

Art and its Relation to Nature.

(1)

In our talk this evening we must associate ourselves with the question which puzzles the majority of people - "To what extent does Art relate itself to Nature?" To find an answer we must first of all ask ourselves "What do we mean by Nature?"

Do we limit nature to our visual perceptions or are we to extend our conception of Nature to include the whole universe? Great Art is not found in the mere mimetic imitation of nature, but the artist does perceive through his study of nature the awareness of a force which is the one order to which the whole universe conforms. Art in all its various activities is trying to tell us something, something about nature, something about the universe, and something about life. Art must include in its study of nature the whole universe, if it is to envisage some aspect of the universal truth & help humanity to become conscious of the meaning of life.

*Nature
universe*
Close-up

Yet, the artist in a paradoxical way must first of all study nature at close quarters. To observe nature, as it were, in a picture plane, it is nearly always apparently chaotic; the ~~wild~~ wild flowers in a meadow are not in orderly arrangement, the branches of trees are without rhythm, the patches of snow on the hillside are unbalanced in relation to their areas, and the stones from broken crags of a mountain are static and without vitality. One cannot become aware of the hidden laws of Nature from this perspective; the laws which awaken in us the universal truth of all-relating harmony and the sense of unity, the laws which are found in every department of man's activity, an expression of order, relation, union and unity.

Plato in his close study of nature came to the conclusion that in the creation of nature "God for ever Geometrises. He became conscious

(2)

of this truth.

Pythagoras found in his great ~~Theorem~~^{Theorem}
 "The ^{area of the} squares on the two (smaller) sides of a right-angled triangle are together equal to the square on the greatest side," the secret of natures law of relationship of areas. He also found that the length of the diagonal of a square was mathematically related to the side of the square, and in testing this relationship with nature he found that the geometrical relationships of lines and curves were consistent throughout. No matter what object of nature one wishes to examine, this geometrical or mathematical relationship will be found to fit the structural forms. This is the first law of Nature - the dynamic symmetry of form - the relationship of the part to the whole, ~~with~~ whether in line (contour) or area. Nature however provides unlimited examples of variety of enrichment, rhythm of line, and surface texture. All nature is mathematically related and all the infinite structures of nature are based on the relationships of nature which Pythagoras discovered - or became conscious of. Examples of relationship illustrated..



A



B



C.

Simple relationships of lines.



A

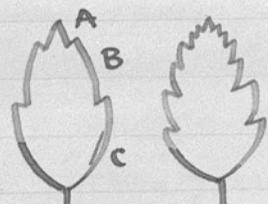
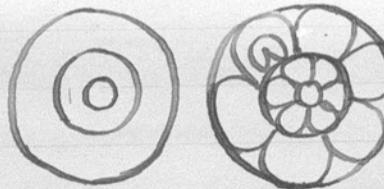
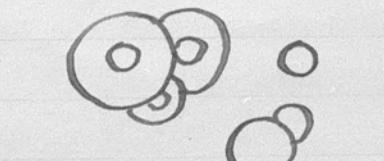


B



C

Simple relationships of Area.

A
B
CA
B
C

So far the examples we have taken are free units, that is, they are not placed within a boundary. When one has to decorate a bounded space the problem of balance is doubly increased. The design must balance and also the background; or if one would prefer we might state it in this way - the pattern and the space relationships made by the pattern must balance. In other words the space relationships cannot be measured but through continual practice one becomes sensitive to true balance. In other words one feels or becomes conscious of true relationships. Intuitively all people have some degree of the universal law of balance, it is part of our nature. It can be found in the arrangements of a room, in the laying of a table, or in the desire to have good proportion in articles of everyday use.

The Pythagoras Theory of line and area proportion was used by the Greeks in their Architecture, Ornaments, and Decorative designs for all articles. From the period of Greek culture up to the present time it has always been felt that there was some advanced aesthetic quality in the Greek culture repression, some secret quality of relationships which died with the fall of that Civilisation. The Romans endeavoured to discover the secret of Greek perfection and thought that by basing their proportions on numerical relationships they would arrive at the bases of Greek proportion. Granted that numerical relationships:

1 part to 2, 1 part to 3, 2 parts to 3, 3 parts to 5, etc; are fairly satisfactory, one does not hesitate to notice that the Grecian column is far more refined, dignified & subtle than the Roman column.

²⁵ Only fifteen years ago the secret of the relationships of structural form throughout all nature was re-discovered by the German-American Hambridge. Hambridge interested himself in searching for the secret of Greek proportion. He (intuitively) tested the theories of Pythagoras - the mathematical relationship of the diagonal of a square to

Space
relationships

Greek
proportion

Hambridge

the side of the square - and found to his amazement that this was the bases of Greek proportion. Here we have one reason why all functional design has so decidedly changed during the past fifteen years.

There are also other reasons but this first reason must be included in the expression of design today.

You must be aware of the noticeable change in the design of furniture, utensils, architectural plans and elevations - the re-establishing of aesthetic truth in relationships of line and area.

In mentioning this change I would like to refer to a criticism I often hear about the design of today. It is this "It is far too plain and uninteresting" Yes! I am inclined to agree with this view but I think that the return to perfect relationships of the various parts is an advancement and it is the only bases on which any decoration should be established. At this time the correct type of design has not yet been created - suitable decoration can only evolve slowly & ~~that~~ this moment the designers of the new proportions find aesthetic enjoyment in pure simplicity & red.

The laws of nature are also within us. They are part of the essence of our minds. Since the time of the Greeks there are many examples of great art - yet the artist did not consciously know, or use, this law of the proportions of nature. When the great masterpieces were scanned compositionally by the test of dynamic symmetry it was found that they fitted the test exactly. Intuitively artists create within the structural forms of nature. The quality of this intuitive expression determines one of the first necessary requirements of a work of art.

We have so far only dealt with the geometrical structure of work of art and its relationship to nature. A work of art which expresses only the objective form always has an over-emphasized naturalistic effect.

Through our sensations, perceptions, conceptions, and feelings we become aware of other activities

~~introduce the
metaphysical
dimensions.
depth, etc.,
concern, etc.~~

~~design of
today~~

~~Intuitive
knowledge
of life~~

Conceptions
&
perceptions

Sense
Sight

in the instance of the world outside of us. Here enters the second order in the expression of a work of art, through appealing to the senses and achieving values beyond the material. The interpretation of emotional feeling and emotional understanding is the problem of the artist. In viewing a sunset we feel the symbols of approaching rest, peacefulness after the striving of the day, the passing of light into darkness, the shadow of death. In viewing the sunrise we feel the birth of the new day, the awakening warmth of life, the enduring and everlasting power of creation & the Spirit of God. The interpretation of the world, in art, through the sense perceptions becomes expressions of our inner consciousness - our subjective thoughts manifested through objective observations. Art now becomes reaches the plane where it becomes the expression of ideals and spiritual aspirations. The artist no longer strives to imitate nature the exact appearance of nature, but rather to express the spirit therein. The artist is quite justified in his expression of those characteristics of heightened sensibility and imaginative apprehension, but the majority of people neglect to look for this message in a work of art and judge the artist's merit entirely on the craftsmanship.

Public
criticism
of
art

Some very common criticisms of pictorial art are : - "I never saw anything like that", "The public have the only right to judge a work of art", "It does not represent what we visually see, it is not art." Artists find it impossible to understand why the public - in the mass - seem to think that they are justified in expressing judgement as to what a work of art should consist of, nor why the artist should ^{be} expected to limit his conceptions to the conscious ~~development~~^{level} of the public. Again I repeat that a It is admitted that a work of art must appeal through the senses; but unless it achieves values beyond the material & the reasonable, it fails of

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If the purpose ascribed to it by every prophet & seer through the ages.

Let us now consider what the public thinks of as real and reasonable & what the message is that the artist wishes to express. More visual representation is what the public seek, but the artist seeks the spirit of matter as I have already stated. In this day and age the public put their faith in Science so let us now examine what the Scientist has to say about reality & matter.

Science studies the structural forms of nature. Where has this study brought the Scientist to today? A tremendous revolution has taken place within the past forty years, the result of which, we have discovered what we feel through our sense perceptions to be "reality", is only an illusion of reality. It was felt at the beginning of this century that if we could isolate the atom we would know what "matter" was. The atom was isolated by & very soon it was broken by Sri. J. J. Thomas, who found that the atom was made up of molecules & those molecules were nothing other than electrons and protons. Sri James Jeans, the eminent English Scientist says in his "Mysterious Universe" — "Electrons & protons, the fundamental units of which all matter is composed can appear now as particles, & now as waves (electrical) — no one has ever seen an electron, or has the remotest conception as to what it would look like." (Actually a theory of waves provides a picture which has never yet failed to predict the behaviour of electrons, while the conception of an electron as a hard particle has failed on innumerable occasions.) In this way we are beginning to think suspect that we live in a universe of waves & nothing but waves." The waves are electrical.

Now Minkowski states — "Matter is electrical in substance, so that all physical phenomena are ultimately electrical."

A little later Minkowski, Sri Arthur Eddington & Sri Oliver Lodge agree that "Space & Time separately have

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vanished into the merest shadows, and only a sort of combination of the two preserves any reality."

(Still later) Professor Einstein says & I quote - "The study of the inner workings of nature has passed from the engineering-scientist to the mathematician."

Sir James Jeans speaking of the law of Gravitation says, & again I quote "The law of Gravitation is, strictly speaking, nothing more than a mathematical formula giving the acceleration of a moving body - the rate at which it changes its speed of motion."

We hasten along our road of ~~on~~^{in the} our study of apparent "reality" & further revelations stagger us. Here is another statement by Sir James Jeans - "The critics who say today that the universe must admit of material representation cannot possibly be granted this conclusion." "Scientists today (insist on the finiteness of Space at all costs), & cannot admit the material representation; and the reason is that it has become a mere mental concept." "The universe is a universe of thought & its creation must have been an act of thought." "Indeed the finiteness of Time & Space almost compels us, of themselves, to picture the creation as an act of thought." ("Mind no longer appears as an accidental intruder into the realm of matter; we are beginning to suspect that we ought rather to hail it as the creator & governor of the realm of nature - not of course our individual minds, but the minds in which the atoms out of which our individual minds have grown exist as thoughts.)"

Now Art is expressing the same truth pictorially - the inner meaning of apparent reality.

The discoveries of empirical Science help humanity to form new conceptions about Nature & has a definite share in the evolving of a new consciousness.

I must now speak of the new concepts of the living Philosophers of today as later on we can the more clearly understand similar expressions of thought in the art of our time.

The study of the mind is the study of consciousness and its unfolding. There are different grades of consciousness observable in nature - those of the vegetable-animal, animal and Man (with the sense of Space). As consciousness changes & develops, so also does the sense of space change & develop. That is to say, the dimensionality of the world depends on the development of consciousness. Man has a sense of three-dimensional space, & has that sense only because that is the stage of development which he has reached.

Philosophers today speak of the 4th Dimensional consciousness which man is evolving into. This 4th dimension deals with new concepts of Time & Space. For those of you who may desire to study this new philosophy I would recommend for ^{like to mention} ~~your reading~~ its clearness of explanation — "Tertium Organum" — "A Key to the Enigmas of the World" — by P. D. Ouspensky. Ouspensky was first of all an important Russian scientist before he devoted his interest to Philosophy. As an introduction to this 4th Dimensional Philosophy I now quote from Ouspensky — "Matter is that in which proceed changes called motion and motions are those changes which proceed in matter." (objective knowledge). Then he says "The existence in us of psychic psyche life i.e. of sensations, perceptions, conceptions, reasoning, feeling and desires, etc; & the existence of the world outside of us - from these two fundamental data, immediately proceed our common & clearly understood division of everything that we know into subjective & objective."

"Our relation to the objective world is most exactly defined by the fact that we perceive it as existing in Time & Space: otherwise, out of these conditions, we can neither conceive nor imagine it." "In general, we say that the objective world consists of things & phenomena; i.e. things & changes in states of things. The Phenomena exists for us in Time, the things in Space." "By Time we mean the distance

The cube extended in time is the extension into unknown space & therefore time is the 4th dimension of Space.

(9) separating events in the order of their succession & binding them in different wholes." This distance lies in a direction ^{not} contained in three dimensional Space, therefore it will be the new dimension of Space.

(Use examples of dimension extensions).

Point, Line, Plane, Cube, Time.

Point moving in Space gives the line, Space & movement gives the concept of time.

We noted earlier that Art, in its fullest expression, is knowledge, made concrete, of the inner truths of nature, or creation - all being. What does the new art of today express. It has begun to express the 4th dimensional Space concept. This is first found in the work of Cezanne & that is the chief reason why his work is so important already. Cezanne felt 4th Dimensional Space intuitively - before it became ~~too~~ the conscious thoughts of Philosophers and Scientists. The expression of this new art cannot help itself evolving - it is the art which is the conscious expression of our time. There is no possibility of returning to the art of the past. And this art is not art gone chaotic. Creative thought knows not chaos, only the material side of life can become chaotic. The creative geniuses of today, whose consciousness has advanced to concepts of the 4th dimension of thought, carry the torch of a new understanding together with the Philosophers & Scientists.

In case it may be felt that artists of today have no appreciation of the arts of the past, I must state, that artists who have any understanding of today's expression cannot possibly have reached that understanding without knowing that each period of conscious development throughout the centuries, has its masterpieces of art. I ask - who can fail to appreciate the masterpieces of art? Surely not the artist!

There are, we must admit, many pseudo artists who have adapted the techniques of the new art & have inflicted the unfortunate public with crude and blatant works. This makes it extremely difficult for the public to know what is true & what is false.

The creative artist knows that his rendering is for knowledge & not for pleasure. If it were only for pleasure the charm would cease at once.

The search for beauty is a constant seeking.

Cezanne
extension of the forms.
enrich of the forms.

Family Conn
Varley

People who have no special education of matters pertaining to art can detect which is which, by searching into the development of the artist. No artist can be conscious of the expression of this new art unless he or she has devoted years of searching through naturalistic & idealistic art. The development of an art expression can only be obtained through the most intimate & extended study of nature. Again, one must not be misled by artists who appear very dexterous & produce modern art works by the dozen - An analysis of their work will be found to record almost direct plagiarisms of the various technical expressions of the world's most creative leaders of art. Even the Geniuses of art in the world today are unable to produce ten creative works a year. The threshold of intuitive feeling can not be reached at will and even when it is reached the artist has to mentally formulate the thought-forms & be able to accomplish bringing them into physical manifestation.

There are many levels or planes of art expression, just as there are many planes of musical, literary & dance expressions. Each plane has its value for humanity as they serve to as stepping-stones to the understanding of the highest. We must strive to know the highest.

Let us now look for the inner meaning of the arts of today.

Architecture :- (1) Retraoing oneself from the material world. (2) The attempt to grasp Space. (3) The uniqueness of newly invented alloys fitting the requirements of the conscious will.

Sculpture :- (1) Space concepts expressed in the concave and convex. (2) Space by not expressing the form completely (3) Mobile Sculpture.

Painting :- (1) Extending cubistically the 3rd dimension (2) Kinetism - apparent reality expressed in movement. (3) Abstract - aesthetic relationships of pure form - elimination,

Space expressed in volume projected; colour planes.

(4) Surrealism - Study of dream state - point where sub-conscious & conscious mind meet.

Literature:- (1) Extension of the mental concepts - introducing all thoughts ^{while} still retaining the original theme (E.E.Cummings). (2) Musical vibrations of the sound of repeated words.

Dance:- (1) Expressive interpretations (Martha Graham).
(2) Aesthetic values of choreography.

Colour:- (1) Space, ~~values~~ through intensity & value.
(2) Physical reactions.

Mans consciousness is always in a state of change. With the change of consciousness comes the change of Art. Art is a record of the evolution of Humanity. Our knowledge of Nature has changed. The artist's expression must change as the artist finds his inspiration for ever stimulated by searching into nature.

Thomas Mann said in "Joseph ⁱⁿ Egypt" -

"We are children of our age, and it seems to me it is always better to live by the time of the truth wherein we are born than to try to guide ourselves by the unmemorial past, & the storm masters of antiquity & so doing to deny our souls."