of stress and poise, just as the designer of the Forth bridge so conceived his problem."

Form in Civilization p. 73
Once the structural difficulties were overcome, as soon as building ceased to be a rigorous intellectual problem Gothic degenerated and became ornate, vulgar and meaningless. A comparison between an example of early English perpendicular Gothic such as York Minster with some of the later continental structures like the Antwerp Cathedral will make the point obvious enough.

This third stage of decadence has hitherto been avoided in the case of ships and will probably be avoid completely in the case of airplanes. The sea is too exacting a master to permit any slackness of fibre in its servants. Flight is far too hazardous to permit caprice. Nothing less than completely unified, strong, economical Form will serve in these cases.

This probably explains the immense superiority of Naval Architecture to land Architecture particularly during the Nineteenth Century. Architecture was considered to be a Fine Art, the function of the architect, self expression. Art for Art's sake was victorious. Having nothing to do but design beautiful buildings the architect achieved in fact unique monstrosities, or at best, academic reproductions of the work of a previous age. During the same period Naval Architecture was producing consistently structures of real beauty. At worst its products were free from offence, at best they were thrilling.
It is no accident that the development of the steel frame skyscraper had much to do with restoring Architecture to health and sincerity once more. Here were entirely new technical problems which could not be sidestepped. The designer was compelled to think in terms of building well, to think that is, of the intrinsic excellence of his product. He had to return to the logic of efficiency and the discipline of function. Building once more became sufficiently difficult to absorb the intellectual energy of brilliant men with the result that the old slack decadence was left behind and the discovery of new forms commenced once more.

The new spirit carried over into the design of simple buildings. It was found that the problems of real convenience of light, air, efficiency and health could not be solved so easily as had been thought, and that the complete solution of these problems led to new Forms of considerable interest. Since the architect has given up trying to design beautiful buildings and has taken to solving essential problems like a sensible man his products have improved immensely.

(The consideration of Functional architecture however leads to one or two difficulties which I do not wish to discuss here. I have therefore added a brief chapter for their discussion immediately following this.)

The close connection between the creation of Form and technical difficulty may be illustrated from the Fine
Arts. Italian painting provides an excellent example.

The gradual infusion into Italy of the spirit of the Renaissance turned men's minds away from the rather formal religious designs of the Byzantine tradition towards a greater interest in nature, much of it deeply religious and mystical, somewhat in the spirit of St. Francis. This awakening of delight in the world around them led the artists towards an attempt to depict, to express in paint this bright new spirit. It led them away from the rather abstract and otherworldly symbolism of the Byzantine tradition towards representation of those aspects of nature which they found so entrancing. This at once led to difficulties.

In the thirteenth century, Cimabue showed a strong sense of pattern and design, but practically no knowledge of perspective, anatomy, the representation of the third dimension, of the effects of light and air. These things were not considered to concern him at that time. His job was to symbolize pictorially certain religious conceptions. The new painters, warmed by the spirit of St. Francis, had to break new ground. The technical difficulties which beset them were not completely solved for two hundred years, and in that two hundred years lies the glorious age of Italian painting. The difficulties compelled the artist to be singleminded, prevented caprice and canalized and controlled his emotion, compelling it to find its outlet in strenuous effort. This two hundred years was an age of happy craftsman-
ship, of complete sincerity and of spiritual health so infectious that its quality affects us today. Giotto and Fra Angelico have something to say and say it with a directness and simplicity which today seems almost naive. These men have a childlike delight in their growing ability to paint. In sheer love of their craft, quite humbly and sincerely, they embellish their pictures with flowers of gem-like color. Their characters are portrayed with deep affection, their design is always strong and sure, and, breathing through the whole, is a spiritual vitality. Every picture of Fra Angelico is a heartfelt song of praise.

Leonardo da Vinci was the supreme experimenter and scientist. His studies in perspective and anatomy are in themselves sufficient to give him a place in history. It is no accident that this interest in the technical problems of his craft should find its outcome in paintings of real beauty. The discovery of the best way of doing something which one feels it is very important to do is the essence of artistic integrity.

By the time of Raphael and Del Sarto the technical problems had been essentially solved. Moreover technical cleverness began to be overvalued. The ability of an artist to represent appearances with remarkable fidelity became the measure of his greatness. Dexterity became an end rather than a means. Giotto and Fra Angelico had something to express and succeeded magnificently in expressing it. Raphael, great painter that he is, had less to say, although his technique is not only unsurpassed, but probably unsurpassable.
The fruit was ripe. After Raphael the painters were subject to a less rigorous intellectual discipline. Softness, caprice and sentimentality could now appear. The austere and unassuming sincerity of the earlier painters began to be lost. Painters began to strive for effect, to play to the gallery, to flatter wealthy patrons. Virtuosity took the place of Virtue and the great age of Italian painting was over. As soon as the technical problems ceased to be a challenge representational painting became decadent.

Clive Bell makes a significant remark in "Since Cezanne": "Most artists have got to canalize their emotion and concentrate their energies on some more definite and maniable problem than that of making something which shall be aesthetically"right". They need a problem that will become the focus of their vast emotions and vague energies, and when that problem is solved their work will be "Right"." Right for the spectator means aesthetically satisfying, for the artist at work it means the complete realization of a conception, the perfect solution of a problem." Artists of great genius often appear to feel the need for some difficult problem which will compel directness and economy of statement. Shakespeare, in his verse, used the intricate sonnet form, Bach used the Fugue and Christopher Wren the Dome as an architectural element in order to maintain the tension necessary for fine creation.
FUNCTIONAL ARCHITECTURE.

There has been growing for the last few years, particularly in Europe, a vigorous Functional school of Architecture. The more uncompromising supporters of this school say that the job of the architect, like that of the engineer, is to design something that will function, smoothly, economically and well, that the shape of the building should arise logically from considerations of the materials available, the purpose of the building and the stresses involved, and that all conscious consideration of styles and decorative effects should be barred. Style, they hold, will emerge as an inevitable consequence of sound functional design.

Now this is almost exactly the position which I am attempting to establish, that beauty is a kind of glow which lights up intrinsic excellence. It therefore seems unfortunate that a strictly functional design of, say, a factory or a department store is quite liable to produce something with all the appeal of an oversized packing case. I have to admit that a functional building such as that illustrated in Fig. 5 is to me, truly ugly. This looks as though our first attempt to apply our principle to a particular case has been a failure. However, a little closer consideration and the use of some of the information gained by the study of bridges will clear up the difficulty.
There are two aspects from which the building may be considered; as a factory and as a structure. As a factory it may be wonderful. The factory superintendent may quite possibly gain real delight from the mere contemplation of its excellences, the perfect lighting, the abundant air, the strong resilient floors, the bright clean walls and the convenient layout. As a factory it may have Form.

The man in the street, however, knows nothing about this. He sees the structure. Now as a structure the building may be on the same aesthetic level as the simple routine bridge made of standardised members. It does not rise to the level of Form because it is too easy to make. The shape has little logical connection with the forces involved because steel and reinforced concrete provide such an abundance of cheap strength. It is not until a builder is pushed to the extreme limit of his capacity, until he is compelled by the difficulty of his problem to let the distribution of strains and stresses dictate the shape and arrangement of the parts that Form emerges. The arched roof of a great cathedral, the great dome of St.Paul's in London, the proud arch of the Sidney Bridge and the thrilling line of the new San Francisco Bridge arise in this way, as the solution of problems in statics. The functional design of a factory or department store is too easy to give rise to structural Form of this kind.
An architect is trying to do two things at the same time and there is no reason why the solution of one problem should lead inevitably to the other. He is designing a place in which certain particular human activities are carried on, and which must be made apt and fit for those purposes. He is also making a structure which will be seen, which will become part of the visual environment of "the man in the street". The uncompromisingly functional type of building at its best rises to the level of Form from the point of view of those within, but it may, at the same time make a violent attack upon the eyes of the man outside.

There appears to be nothing illogical, therefore, about the architect taking steps to make his building pleasing to the eye. Bad architecture results from his making this very minor consideration the centre of attention. Beauty must grow out of functional excellence, otherwise it is mere polish and sham. Moreover, as the man in the street learns to understand the aims of functional design he will learn to "see" it differently. A little consideration by the architect for the sensory qualities of his materials, a little consideration of the mechanism of the human eye will relieve the harsh brutality of pure functional structure and produce a building which appeals to the eye as well as to the mind.
FIG. 5  **FUNCTIONAL UNMODIFIED**

FIG. 6  **FUNCTIONAL BUT CIVIL.**
The very great difference which is made by a little thought for the man "outside", a little civic courtesy, in functional building is shown by a comparison of the photographs. Both buildings are functional, the first brutal, uncompromising and harsh; the second urbane courteous and pleasing.

Good craftsmanship of any kind is an attempt to make well what needs to be made. But man is so constituted that when making well his spirit sings. The primitive craftsman expressed this lyrical mood by affectionate embellishments, gratuitous gifts of fine workmanship which show that he is not a mere slave to the pressure of necessity. The whole man, working well, is a happy man and his happiness is rightly expressed in his work. This is decoration in the best sense.

The architect, like any other maker must be allowed to rejoice in and through his work. It is only when we interpret 'function' in a narrow commercial sense that difficulty arises. Perfect function means effectiveness in the service of man, but man is more than profit and loss, more than ledgers and more than a machine. Lethaby puts it:

"Efficiency, it will be said, is not all. What is the next step in design? The next step is best thought of as still more beautiful finish, trimness, smartness, brightness. Then if the thing is in the hands of a real master designer, some little embroidery, as it were, on the plain garment, some little added fun of workmanship, may be permitted, and this is ornamentation.

1 Form in Civilization p 52.
FORM AND ARRANGEMENT

It is necessary, I believe, to clarify still further the meaning of the word Form as I am using it and to show very clearly wherein Form differs from mere Arrangement. The emphasis in this chapter lies upon the word, Intrinsic. Form is the logical and necessary consequence of the function of the whole and the nature of its parts. It has the quality of 'Inevitability' in the sense that is the antithesis of capricious or arbitrary.

To produce an arrangement is comparatively easy; a measure of determination, possibly quite ruthless and insensitive, will suffice. To achieve Form is the most completely strenuous task which man undertakes. It demands the perfect coordination of sensitivity, understanding and consideration with steely determination and executive skill.

The true artist, and I use the word in its broadest sense, must allow his medium to guide him to some extent (as the novelist must sometimes allow his characters to take him where he had not planned to go) Otherwise his product will be mechanical and stiff, will be, that is, an Arrangement rather than a Form. "A rigid predetermination of the end-product whether by artist or beholder leads to the turning out of a mechanical or academic product.-- Like the scientific inquirer, the artist permits the subject matter of his
perception in connection with the problems it presents determine the issue, instead of insisting upon its agreement with a conclusion decided upon in advance."

The creation of Form demands sensitivity without weakness, determination which is not stubbornness and intelligence which is warmed by emotion. (Cold intellectuality is as far from the creative spirit as is soft sentimentality) A submissive willingness to learn must be coupled with the strongest kind of executive determination.

These statements are abstract and probably obscure. They need to be illustrated by practical examples. These I have chosen deliberately from many fields of human effort, for one of the central aims of this thesis is to show that all the significant human activities may, at their finest and most perfect attain the level of Form.

Doggerel is an example of purely arbitrary arrangement imposed upon words. Its amusing quality arises from the incongruity of sense and sound. A true poem has Form. There is nothing arbitrary about it. One cannot feel that the poet might have said it differently, used a different metre or chosen different words. The whole is inevitable. Max Schoen puts it: "The letter must not only reflect the spirit but become spirit. The form must so fit the content, the matter so clothe the idea that the two are merged, wedded and united to a point where matter loses its identity by becoming idea."

1 Art as Experience. John Dewey. p 138
2 Art and Beauty. Max Schoen. 71
A poet does not abuse words for the sake of his total effect, on the contrary he uses them in all their fulness and richness in such a way as to give them the greatest possible effect. In prosaic writing we utilize only a small fraction of each word, its meaning in the intellectual sense. The poet uses the whole word, its sound, rhythm, emotional associations as well as its sense. He uses it moreover so that its relations to the whole enhance its significance. The word is not sacrificed to the poem, but rather, like a jewel, given a perfect setting.

In a very similar way the decorator, in planning the arrangement of a room, gives each picture, vase, or piece of fabric a setting which shows it off to the very best advantage. His room when finished must be harmonious, a unity, but not at the expense of the objects which he uses. They can contribute fully to the richness and colour of the whole only when set in a way favorable to themselves.

The good actor builds up his effects in a similar way giving tremendous significance, by his timing, pauses and voice control, to every word spoken, and every tiny gesture.

The playwright, who in the interests of the structure of his play, prevents his characters from acting, each according to his nature, is not creating Form. We rightly say his play is mechanical, an artificial arrangement. Most popular farces, thrillers and melodramas are of this type. The vitality of the parts is sacrificed to the tidiness of
the whole. The great playwright is the one who can endow
his characters with abundant life and still write a play
which has coherence and unity.

The same principle is true in music. Bach as a
composer could weave a close strong fabric of sound out of
a number of "voices", each as vital and as dainty as a ballet
dancer. The commonplace composer takes a thin string of
air and marches a lot of meaningless 'pom poms' underneath.
He applies some rather mechanical rules of harmony so
that none of the voices other than the air have any character
of their own. Form is the harmonious interaction of vital
and significant parts, Arrangement sterilizes the parts that
they may be more easily and tidily put into place.

The difference between Form and Arrangement is of
great importance in the case of communities. The rather
strict Victorian conception of discipline was inclined to
produce social organizations characterized by imposed
arrangement rather than intrinsic Form. The home provides
a good example. In many cases the order and unity of the
whole was obtained by the ruthless subjugation of the indivi-
dual. "The Barretts of Wimpole Street" and Samuel Butler's
"The Way of All Flesh" are sufficiently vivid illustrations
of this. The home in which the father's word is law, from
which there is no appeal, and against which no argument is
tolerated may have been orderly and superficially peaceful,
but the internal strains must have been terrific. There
was no true harmony, only its semblance. If the children
continued to submit they were effectively prevented from
developing naturally and fully. If they left home, the unity of the whole was destroyed. Such a home was brittle arrangement, full of destructive forces which were never resolved but merely resisted by the force of authority.

But a home may be a smoothly functioning whole while allowing each member to be fully himself and to make his characteristic contribution. To create such a home is one of the most delicate of the arts, for freedom must not degenerate into licence, nor self development into selfishness; spontaneity must not become irresponsibility nor freedom of discussion bickering. There must be order and effective cooperation but it must spring from affectionate loyalty rather than from fear and coercion. It is therefore a matter of delicate balance, of tactful coordination and clear formulation of aims upon the part of the authoritative members.

Such a home provides a perfect setting for the individual. Its orderliness leads to efficiency and to a sense of security. The frank and friendly sanity of the atmosphere allows mutual readjustments to take place without bitterness, provides a social discipline which does not destroy naturalness and sincerity. It is a truly delightful experience to observe a home of this kind, a delight which is truly aesthetic; a disinterested pleasure, that is, in contemplating, "the thing in itself" without any thought of possible benefits to be derived.
Here is a principle of great value in Sociology. The concept of Form provides a criterion for the evaluation of all manner of groups, societies and organizations. It resolves the old difficulty of whether a community exists for the benefit of the members or the members for the benefit of the community, for, if a community rises to the level of Form the members gain from it a setting which makes possible the highest measure of personal health and efficiency and development. At the same time the group as a whole gains strength and flexibility by the enthusiastic loyalty of its members.

This is not the place to consider the ways and means of bringing such Form into being. My point is that Form is the expression of the highest attainable excellence in communities, as in all other complex integrations.

A regiment of soldiers may be held together by coercive discipline and fear. But the wise leader knows that this is not enough. Such a regiment is brittle, liable to disruption when subject to severe strain. However, men are so constituted that loyalty to the group is a very natural expression of the self respect. Man is always hungry for something, closely identified with himself, in which he may take a pride. It is for this reason that military leaders pay so much attention to tradition. Discipline, smartness,
and precision all begin to play their part. A man cannot feel proud of his membership in a slovenly careless troop. It is in this way that internal cohesion, loyalty, and even self sacrifice are born in a regiment. To a man without pronounced individuality membership in such an organization may well provide a condition for satisfactory living far superior to the discouraging chaos of our industrial, so called, civilization. Whether or not this is so, the unity of a fine regiment is an internal principle helpful to the self respect and pride of every soldier in it and so is closer to Form than mere Arrangement.

It is of course very difficult to draw the line in any particular case and say, here is Arrangement and here is Form. The thing is complicated in the case of human organizations because a great deal of quite strict discipline is originally necessary to bring the whole up to that pitch of excellence that will engage the personal pride of its members. Most people function best, find their highest level as individuals in a framework of considerable firmness. A good school, a well run hospital, a strong police force, or an efficient railroad will always be found to be firmly administered. Yet these organizations do not stunt or warp their members. On the contrary they often develop their highest possibilities, by providing a job to be done and making it a matter of group pride that nothing but the best shall be acceptable. In cases of this kind, the discipline is external, imposed and irksome only to the
beginner. The older member gives himself with real personal enthusiasm to the work of the group and holds his head high in consequence of his membership.

Stupidity of leadership, vanity leading to abuse of authority and lack of sense of proportion may easily turn such an organization, held together from within by loyalty and pride, into one controlled by fear. When internal cohesion becomes external coercion Form degenerates to mere arrangement. The difference, though of immense importance is not always easy to discern by the casual observer. As in any other integration a superficial tidiness and order can deceive the undiscriminating. The difference is quite obvious to a trained observer. The School Inspector for example, learns to become sensitive to the "Tone" of a school. From a variety of subtle indications he can tell whether the spirit is one of mutual respect and willing cooperation or merely one of slen obedience and conformity. Good tone in a school is simply that pleasant overtone, that happy atmosphere which marks all communities which approach the level of Form.

Dewey illustrates this difference between imposed Arrangement and intrinsic Form by a simple comment upon the nature of courtesy. "The difference between the artificial or artful, and the artistic lies on the surface. In the former there is a split between what is overtly done and what is intended. The appearance is one of cordiality, the intent is one of gaining favor. Wherever this split
between what is done and its purpose exists, there is insincerity, a trick, a simulation of an act that intrinsically has another effect. When the natural and the cultivated blend in one, acts of social intercourse are works of art. The animating impulsion of genial friendship and the deed performed completely coincide without intrusion of ulterior purpose. Awkwardness may prevent adequacy of expression. But the skilled counterfeit, however skilled, goes through the form of expression; it does not have the form of friendship and abide in it. The substance of friendship is untouched."

The great classical and humanist tradition in Europe has long associated gracious courtesy in action with a similar grace and cultivation of the mind. The scholar and the gentleman have had a long and close association. Is not the difference between pedantry and true culture another example of the difference between Arrangement and Form? The pedant accumulates second hand furniture for the mind and keeps an accurate catalogue of all his possessions. He knows exactly what 'who' said about 'this and that'; his knowledge is classified, tidily arranged and as dead as mutton.

The really cultured man has a mind which grows rather than accumulates. He is, as Herbart says, "a man of many sided interests". His mind grows as a result of enthusiasms, of vital, vigorous, fully conscious living.
It becomes disciplined, orderly, accurate and also impartial as a result of much experience regarding the prevalence of error. The vitality of its interests keep it open, growing and searching. The owner of this kind of a mind responds with vivid interest to anything bearing upon the various enthusiasms which motivate his mind. New information arouses his attention, he examines it, relates it to the material already in his possession. If it is not wholly consistent with these a period of critical thought begins. The validity of the new information is carefully probed and if established, leads to a readjustment of the opinions already in the mind.

Thought of this kind is not cold and formal, rather it is enthusiastic and personal, intimately bound up with the life interests of the thinker. A mind which grows in this way is not chaotic. All the knowledge is integrated into the whole as it is acquired, but the principle of unity is not some external system or classification. Rather, it is the unity of a growing organism assimilating from its environment what is essential for its needs. This kind of mental growth is simply the intellectua aspect of full and abundant living, of the response to life of a Whole man. Contact with this kind of a mind is as delightful as contact with pedantry is unpleasant. (provided always that the vital mind is not so far ahead of us that we cannot understand it. Failure to understand is always painful)
I realize that I am dealing, sketchily and inconclusively with some very difficult and important problems in this chapter. My aim, however, is simply to show that in every significant aspect of life Form is the characteristic of the vital, the delightful and the lovely, while external arrangement may be quite sterile and dead; that Form is the embodiment of wisdom, warmth and abundant life and that arrangement may be the expression of incomplete humanity, of stupidity, vanity or ruthlessness.

In the problems of personality these principles find their fullest and most significant application. The modern psychologist calls the healthy-minded, effective, happy man a well integrated personality. The bible uses the simpler word 'Whole' to represent a similar idea, and old fashioned colloquial speech, 'Hale' as in 'Hale and Hearty.' On the other hand we speak of a chaotic personality, of dissociation, of conflict when referring to various personality weaknesses. Here, above all, is a field in which Form must be discovered and realized, and in which mere Arrangement imposed, extrinsic Form is utterly inadequate.

Why is it that the term Moralistic has become one of reproach, an indication of the second-rate? Is it not because we feel that so much morality is merely imposed arrangement having no necessary connection with internal integration and harmony, a form of prudence suited only
to those without the courage and ability to make an Art of living. Quality of living does not result from doing what one is told, from conforming blindly to the prejudices and opinions of the group, or from accepting the authoritative instructions of religious bodies (although all such instructions should be most carefully considered and utilized as negative safeguards) It results rather from the growth of clear, definite, personal aims and ideals, from the application of energy, intelligence and skill in the realization of those ideals. As in any other art, as in the creation of Form of any kind there must be a stage of discovery, of problem solving, in the sense that some way must be envisaged of organizing the complex elements involved into a unity, and the kind of unity, moreover, that we desire. The attempt to embody that discovery will lead always to modifications so that, in life, the formulation of ideals and their application interact continuously. This particular individual, myself, must learn how to harmonize and unify the complex elements in my make up, must learn how to live in relationship with my fellows that my life may be full and harmonious within and without. I must discover my vital enthusiasms and build my life around them. If I do not, I am wasting, even antagonizing the springs of energy which are the foundations of vitality. Only so can I make my full and characteristic contribution to the group in which I live. A second hand morality never yet produced
a strong integrated personality.

A recent book by Henry C. Link, "The Return to Religion" typifies this moralistic point of view. I quote: "My reason for attending church again is that I have recommended it to so many others. I go because I would rather lie in bed late on Sunday mornings. I go because I would rather read the Sunday papers. I go because I know it will please my old father when he learns of it, and my parents in law whom I shall undoubtedly see there. I go because I shall have to meet and shake hands with people, many of whom do not interest me in the least, because if I don't go my children consider that they have a good reason for not going to Sunday school, because I might be asked to do something I don't want to do, because I disagree with what the minister has to say. I go because I do not believe in all the doctrines of the church. I go in short because I hate to go and because I know it will do me good". (In all reverence I say, Heaven save the church from her new friends) He continues: "But today, rather than "Know Thyself", the phrase, "Behave Yourself" epitomizes the findings of modern psychology. A good personality is achieved by constant practice, not by introspection. Just as the pianist masters the intricacies of music through hours and years of practice, so the mastery of life is achieved by the ceaseless practice of the mechanics which make up the art of living".

I wonder what St Francis, or Sir Thomas More would have thought about a return to religion of this kind? One can imagine the very amusing and instructive half hour that Socrates would have had with a man who set up an antithesis between, "Know thyself" and "Behave Yourself". The error of course arises from a complete ignoring of the difference between imposed arrangement and intrinsic Form. "The ceaseless practice of the mechanics which make up the art of living." This sentence summarizes it. No art is made up of mechanics, essential as sound technique may be. Technique is always the servant of a vital personal conception to be expressed in real art. The quality of any true artist depends upon a delicate balance being maintained between the most sensitive understanding of his medium, its possibilities and its limitations, and executive determination. This is as true of the art of living as of any other art. Determination without understanding is merely ruthless stupidity, technique without personal 'vision' is dead, useless virtuosity, which is just about what the divorce of, "Know Thyself" from "Behave Yourself" would lead to.

In contrast, consider this extract from the work of a man imbued with the spirit of Form. "Holiness is moral integrity become an art, a thing admirable in itself, a thing made. Holiness like art is more than prudence, it is prudence become an end instead of remaining simply a means. Such is the holiness of the saints and there is always a
certain gaiety about it, the gaiety of men set free. Utilitarianism is burdensome. To do things always, in order that, in order that something else should follow, never to do things because they are themselves worth doing, that is the bore, the burden of mere prudence, that is the burden, the bore of mere piety. The word (holiness) lost its meaning. It ceased to mean hale and hearty. The holy man was no longer thought of as the whole man. Holiness came to be a partiality, an excess, an overgrowth. It even came to be a cutting off, an asceticism in the narrow and negative sense of a voluntary privation of sensual enjoyment. To enjoy came to be the reverse of to be holy. And the holy man was no longer the man fulfilled, the man really enjoying himself, the whole man seeing things whole. He became simply the negative man, the man who did not marry, the man who did not drink beer or wine, the man from whose vocabulary the "best words" were expunged.  

Little comment is needed. The first quotation, that of Henry C. Link, deals with an imposed moralism, mere extrinsic arrangement. The second deals with the man who has discovered and realized Form in his own nature and so has become joyful and complete.

One more point needs to be made before completing this chapter. There is a very close connection between Form and happiness, both on the side of the maker and on the side of the observer. We recognize this in everyday speech.
when we say that a writer has felicity of expression, that a craftsman has a happy knack. Of course the maker has his struggles, his disappointments and his bitter experiences, but they culminate in the deepest of all joys, that of the worker who surveys the product of his hands and finds it good. The appreciative observer is always delighted by Form; in any community the infallible indication of Form is a spirit of happy vitality; the whole man is the happy man.

There is an infectious, glowing warmth about Form wherever discovered. "Like the bloom on the cheek of youth in the perfection of health at the height of his powers; it is something added, an essence that is distilled only when a fine thing is functioning in a way appropriate to its nature, a fragrance to things good when they are being good."

I have suggested in several places throughout the preceding discussion that the appreciation of Form is not possible unless the observer is sensitive, discriminating and attentive. Without some knowledge and training it is too easy to mistake the superficial imitations of Form for the real thing. The pleasure which Form gives is therefore part of a remarkably complete experience, it is a pleasure which suffuses, which is quite inseparable from active attention, from the application of judgement and of discrimination. The emotional experience is not passive but an essential aspect of the effort of appreciation which calls for the harmonious interaction of the senses and of the mind.

Such a state of mind is, I believe, the characteristic Aesthetic experience. In any particular aesthetic experience there may be much more, but unless appreciation of Form is the central factor, the experience is not aesthetic but something else. Santayana expresses a very similar opinion:

"Form therefore does not appeal to the unattentive, they get from objects only a vague sensation which may awaken extrinsic associations; they do not stop to survey the parts or to appreciate their relation, and consequently are insensible to the various charms of various unifications; they can
find in objects only the value of material or function, not of Form.

Beauty of Form however is what specifically appeals to an aesthetic nature; it is equally removed from the crudity of formless stimulation and from the looseness of reverie and discursive thought. The indulgence in sentiment and suggestion of which our time is fond, to the sacrifice of formal beauty marks an absence of cultivation as real, if not as confessed as that of the barbarian who revels in gorgeous confusion."

There are certain difficulties about this point of view which need to be discussed. Many writers, impressed by the 'immediacy', the spontaneity of our response to beauty insist that beauty is a direct appeal to the senses rather than to the mind. John Dewey writes: "A good deal of intellectual effort has been expended in trying to identify efficiency for a particular end with beauty or Esthetic quality. But these attempts are bound to fail, fortunate as it is that in some cases the two coincide and humanly desirable as it is that the two should always meet. For adaptation to a particular end is often, (always in the case of complicated affairs) something perceived by thought, while Esthetic effect is found directly in sense perception."

1. The Sense of Beauty. Santayana. p 96

This argument fails to carry conviction. In the first place it is very difficult to attribute definite meaning to the phrase, "perceived by thought" in contradistinction to, "direct sense perception". What we perceive, as distinct from crude sensation is always conditioned by the mind. Perception involves recognition of meaning and although the process may be almost instantaneous, it is definitely a mental process. It is cognition become habit and therefore quick and effortless. The meanings that we recognize are determined by our previous experiences and our previous thoughts. Perception is absolutely dependent upon the resources of the mind. With the right kind of training the mind acquires the power to perceive very complicated relationships almost instantaneously.

Observe the school boy in a rural district learning to judge cattle. The process of judgement is slow, conscious and deliberate. Point by point he compares the actual animal with the ideal portrayed on his chart and finally decides that the beast is good, bad or indifferent. Observe the same boy after a few years of experience has made him expert. He now merely looks at a beast and perceives its quality at a glance. Training has turned a process of conscious deliberation into one of immediate perception. Perception of complicated relationships is a characteristic of the well trained mind.
Mr L.A. Reid expresses an opinion of this kind as follows:— "For aesthetic experience, as we have said, is not mere feeling; it is knowledge. And into knowledge there enters at any moment a vast complexity of assumptions and presuppositions and past judgements. This needs little argument since we all admit that aesthetic appreciation may be trained, and training means the direction of attention upon essentials which are in turn determined for us partly by analysis. As in the realm of perception we see snow to be cold, so in the realm of aesthetic experience we may be said to see a thing this way or that way because of a certain history, a certain training, a certain tradition, which is partly determined at every step by some sort of reflection. And if the reflection has been profound and thoroughgoing and true, surely the actual vision will be clarified."

There is really nothing inconsistent in the fact that appreciation of Form involves an element of judgement and that response to beauty (to which we are capable of responding) is immediate. In almost any trade or profession the man with the well trained mind is able to see at a glance quite complicated relationships which would demand of the novice a long and arduous process of thought. We do not therefore claim that the trained man is not using his mental powers.

1 A Study in Aesthetics. L.A. Reid. p 27.
That the recognition of beauty may be a very complicated matter is made evident by the degree of preparation which is necessary to enable us to appreciate much of the very finest in the world of art. A Beethoven Symphony, or a Bach Fugue has little or no appeal to the simple and untrained. The most musical person benefits from patient study and frequent rehearing in discovering the full richness and beauty of such a work. An unfamiliar type of art often repels us at first since our minds are not prepared to perceive the significant relationships within it.

A man knowing only the music of the classical period up to, say, the time of Mozart, would probably experience bitter distress on first hearing the works of Wagner and Richard Strauss. His ability to enjoy these later works would develop slowly as the result of a quite strenuous period of readjustment, much of it intellectual. Only after such a readjustment had been made and a new set of listening habits formed would the music be able to give that direct and spontaneous thrill that we call Beauty. The long mental preparation is proof however that the experience is dependent upon the recognition of quite complicated relationships.

The relationship between sensuous pleasure and the aesthetic experience is a little difficult to define in a general way. The fine arts particularly are meant to be
perceived through the senses, they are attempts to communicate and must not therefore violate the senses through which they are to pass. A painting is to be seen, to be looked at attentively. If it is, in the strictly physiological sense hard on the eyes, producing unbalanced strains and tensions, providing it with no satisfying position of rest from which it can move rhythmically to take in the details of the whole, it defeats its own ends, since it destroys sustained attention. It is therefore quite an essential part of the painter's problem to make his picture please the eye. But the magazine illustrator, and the collar advertiser know all about that. The mediocre commercial artist always makes a direct appeal to the senses, knows how to balance his picture so that the eye will rest comfortably about its centre of gravity, knows what colour combinations the eye finds soothing and pleasant. The pleasure which such work gives is many steps removed from the aesthetic experience. Every tenth rate practitioner of pseudo art knows how to titilate the senses.

Sir Henry Hadow puts the case very clearly with respect to music. "Almost all people of imperfect musical cultivation have their favorite instruments; one enjoys the violin, but cares nothing for the piano, another remains in frozen indifference until he is melted by the human voice, another finds all music comprised in the invigorating skirl of the bagpipes. It must be remembered that such influences are wholly physical. They have nothing to do with artistic appreciation in the proper sense of the term, they are as
purely sensuous as our delight in the colour of a flower or the taste of a dish. In music it is not the sensuous question which matters, but the intellectual, not the fact of concord or discord but the way in which they are employed."—"If a chord does not fulfill some duty, if it does not justify itself by becoming some definite organic part in the total plan, then it is not art but confectionery. Any musician who deliberately aims at sensuous effects alone ipso facto commits artistic suicide."

If beauty is,"perceived by the senses" rather than the mind Tschaikovsky would be a greater composer than Bach, and Rimsky Korsakov than Mozart, for these flambouyant romantics have composed works of much greater sensuous appeal. They use, with great skill and contrivance, every resource of the great modern orchestra, every shade of tone colour. Bach weaves his entrancing patterns out of the simplest materials, depending hardly at all upon the sensuous appeal of varied instrumentation and rich chords. Tschaikovsky is for this reason much more popular than Bach with the "man in the street".

With the growth of musical appreciation this changes. Once a person has really learned to listen to the music of Bach becomes the highest kind of delight, the true aesthetic experience in all its purity, cool, fine and bracing. The lover of Bach will have no difficulty in relegating the sensuous qualities to their proper position.
and of appreciating the supreme significance of Form.

The same point may be illustrated from other branches of art. If beauty were dependent upon direct sensory appeal, Titian would be greater than Giotto, and Alma Tadema than Cezanne, any mid Victorian maker of statuary would be greater than Epstein and Flo Ziegfeld than G.B. Shaw.

A shiny coat never yet made a beauty out of a horse with a sagging back.
RHYTHM AND LINE

The universal nature of rhythm is a commonplace and its intimate connection with Form is generally recognized. Just why it should be so characteristic of Form is not so widely understood. There are a number of aspects of this problem, of great significance to Aesthetics, which need to be discussed at this stage.

The entire universe, as we know it, is, in all its significant aspects, composed of stable and persistent wholes, organized unities of varying complexity, which hold, in some form of Kinetic Equilibrium, large amounts of contained motion. The atom, the molecule, the crystal, the solar system, the single cellular organism, the community, may all be described in this way.

The significance of the contained motion has been pointed out by Spencer in his, "First Principles". He defines evolution as, "integration of matter and concomitant dissipation of motion, during which matter passes from an indefinite incoherent homogeneity to a definite, coherent, 1 heterogeneity." A simpler statement of the above which might be satisfactory is; that the universe appears to be engaged in producing rich and varied Forms from a chaos of

motion. He goes on to point out that, unless a whole contains a great deal of motion, further adaptation becomes impossible and this in an ever changing, active universe is fatal.

"So long as the parts of a body or mass have motion, rearrangement is possible. As soon as they lose their motion rearrangement becomes impossible.---Incident forces work secondary redistributions easily when the contained motion is large in quantity and work them with increasing difficulty as the contained motion diminishes.--- Secondary redistributions can have permanence only when the contained motion has become small, opposing conditions which seem to negative any large amount of permanent redistribution."

A simple illustration of these principles may be found in the blacksmith's shop. The iron, when raised to white heat, now contains much more molecular motion than when cold and the, "incident force" of the hammer can now work redistributions of the material easily. Cool the metal and the new shape becomes permanent; the molecules have lost much of their motion and changes in shape are now difficult to make. Pouring molten metal into a mold and allowing it to cool, moistening clay when we wish to work it and baking it when we desire a permanent shape are further examples.

Spencer then goes on to show that the apparent

incompatibility between flexibility and stability is solved, particularly in living organisms by the discovery of forms which combine stability with great contained motion. Such Kinetic Equilibrium in wholes appears therefore to be a fundamental condition of evolution and of persistence in a changing universe.

Which brings us back to rhythm. All motion contained within a persistent whole must be either rhythmic or rotational, otherwise the moving particles would lose touch with the whole and disruption would result. Try to conceive for instance, a steam engine in which the piston moved forward continuously in a straight line, or a steam turbine in which the blades moved straight ahead instead of rotating about an axis.

Now circular motion is very closely related to rhythm. Any rotating body, unless perfectly balanced, produces rhythmic forces in the object which holds it in position. The gravitational effects of a body moving in a circular path are rhythmic, as witness the tides. Rotational and reciprocal motion are mutually interchangeable by a very simple mechanical device. Geometrically, circular motion is compounded of two equal harmonic motions at right angles to one another and so is really itself a compound rhythm.

Now, when we consider that the universe is made up of wholes, it will obviously be very difficult to find motion
which is not rhythmic. Spencer states quite positively, and, I believe, proves his case that all motion without exception is rhythmic. Even the motion of a planet in its orbit is disturbed by the varying gravitational pulls of the other planets, and thus becomes rhythmic. The electrons speeding round the nucleus of an atom, held in their orbits by a tight complex of forces, are continually disturbed, and, vibrating like a taut string, produce those electromagnetic waves that we call light, radiant heat, 'x' Rays and ultra violet light. There is no need to go on enumerating examples. Rhythm permeates the whole material fabric of the universe.

In still another way is rhythm connected with the economical stabilization of wholes. I refer to the very intimate connection between rhythm and resilience.

All matter has a degree of elasticity; disturbing forces can produce some small change in the shape of the material, but a restoring force at once begins to build up, proportional to the disturbance produced. Perfect rigidity simply could not exist since the smallest impact with an outside body would shatter the object concerned. This point perhaps demands a little explanation.

Any moving body has Kinetic Energy, ability to do work, that is. We can conveniently express that Kinetic Energy in terms of any of the standard work units such as, 'ergs', 'joules' or 'foot pounds'. Now a moving body can be brought
to rest only by making it do the amount of work of which it is capable. Suppose, for example, that a bullet has a Kinetic Energy of 100 foot-pounds. To bring it to rest in two feet would require a resisting force for it to overcome averaging fifty pounds; to bring it to rest in one foot, a hundred pounds; in an inch, twelve hundred pounds; in a tenth of an inch, twelve thousand pounds, and so on. Now imagine this bullet hitting a perfectly rigid object, an object without the slightest element of 'give'. The bullet would be brought to rest instantaneously and the resisting force would be infinite. The object would inevitably be shattered. Such an object, of course, does not and cannot exist, but within the range of our experience we know that the less a body 'gives' at impact the greater is the danger of breakage, thus the ease with which crystallized glass, cast iron, or a hard steel file may be shattered.

However, our interest is with persistent structures. An object which merely changes its shape every time an external force acts upon it is of no greater significance than one which is broken by impact. The persistent whole must not only give, it must restore itself to its original condition; that is it must possess, elasticity or resilience.

The action of resilience is always rhythmic. As the particles of a body move under the influence of an external force an internal resisting force builds up proportional to the distance which the particles have moved from their normal position. This force succeeds in stopping the motion
only when it has become great enough to do two things; to over­
come the external force and also to absorb the momentum of the
moving particles. As soon as it has succeeded this momentum
ceases to exist and the resilient force now finds itself
greater than the external force, and a return motion begins.
A rhythmic action within the body is, in this way, set up
and continues until the energy involved has been dissipated.
The swaying of the branches of a tree, the waving of the
heads of grain in a breeze, the spring in a board walk, the
'whip' in a fishing rod are all examples of this kind of
rhythm. Such resilient rhythm is a property of all matter,
and a particularly noticeable property of nearly all
economical and efficient structures. Resilience is nearly
always accepted as evidence of the excellence of a whole.

As we have already pointed out, sport is one field
in which intrinsic excellence is pursued whole heartedly. It
will be noticed that this rhythmic resilience of which I
speak is always found in the highest grade of sports
equipment; the cricket bat, the golf club, the fishing rod
and the fencing foil. These things gain much of their aesthet­
ic appeal, which is, by the way, very great to those interested,
from this rhythmic quality.

It is, of course, a commonplace that resilience,
involving rhythmic response to external disturbing forces
is a characteristic excellence, not only of structures and
material objects, but also of organisms of all kinds, of personalities, and of communities. To 'give' easily to small disturbing forces and quietly to return to normality makes for harmonious functioning. To build up ever increasing resistance to forces threatening the integrity of the whole is an essential condition of survival. Such reactions are what produce the rhythmic quality in human affairs. It is steel that we use as our symbol of strength and glass as our symbol of weakness, though the latter is the much harder substance.

I have attempted to show in this brief, somewhat mechanical discussion, not only how intimately rhythm is connected with the essential properties of matter, but also that it is a necessary condition of the persistence of wholes, an intrinsic excellence, and a characteristic of Form even at its simplest level.

Dewey develops a very similar argument from biological considerations. A few brief extracts will make his point perfectly clear. "Life itself consists of phases in which the organism falls out of step with the march of surrounding things and then recovers unison with it--either through effort or by some happy chance. And in a growing life, the recovery is never mere return to a prior state, for it is enriched by the state of disparity and resistance through which it has successfully passed. If the gap between organism and environment is too wide the organism dies. If its activity is not enhanced by the temporary alienation, it merely subsists.
Life grows when a temporary falling out is a transition to a more extensive balance of energies of the organism with those of the conditions under which it lives. The marvel of organic, of vital adaptation through expansion (instead of by contraction and passive accommodation) actually take place. Here in germ are balance, harmony attained through rhythm.

"The rhythm of loss of integration with environment and recovery of union not only persists in man but becomes conscious with him; Direct experience comes from man and nature interacting with each other. In this interaction human energy gathers, is released, dammed up, frustrated and victorious. There are rhythmic beats of want and fulfillment, pulses of doing and being withheld from doing.

All interactions that affect stability in the whirling flux of change are rhythms. There is ebb and flow, systole and diastole; ordered change. The live being recurrently loses and reestablishes equilibrium with his surroundings. The moment of passage from disturbance into harmony is that of intensest life. In a finished world, sleep and waking could not be distinguished. In one wholly perturbed conditions could not even be struggled with. In a world made after the pattern of ours, moments of fulfillment punctuate experience with rhythmically enjoyed intervals.

1. Art as Experience. p 14. 2 ibid p 16-17
"The first characteristic of the environing world that makes possible the existence of artistic form is rhythm. There is rhythm in nature before poetry, painting, architecture and music exist. Were it not so, rhythm as an essential property of form would be merely imposed upon material, not an operation through which material effects its culmination in experience."  

"Because rhythm is a universal scheme of existence, underlying all realization of order in change, it pervades all the arts---. Since man succeeds only as he adapts his behaviour to the order of nature, his achievements and victories as they ensue upon resistance and struggle become the matrix of all aesthetic subject matter; in some sense they constitute the common pattern of art, the ultimate conditions of form.---Underneath the rhythm of every art and of every work of art there lies, as a substratum in the depths of the subconsciousness, the basic pattern of the relations of the live creature to his environment."

It is hardly surprising therefore, that deep in the nature of man is an innate tendency to respond to rhythm with a feeling of pleasure. The pleasure which any kind of smooth rhythm gives to a baby, the spontaneous delight with which the most primitive people respond to the rhythm of the drums and of the dance are evidence of this. It is this immediate, this innate response to the rhythmic

1. Art as Experience. p 147.  2. ibid p 250
quality which is characteristic of all Form which gives the aesthetic experience that sense of spontaneity, that immediacy which sometimes leads people to deny the influence of the mind upon the appreciation of beauty.

'Line' is very closely related to rhythm, and has, I believe, a similar direct appeal. Certainly one of the delightful elements in all fine art is 'line'. We know what we mean by the word when applied to drawing, painting, architecture, pottery and even to music, but to define it, to say wherein good line differs from bad line is extremely difficult. Of course, bearing in mind the organic unity of Form, we might define good line as, line which knows where it is going and what it is doing and which performs its essential function in the service of the whole with as little fuss and efficiently as possible. There is much truth in this. But there is more to good line than this. One of the essentials of Form is that the significance of the parts must not be sacrificed to the whole but rather given, within the whole, a perfect setting.

The expression, "lovely line", has meaning in itself. Great art does not cramp and torture line for the sake of the total effect. The music of Bach has a firm integrity, but an examination of the strands from which it is woven shows that each is characterized by vital 'line'. The entrancing quality of the music of Mozart is dependent even more upon the
lovely quality of the musical line' with which he works. Shaw's recent little book of epigrammatic commonplaces, "The Black Girl in Search of God", is illustrated by a series of exquisite wood-cuts in which the line is little short of glorious. "Lovely Line" means something more than the efficiency with which the line plays its part in the whole. Detach the line from the whole, and while it will lose greatly in significance it will still retain an independent aesthetic quality.

It is impossible to be dogmatic about this matter. I am inclined to believe, however, that 'line' is just as essential an element of Form in motion as rhythm is of Form in structure, and that, at least in part, our delight in line is based upon our experiences of directed and purposive movements which have been raised to a high degree of perfection. Watch the slow motion pictures of any kind of athletics and see how inevitably fine line characterizes the movements depicted. Watch the flight of the seagull, the motions of a fish, the progress of an excellent skater, all wonderfully efficient motions in which change of direction takes place without loss of energy. Rhythm and line are inextricably fused in motions of this kind.

Line in art is always dynamic, it always goes somewhere and takes the eye and ear with it. It moves, and the sense of motion it gives to the observer is akin to the thrilling rhythmic motion of the seagull or the skater.
Certainly the movements of the eye are pleasantly rhythmic when following a fine line in pottery or in painting. Our delight in 'line' is somehow very closely connected with our appreciation of harmonious and economical motion and our response to rhythm.

Human behaviour operates on three main levels. Our emotional response to stimuli may be, innate, habitual or learned, or the outcome of a period of deliberate thought. Now rhythm and line are such universal elements in Form that our reaction to them has become innate, a racial habit rather than a personal habit. They are therefore of tremendous importance in the aesthetic experience.

The concept of Form as the essential factor in the aesthetic experience often meets with opposition because it appears to imply a measure of conscious ratiocination which is incompatible with the spontaneous thrill which marks our recognition of beauty. Our response to Form, however, is on all three levels and it is Line and Rhythm which are chiefly responsible for the innate response. A further aspect of the 'immediate response' is the result of training, a learned habit of looking at once for the essential things and perceiving their significance. (This is the true meaning of the cultivation of the taste.)

However, even the two aspects of the immediate response, the innate and the learned, do not complete the aesthetic experience. A thrill is transitory. Our joy in a fine work of art abides, because conscious consideration
and deliberate judgement follow spontaneous delight. No aesthetic experience is complete unless it rises to the level of understanding.

"The total overwhelming impression comes first, perhaps in seizure by a sudden glory of the landscape, or by the effect upon us of entrance into a cathedral when dim, light, incense, stained glass and majestic proportions fuse in one indistinguishable whole. We say with truth that a painting strikes us. There is an impact that precedes all definite recognition of what it is about. As the painter Delacroix said about this first and pre-analytic phase, "before knowing what the picture represents you are seized by its magical accord". This effect is particularly conspicuous for most persons in music. The impression directly made by an harmonious ensemble in any art is often described as the musical quality of that art.

Not only, however, is it impossible to prolong this stage of esthetic experience indefinitely, but it is undesirable to do so. There is only one guarantee that this direct seizure be at a high level, and that is the degree of cultivation of the one experiencing it. In itself it may be, and often is, the result of cheap means employed upon meritrious stuff. And the only way in which to rise from that level to one where there is intrinsic assurance of worth is through intervening periods of discrimination."

1. Art as Experience. p 145.
FORM AND THE EXPRESSION OF EMOTION.

A number of modern writers on Aesthetics, notably, Mr. E. F. Carritt, Mr. L. A. Reid, and Signor Groce identify Beauty with the expression of emotion. For obvious reasons I find it impossible to accept such a theory without considerable modification. If a splendid bridge, a racing yacht, a microscope, a fine horse, have Aesthetic appeal, and I insist most emphatically that they have, then the theory is, to say the least, very difficult to apply.

Of course the chief proponents of this idea are interested almost exclusively in the Fine Arts and here it is of considerable value. Emotion is always intimately involved in creative activity of this kind. Fine Art is a development of language, it is an attempt to communicate a complete experience in all its richness, and a complete experience always has an emotional aspect. However, the quality, the beauty of the product, is not dependent upon the nature of the emotion but upon the success of the expression. The beauty of a work of art arises from the perfect embodiment in some sensible medium of the experience with which the artist is concerned. A very delicate, tiny, emotional experience, clearly and truly felt, may, if expressed with
perfect fitness result in an enduring work of art. A great overpowering emotion, on the other hand may be badly expressed and as a work of art be valueless.

"While there is no expression unless there is an urge from within outwards, the welling up must be clarified and ordered by taking into itself the values of prior experiences before it can be an act of expression.------

"There is no expression without excitement, without turmoil. Yet an inner agitation that is discharged at once in a laugh or cry passes away with its utterance. To discharge is to get rid of; to express is to stay by, to carry forward in development, to work out to completion. A gush of tears may bring relief, a spasm of destruction may give outlet to inward rage. But where there is no administration of objective conditions, no shaping of materials in the interest of embodying the excitement there is no expression. What is sometimes called an act of self expression might better be termed one of self exposure; it discloses character—or lack of character to others. In itself it is only a spewing forth."

A Prayer for Toads.

Lighten Lord my load,
I no beast of brawn
But tired and troubled toad
A simple son of spawn.

1. Art as Experience. John Dewey. p 61
A harmless foolish toad,
Whom dog disdains to clutch,
Who shuns the hurtful road
But loves the lawn's touch.

Encourage me who creep
With warted limb and back
And send me sister sleep,
When winter cometh back.

And I will worship well
In manner of my mind,
Fold fingers, hunch and tell
The garden, God is kind.

The poet's mood here is one of gentle, playful melancholy, quite unimportant and trivial until he attempts to express it. It is, however, sufficiently clear and true to dominate the process of expression, to make the whole unified, a perfect embodiment of an experience. It is this perfect embodiment which is beauty. Croce summarizes the point clearly: "What we admire in genuine works of art is the perfect imaginative form which a state of soul assumes. -- Feeling without image is blind, and image without feeling is void. Expression and beauty are not two concepts but a single concept, artistic imagination is

1 G.I. Scott Moncrieff. New Statesman and Nation. May 3 1930
always corporeal, but it is not obese, being always clad in itself and never charged with anything else ornate".

Thus the emphasis must be on the expression rather than on the emotion, and this brings us right back to the concept of Form. To express means to embody and to embody is to give Form.

The word emotion in this phrase, "expression of emotion" must be qualified in yet another way. The artist does not express mere emotion, he expresses a whole, vivid, significant experience of which the emotion is only a part. An emotion is not self subsistent, it is merely one aspect of a total situation in which a person is actively involved. If an experience or idea is of vital importance to the individual it is bound to be emotional but it is the whole significant experience, not merely the emotion which the artist expresses. Croce appears to recognize this fact when he uses the very broadest term available, "the perfect imaginative form which a state of soul assumes".

Although the emotion, then, is not what is expressed, it does play an essential part in the creative process, in the selection and unification of the material. The mood, the feeling-tone of an experience impregnates the expression and excludes all elements alien to itself. Both Dewey and Croce are agreed on this point. Thus Croce:

1. Essentials of Aesthetic Croce. p. xvi
"What gives unity and coherence to intuition is feeling.— What offends us in false or faulty work is the unresolved discord of different moods, their mere superimposition or confusion, or their alternation which gets but a superficial unity forced upon it by the author, who for this purpose makes use of some abstract idea or plan or of some unaesthetic passion".

Dewey covers very similar ground:- "That art is selective is a fact universally recognized. It is so because of the role of emotion in the act of expression. Any predominant mood automatically excludes all that is uncongenial with it. An emotion is more effective than any challenging sentinel could be. It reaches out tentacles for that which is cognate, for the things which feed it and carry it to completion. Only when emotion dies can material to which it is alien enter consciousness. ---- If one examines into the reason why certain works of art offend us one is likely to find that the cause is that there is no personally felt emotion guiding the selecting and assembling of the materials presented. We derive the impression that the artist is trying to regulate by conscious intent the nature of the emotion aroused. We are intimidated by a feeling that he is manipulating materials to secure an effect decided upon in advance. The facets of the work, the variety so indispensable to it are held together by some external force. The movement of the parts and the conclusion disclose

no logical necessity. The author, not the subject matter is the arbiter:"
(The result, that is, is arrangement rather than form) Dewey continues:--"Just because emotion is essential to the act of expression it is easy for inaccurate analysis to misconceive its mode of operation and conclude that the work of art has emotion for its significant content.--Yes emotion must operate. But it works to effect continuity of movement, singleness of effect amid variety. It is selective of material and directive of its order and arrangement."  

One does not wish to drift into a futile argument about the relative importance of Form and Content in a work of art. Form is simply embodied Content. The essential point which must be made clear is that it is perfect embodiment which marks the true work of art. As Carritt says, "I cannot distinguish beauty from success in art. I am, myself, sure that I have always meant the same by a successful work of art and a beautiful one and by an ugly work of art and a failure."  

Now the perfect embodiment of an idea or an experience in a sensible medium is Form. The great advantage of the concept of Form as the basic principle of Aesthetics is that it includes within itself the idea of Expression as applied to the fine arts while still being applicable to the beauty of strictly useful things. It is impossible to bring the Sidney Bridge under the expression formula unless we go round in circles and say that it expresses the desire of the builder to make a fine bridge. But the bridge, a poem,  

1 Art as Experience. p 69. 2
a painting, a symphony and a racing yacht are all, in their own way, examples of Form. So too are the airplane, the fine horse and the cathedral. The concept of Form is thus equally satisfactory when applied to the Fine Arts, the Practical Arts, and to natural objects.

Physiologically, emotion involves a redistribution of energy, a mobilization of the forces of both body and mind. Anger, for instance, affects the beat of the heart, the secretion of adrenalin and, through it, the release of glycogen into the blood. It marks the preparation of the organism for a stage of intense activity. The other exciting emotions working through the sympathetic nervous system have a similar effect.

To balance these there are other emotions which are, in the literal sense of the word, recreational; feelings of affection, of contentment, of internal peace. These emotions, associated with the sacral and cranial sections of the nervous system rest the heart, encourage the processes of digestion and in general bring about conditions favoring recuperation.

It is only under the influence of the arousing emotions that man reaches his highest pitch of effectiveness and is capable of the sustained and intense activity necessary for his highest achievement. Unemotional work, work which doesn't matter to the individual, is necessarily inefficient since the energies of the worker are not properly mobilized.
Since Form is the highest kind of attainment, it cannot possibly result from indifferent, half speed effort of this kind.

It is really a bitter commentary upon the quality of our civilization that we have come to accept as normal and usual this dissociation in daily work, (for it is dissociation to be only half engaged in a task); that we have come to associate the greater part of the work of the world with the performance of mechanical and routine tasks too insignificant to engage the whole attention of a human.

The rhythm of the artistic worker, and this does not mean only the practitioner of one of the fine arts, is from excitement and passionate struggle to achievement and deep satisfaction, when having completed a piece of work he surveys it and finds it good. Work which matters deeply and which leads to stages of achievement, raise the human organism to the highest pitch of effectiveness. The greatest mobilization of energy for work and the most perfect state for recuperation are attained by the emotional rhythms inherent in any kind of artistic effort, in any kind of effort which results in Form.

Man acts in response to external necessity or to internal urge. In so far as he responds only to necessity, to external pressure or to the insistent demands of his appetites he is still a slave and his work, like all slave labour, is grudging. If it will 'get by', then it is satisfactory. Fortunately, however, man is so constit-
uted that many tasks which are originally done of necessity come to engage his pride and to be done for their own sake. With the growth of skill and mastery the task becomes intrinsically pleasurable. Give a man something to make (not merely something to do), something, the excellence of which is dependent upon his own care and ability and see how quickly craft pride will develop. It is this spirit which provides the motive for that search for the highest degree of intrinsic excellence which leads to form. The worker now keeps ahead of the pressure of necessity, he has gone beyond the stage where utility values suffice, and in so doing he has become free. His freedom is not that of the wealthy man, it is not the result of abandoning the work of the world; there is no divorce from utility, rather their is a growth through and beyond utility.

This, incidentally, touches one of the most serious fallacies which continues to beset Aesthetics; I refer to the notion that everything beautiful is essentially useless, that there is a clear cut antithesis between the beautiful and the useful. I do not wish to discuss this point here, further than to point out the essential difference between the cultivation of intrinsic excellence for its own sake and the deliberate avoidance of every form of useful activity in order to make possible the cultivation of sensibility. It is no accident that this "Art for Art's sake" doctrine, this
cult of the useless should find its most recent supporters amongst the nineteenth century decadents. It was Oscar Wilde who said, "We can forgive a man for making a useful thing as long as he does not admire it. The only excuse for making a useless thing is that one admires it intensely. All art is quite useless." ¹

To return from this digression; Every significant activity of man is emotional in one aspect. Good craftsmanship is always affectionate, good management is proud and loyal, good philosophy is suffused with a passionate devotion to truth, good art with deep sincerity. Science compounds a spirit of adventure with an uncompromising devotion to precision, accuracy of statement and impartiality. These may be hard emotions to name, but that they are emotions is undoubted.

These emotions which are intrinsic to the vital activities of man explain the surprising lyrical quality which sometimes appears in most unlikely places. Sinclair Lewis has recently written a book about a hotel keeper, who turned that most prosaic of occupations into a work of art. A good mechanic often develops a real affection for a piece of fine machinery for which he is responsible. The case of the simpler crafts is now a commonplace.

Primitive decoration is simply the expression of the worker's delight in his task, a piece of fine workmanship added gratuitously as a token of affection and delight in skill.

¹ Philosophies of Beauty p. 197
Such a spirit makes it very difficult to draw a clear line between the fine arts and the practical arts, in fact much of the finest and most significant art that the world knows has been made by fine craftsmen expressing within their work no more than their intrinsic delight in it. The segregation of a section of the leisured class as self-conscious artists is a thoroughly unhealthy development.

The harnessing of the emotions to a job of fine 'making' is the very foundation of healthy integrated personality. Emotion may be denied an outlet, may be repressed. This is ultimately harmful to the self. Habitual frustration of emotion leads to the dissipation of the essential energies of the individual, to internal conflict and abnormality. Emotion may, on the other hand, be allowed to discharge violently and impulsively, uncontrolled by reason and discipline, as when the mother spoils her child through uncontrolled affection or the father breaks the crockery in an outburst of rage. This too is wasteful and destructive. But emotion may be used constructively, made to work through intelligence and skill, used to impose order upon indifferent elements in the environment. When so used it raises the self to the highest pitch of efficiency, concentrates attention and unifies the aim. This is the place taken by emotion in the strong, integrated, purposeful character; this too is the part it plays in the creation of Form.
Goodness and Beauty.

The very close relation between goodness and beauty has interested writers on Aesthetics from the earliest times, and remains a vital topic today.

Plato, though giving to the imitative arts a very subservient position and even threatening the poets with banishment, conceives goodness itself in terms of beauty. No sooner does he begin to write descriptively of the good man than he uses expressions such as, grace, harmony and nobility. In speaking of things made, he uses the terms virtue, beauty and excellence as synonyms. "Now does not the virtue, beauty and excellence of every product or living thing or action depend upon the purpose for which it was made or developed?"

The following quotation from "The Republic" illustrates the very intimate way in which he connects morality or goodness with beauty; a connection which amounts almost to identification. "Then good speech and good music and grace and good rhythm follow good nature, not that silliness which we call good nature in compliment, but the mind that is really well and nobly constituted in character.--But painting and all craftsmanship are, we know, imbued with these; so are weaving and embroidery, architecture and the making of all other articles; so too is the body and other

living things. All these show either grace or absence of grace. And absence of grace and bad rhythm and bad harmony are sisters to bad words and bad nature, while their opposites are sisters to and copies of the opposite, a wise and good nature. Then we must speak to our poets and compel them to impress upon their poems only the image of the good or not make poetry in our city. And we must speak to the other craftsmen and forbid them to leave the impress of that which is evil in character, unrestrained, mean and ugly on their likenesses of living creatures, or their houses or on anything else they make. He that cannot obey must not be allowed to ply his trade in our city. For we would not have our guardians reared among images of evil as in a foul pasture, and there, day by day and little by little gather many impressions from all that surrounds them, taking them all in until at last a great mass of evil gathers in their inmost souls and they know it not. No we must seek out those craftsmen who have the happy gift of tracing out the nature of the fair and the graceful, that our young men may dwell as in a health-giving region, where all that surrounds them is beneficent, whencesoever from fair works of art there smile upon their eyes and ears an affluence like a wind bringing health from happy regions, which though they know it not, leads them from their earliest years into likeness, and friendship and harmony with the principle
of beauty."

"Is not musical education of paramount importance for those reasons, because rhythm and harmony enter most powerfully into the innermost parts of the soul and lay forcible hands upon it, bearing grace with them and so making graceful him who is rightly trained.--- Beautiful things he would praise, and receiving them with joy into his soul would be nourished by them and become noble and good. Ugly things he would rightly condemn and hate even in his youth before he was capable of reason, but when reason comes he would welcome her as one he knows, with whom his training has made him familiar."

Notice how moral and aesthetic judgements are identified throughout this extract; for instance, in the phrase,"--and forbid them to leave the impress of that which is evil in character, unrestrained, mean and ugly." For Plato a thing which is not beautiful is not completely good. Plato's devotion to fine character is an aesthetic passion; for grace, harmony, poise and dignity which mark the highest goodness are qualities which he finds lovely in themselves. That there could be any difference between goodness of life or character and beauty is utterly inconceivable to him.(A clear mark, by the way, of the superiority of the Greek spirit over much of the unlovely moralism of the present day)

Francis Hutcheson in the eighteenth century comments rather charmingly upon this aesthetic quality of virtue. "The author of nature has much better furnished us for a virtuous conduct than our moralists seem to imagine, by almost as quick and powerful instructions as we have for the preservation of our Bodies. He has given us strong affections to be the springs of each virtuous action and made Virtue a lovely Form that we might easily distinguish it from its contrary and be made happy by the pursuit of it."

More recently, both Santayana and Dewey have something to say regarding the matter. Thus Santayana:- "Not only are the various satisfactions which morals are meant to secure aesthetic in the last analysis, but when the conscience is formed and right principles acquire an immediate authority, our attitude to these principles becomes aesthetic also. Honour, truthfulness, and cleanliness are obvious examples. When the absence of these virtues causes instinctive disgust, as it does in all well bred people, the reaction is essentially aesthetic, because it is not based on reflection and benevolence but on constitutional sensitiveness. This aesthetic sensitiveness is, however, properly enough called moral, because it is the effect of conscientious training and is more powerful for good in society than laborious virtue,

because it is much more constant and catching. It is the aesthetic demand for the morally good, and perhaps the finest flower of human nature."

Dewey pays tribute to the Greek spirit as follows: "The Greek identification of good conduct with conduct having proportion, grace and harmony—is a more obvious example of the distinctive aesthetic quality in moral action. One great defect in what passes for morality is its anesthetic quality. Instead of exemplifying whole hearted action, it takes the form of grudging piecemeal concessions to the demands of duty. But illustrations may only obscure the fact that any practical activity will, provided it is integrated and moves by its own urge to fulfillment, have aesthetic quality."

Of course, what we call morality in ordinary speech far is frequently/removed from beauty. Conformity to the demands of the group, unquestioning acceptance of an imposed code are easy for the timid and for those of little vitality. But such morality is an inferior product, it has nothing to do with the highest attainable human excellence.

There is implicit here an abuse of the word 'good.' When we use the word with respect to a painting, a poem, a bridge or a horse we are speaking of quality; of strength, coherence, unity and fitness for purpose. When we speak of a

1. "The Sense of Beauty" Santayana. p 31
good man we are liable to mean something different; we are not referring to the quality of his manhood but his willingness to conform to certain imposed rules and regulations. So much is this the case that most of us hold in low esteem our reputation for goodness. We would much sooner someone said of us, "he is a real man" than "he is a good man". And this is a sound instinct, for we have divorced the meaning of goodness from positive quality of living.

Where morality or goodness does not rise to the level of beauty it is incomplete, something imposed, a response to external pressure, rather than an inward urge towards excellence. When acting on this level man is still a slave. But just as the craftsman seldom remains satisfied with merely, "getting by" but moves ahead and strives for quality far in advance of the pressure of external forces, making of his work a source of pride and a form of self expression, so man in his conduct reaches ahead of necessity and the demands of convention and pursues excellence, grace and fineness for their own sake. Only on this level does craftsmanship become art, and only on this level does character and conduct become beautiful, and only so does man reach freedom.

Santayana, using the word morality in this partial sense makes a very similar statement. He relates morality to the aesthetic in very much the same way that I have related Arrangement to Form. Morality, he says is conduct
imposed by necessity, the avoidance of destruction in a harsh world; while the search for beauty is from within, the activity of man set free. "The relation between aesthetic and moral judgements, between the beautiful and the good is close, but the distinction between them is important. One factor of this distinction is that, while aesthetic judgements are mainly positive, that is, perceptions of good, moral judgements are mainly and fundamentally negative, or perceptions of evil. Another factor of the distinction is that, whereas, in the perception of beauty our judgement is intrinsic and based on the character of the immediate experience, and never consciously on the idea of an eventual utility in the object, judgements of moral worth, on the contrary, are always based when they are positive upon the consciousness of benefits probably involved.--- The sad business of life is rather to escape certain dreadful evils to which our nature exposes us,-death, hunger, disease, weariness, isolation and contempt.---- The moment however, that society emerges from the early pressure of the environment and is tolerably secure against primary evils, morality grows lax. The forms which life assumes are not imposed by moral authority but are determined by the genius of the race, the opportunities of the moment and the tastes and resources of individual minds. The reign of duty gives place to the reign of freedom, and the law and the covenant to the dispensation of grace."

The beauty of objects is more than utility, more than efficiency, but yet grows out of these qualities. Beauty cannot exist in the ineffective, the weak or the badly made. So too in personality is beauty more than practical effectiveness, more than conventional morality; once again it is an outgrowth from such essential qualities. Beauty is a flower which grows only upon a strong vigorous plant, with its roots deep in the soil, its stem straight and firm and its leaves exposed to sun and air. If the plant is not strong, well founded and effective the flower does not appear.

Beauty of life is simply the visible evidence of fine quality, of excellence become a grace. (Just as a motion of the body, if raised to a sufficiently high level embodies inevitably fine line and rhythm and becomes graceful.) It is not the good of the well-meaning, it is not the good of the merely well behaved, it has nothing to do with withdrawal from life; it is the good of a fine conception effectively realized, it is goodness become an art. On this level goodness and beauty are one.
CONCLUSION.

In an even deeper sense than that of the last chapter are the Good and the Beautiful intimately related; they are different aspects of the same thing, Form. In a strictly literal sense Form is the fundamental, the universal Good.

To attribute some particular purpose to the "Life Force", to the "Universal Power" or to the "Absolute" is to become involved in an endless philosophical controversy which is not relevant to the subject under discussion. What can be said, however, with a fair degree of assurance is that life does manifest a certain consistent trend. The direction of evolution has been towards bringing order out of chaos, towards building complex integrations from simple elements and of so hammering and attacking the resulting wholes that only the most stable, resilient, coherent, and generally excellent can survive. (Fundamentally our idea of quality is based upon this ability to persist under these destructive influences)

The trend of evolution, to use Spencer's classic phrase, is from "indefinite, incoherent homogeneity to definite coherent heterogeneity", or in simpler language, from a formless chaos of simple elements to a rich multiplicity of strongly integrated Forms.
The atoms are stable resilient integrations of electrons and protons. "The order is not imposed from without but is made out of the harmonious interactions that energies bear to one another" The atom is thus an example of Form. From the atoms of the ninety two elements are built the molecules of the countless compounds known to man, each molecule being an integration of internal forces, and again therefore, an example of Form.

The single cell, itself a Form of immense complexity from the chemical and physical point of view is the simple elementary unit of the biologist, and the foundation of all living things. Each living organism is a complex unity in which the cells are differentiated, organized and controlled to serve a common end.

The degree of integration that we know of and, in part, understand in the case of any of the higher animals is immense. Electrons and protons are integrated to form atoms of carbon, hydrogen, oxygen, nitrogen, sulphur etc. These atoms are combined to form molecules of sugars, fats, proteins, vitamins and salts of various kinds. Then some millions of these molecules are organized to form a single cell. And this brings us merely to the elementary unit of the biologist. Several billion of them are brought together in a most complex and delicately unified whole to produce the creature known as man, who then proceeds to organize himself by the million into complex communities

1. Art as Experience. John Dewey. p 14
communities called nations, which he finds so unsatisfactory that his most urgent present task is to evolve some form of harmonious supernational organisation.

If it is agreed then, that integration is the basic activity of the "Life Force", thoroughgoing success of integration, that is Form, must be the great universal excellence which is always valid. The Universe accepts Form, allows it to persist, but destroys imperfect integrations, extrinsic arrangements without internal cohesion.

Some of our judgements of excellence are transitory or personal, arising from peculiarities in ourselves or of the times in which we live. These account, in part for differences of taste. But the excellence of Form is bigger, deeper than any personal preference or any vagary of fashion. It is excellent whether man exists to perceive it or not, it is excellent because the Universe accepts Form for survival. It is Form which provides the deep and uniform reality of Beauty, above the surface of which the little vagaries of personality and fashion play like ripples on a deep and placid lake.

When we come to the concerns of man we again find the principle of Form supreme. All the significant activities of man involve the imposition of order upon disorganized and refractory material, and when completely successful they result in Form.

Science takes simple disconnected facts and discovers within them the possible unity of a hypothesis. It then proceeds
ruthlessly to hammer that hypothesis either to destruction or into a strong coherent theory. The aim of science, as of philosophy is to give Form to knowledge.

The task of the writer is to choose and order words that they may express, without ambiguity, the exact shade of his meaning and every overtone of emotion that his whole experience may be communicated. Every craftsman, engineer, and artist is engaged in the integration of material, in the making of wholes. The craftsman and engineer design and execute works of utility; the artist, works which appeal to the mind and to the emotions, but the task in both cases is so to order and unify inert material as to achieve the desired end. Every organizer, hospital superintendent, ship's captain and military officer attempts to give unity of purpose and functional efficiency to the association of people in his charge. In any of these tasks, the mark of supreme achievement, of complete success is Form. The integration which is not yet Form is intrinsically imperfect, even if it happens to be cheap to make and sufficiently good for commercial purposes.

Equally is it necessary for every individual, through self discipline and a clear aim to realize Form in his own nature. Failure in this respect is the basis of all physical and mental ill health. The function of the psychiatrist is to restore strength and unity to the shattered mind and to bring back harmony to its discordant elements. The healthy personality is the integrated personality.
It is a commonplace of criticism that fine art is not concerned with morality, that the most edifying picture or poem is not necessarily the best from the artistic point of view. This of course is perfectly true. Aesthetic judgement is concerned purely with the thing in itself. When we evaluate a poem we are concerned with its intrinsic quality the perfection with which it embodies the experience of the poet, not how it may affect the morals of the man who reads it.

A poor work of art, an ugly object is, according to Plotinus, one,"--not completely mastered by form and rationality"; either a satisfactory form has not been conceived or inadequate execution has failed to reveal it. What we mean by quality in a work of art is its approximation to perfect Form. But this is the ultimate test of the quality of any whole. If we leave the word morality out for a moment and think in terms of quality, we judge a good picture and a good man by the same standards. Is not a good life, in the final analysis, a fine conception effectively realized, and is not that exactly what we mean by a good picture?

Intrinsic quality is the same whether in a bridge, a ship, a poem or a painting. The only reason that we have difficulty in accepting this relationship between goodness and beauty is that we have allowed the word, "goodness" to mean something other than intrinsic quality. How else can we describe an unsatisfactory character than as,"--one not completely mastered by form and rationality", how else describe
a fine man than one who has found unity, coherence, Form in his own nature and in his life.

Art is merely life in microcosm. The deep satisfactions of Art arise from the fact that in the turbulent flux of daily life Form may be approached but never really attained. Too many factors are outside of individual control. In the arts however, whether 'Fine' or 'Practical' the problem is nearer to man's ability, the factors are more nearly under control and so a much closer approach to complete success is possible. And this, by the way, is one of the dangers of the Fine Arts, they may, and often do provide a way of withdrawing from life and of avoiding its difficulties. Any art is good in itself but the greatest art of all is the art of living. To become a slovenly practitioner of that art in order to cultivate one of the lesser arts is not an evidence of superior humanity.

In life and in art however, quality means simply approach to Form. As Ruskin says, Quality of living is the end of all rational activity". The truest definition of the 'Good' therefore is, That which makes for Beauty.
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