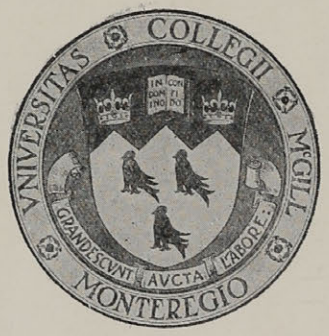
DEVELOPMENT OF THE SENSE OF BEAUTY



THESIS FOR DEGREE OF MASTER OF ARTS.

Major Subject - Education

Minor Subject - Psychology.

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Development of the Sense of Beauty.

The subject is treated from the point of view of art only, and is divided into the following sections:-

1. Introduction, which deals with reasons for the choice of this subject.
2. Definition of "beauty".
3. Characteristics of childhood associated with the "art impulse".
   (a) Play and its relation to the "art impulse".
   (b) Indications of æsthetic feeling.
   (c) Imagination.
4. Development of the æsthetic impulse, with outline of Hildebrand.
5. Experiments in æsthetics, and their application to education.
6. Conclusion - relation to culture.

Development of the Sense of Beauty.

Introduction - Reasons for choice of Subject.

Lord Grey the Governor General of Canada when he opened the Royal Canadian Academy Exhibition in 1910 urged upon his hearers the development of the "spirit of criticism", which may be defined as the art of judging; and Professor Dow of Columbia University says that a training which calls for the exercise of critical powers will of necessity increase an individual's efficiency. To quote Miss Puffer on the subject "The true end of criticism is to tell us whence and why the charm of a work of art: to disengage, to explain, to measure, and to certify it. And this explanation of charm, and this stamping it with the seal of approval, is possible by the help, and only by the help of the science of æsthetics,- a science now only in its beginning, but greatly to be desired in its full development".

The germ of creative power is a natural endowment of every human soul, and it manifests itself first in the form of appreciation; so appreciation of beauty is a faculty pre-existent to any form of art. The cause of the beauty of an object is the desire and the sense of beauty in the human heart. If a certain combination of lines or colours is beautiful, it is the anticipation and appreciation of such combinations as beautiful that has brought about its incarnation.

The aesthetic feeling - that feeling for the sublime and beautiful which magnifies both the pleasure and pain in life-is inherent in the individual, and must be developed, because even an instinctive tendency may become dull for want of exercise.

In the following incident there is evidence of crude aesthetic feeling. Several young rowdies were coming down the steps at the head of Wood Avenue; they had evidently been stealing apples. One of the most unkempt, a boy of eleven or twelve years of age, from his point of vantage at the top of the steps, and looking down the avenue, called out to a chum, "Say Dodd ain't that a fine straight road". Although innate, this aesthetic tendency requires developement and upon the mode of the latter much depends, - the feeling for beauty may be lost altogether, or it may become one of the greatest assets for the good of the individual and of the community. Butler classifies it as one of our inheritances, and places it side by side with the others; so it is the duty of educators to see to it, that each child receives the full advantage of such an inheritance.

Failure to develop this faculty leads to waste of labour, skill, money and time in the production of useless and ugly things.

Harmonious interaction with environment is necessary, and is acquired by adaptation, or by the modification of the

environment, which to a certain extent we ourselves provide.

The inherent power of appreciation leads some to create; but many to desire and approve harmony of form and colour in their life and surroundings, and the question as to whether harmonious and beautiful objects will be produced and predominate in our environment is a question of supply and demand, which is in turn regulated by the appreciative spirit of the consumer.

In a young country the danger of utilitarianism is great, indeed Professor Münsterberg goes so far as to say farther than this and says that the great enemy of a new country is "vulgarity".

While the study of aesthetics appeals to many in a utilitarian manner, it will appeal to all from a cultural point of view, and so ought to be a prominent factor in general education. It will help much the "education of the whole people for appreciation".

A nation's ideals are revealed in its art, and its ~~designs~~, and these ought to represent the spirit of the whole people, whether as creators or as critics. Public appreciation will help to set the standard for both the fine, and the applied arts. To quote Raymond in "The Essentials of Aesthetics" "Painters, sculptors, dramatists, are greatest when thoroughly themselves, yet greatest also when their minds, like mirrors, reflect their surroundings in such ways as to conform most exactly to the observations of the world in general".

The necessity for the development of this critical and appreciative power in general education, and the danger of a certain crudeness, and of a preponderance of utilitarianism in education, in a new country, are the excuses for the formulation of this paper.

J. R. Lowell has said "Americans are the most common-schooled and least cultivated people in the world".

Is it not possible that in the desire to train the intellect, the emotions have been neglected?

More important than the intellectual are the ethical effects of education, and these are obtained by an appeal to the aesthetic instinct; art is as necessary for the development of the emotions as science is for the development of the intellect.

Definition of Beauty.

Beauty is not a quality inherent in the object perceived as the popular use of the term would lead us to suppose; but it is the effect of something in the aspect of an object, which stimulates in the observer an emotional response accompanied by a feeling of pleasure, and this pleasure is considered due to a quality in the object.

Münsterberg speaks of the beauty of an object as an illusory objectification of the mental state of pleasure, and says the aesthetic import of a thing of beauty lies in the fact that it causes pleasant effects in "psychophysical individuals". An object is beautiful if perfect i.e. if every demand which it raises is satisfied by the will, and as agreement means volitions of the same tendency, only a nature which wills can come under the aesthetic point of view.

As pleasure-getting and pleasure-giving are outcomes of the art impulse we may with Marshall consider that it belongs to the science of hedonics; It seems as if there is no other basis than that of hedonics upon which aesthetics can rest, but it does not necessarily follow that all pleasures are aesthetics; an object is never beautiful merely because it is agreeable. That object may be considered beautiful which produces a psychosis permanently pleasurable in revival; but it is not easy to define the bounds of the aesthetic within the hedonic.

Kant holds that aesthetic pleasures lack sensation, but it is only the lower sense pleasures, which have to be excluded from aesthetics; the sensational may be an important part of many aesthetic delights.

Marshall separates the aesthetic field in thought from the hedonic; so it seems as if there may be for individuals certain pleasures which are not aesthetic; how is this determined? It consists in the permanency of the impression.

Pleasures as pleasures are fleeting; those in revival therefore which are permanently pleasurable may be considered aesthetic, those painful in revival are non-aesthetic.

This cuts out the pleasures of the lower senses, they are of limited range, and bound to fade.

Some impressions pleasant in themselves: but not pleasurable in revival, which will therefore be excluded from the field of aesthetic judgment may be included in the field of aesthetic impression.

The aesthetic field is dependent therefore upon individuality.

As beauty cannot be conceived as having a separate and independent existence; a beauty that is not perceived has no more existence than a pleasure that is not felt.

The sense of beauty being subjective grows with the individual, widening and expanding with his increase of understanding and powers of perception, the standard rising

always with his progress to a higher life, until what was once only a physical pleasure becomes transformed into an ideal delight.

Psychologically there is no difference between acts of creative imagination, which result in one case in a work of art, and in another in a mechanical invention.

The response to beauty in any form lies deep in the non-rational part of our nature, and is one of the emotions. Artistic effects are made use of whenever a state of emotional excitement is required; and beautiful architecture, stained glass, and pictures combine with music to produce emotional excitement, to inhibit the calculating reason in favour of impulsive action.

Natural objects can also deeply stir the aesthetic feeling.

For the utmost aesthetic satisfaction first definite form, and second rich spiritual effect is required; and as these are perceptible only to the higher senses, it becomes their exclusive prerogative to take in the utmost effects of artistic effort.

Aesthetics by etymology emphasises the sense element; but Kant said there must also be an intellectual element granted. It is the imagery that gives permanency to the pleasure-field of aesthetic emotion; but there is the basis of sense underlying even the most abstract intellectual process.

Kant regarded the aesthetic experience as the union of sense and reason.

As has been already noted, to become aesthetic the stimuli must be apperceived; that is, they are not in themselves aesthetic.

The value of an object or sound lies in its function as a motor cue, not in its being a good visual picture or auditory echo.

The distinction between a working image, and an aesthetic image is that the former is purely an intellectual concept, while the aesthetic image has incorporated a more or less wide range of rich collateral materials of a sensory and emotional character into a relatively simultaneous synthesis.

If imagery in general represents controlled impulsive and habitual responses, the aesthetic image represents the maximum of such control compatible with the experience as a whole remaining pleasurable; and since all successful control is pleasurable it follows that all reconstruction of former experiences tends to culminate in an aesthetic moment.

Aesthetic consciousness stands for the fullest possible excitation of old tendencies to response as long as it remains predominantly a pleasurable experience. So Ruskin says:-

"That art is greatest which conveys to the mind of the spectator by any means whatsoever, the greatest number of the greatest ideas, and I call an idea great in proportion as it is

received by a higher faculty of the mind, and as it more fully occupies, and in occupying exercises and exacts the faculty by which it is received".

Although an aesthetic judgment must find its justification wholly from within, it is the irrelevance of the purpose rather than the presence of it which interferes with the beauty of an object; as meaning, if it be relatively adequate, is not a bar to beauty. The form must embody the context and the context the form. Style is good only when it corresponds to the thought, and bad when it fails to convey or when it obscures the thought. A word that loses its own identity for the sake of the thought is good.

A rule for architects is "ornament construction, never construct ornament."

Goethe says "In art there appears first a simple impression, then a stage of analysis, which is followed by a return and synthesis of the significant feeling of the whole, which is the aesthetic".

Anything well adapted to its purpose is in a way to become beautiful, and we say with Keats "Beauty is truth, truth beauty".

There are two main elements in an object, which is said to be beautiful, the formal and the concrete. The former comprises the outer characteristics such as line, shade, tone, etc., and the latter is the content or meaning of the object.

The Greeks emphasised the formal elements almost exclusively: but the satisfaction derived from the concrete elements or from ideal emotion is the more lasting. Both are necessary for the highest art. There must be a meaning but it must be elusive. Some art is too elusive. problem after problem is presented with only a tentative solution.

Aesthetic pleasure then is a direct appeal to emotion and feeling. The response to beauty lies deep in the non-rational part of our nature, it is one of the emotions drawing its strength from old deep-seated cravings and desires.

These feeling form the stream of tendency in character, stimulating all the activities, and helping to form those curious motives so impossible to analyse.

When something appeals vividly to the emotional side of our nature, these feelings burst into the conscious mind, and if strong may sweep away the tissue of planned action, and carry the person on a tide of uncontrollable feeling at which they are astonished.

Nature, unadorned landscape, flowers, trees, beauty of sun and moon can deeply stir the aesthetic feeling.

Characteristics of childhood associated with the "art impulse".

(a) Relation between "play" and the "art impulse".

The æsthetic impulse is closely associated with the play instinct, and we speak of the art impulse as a phenomenon common to childhood.

It is not from perversity that the boy carves and chalks his records on books, desks, and walls; nor from chance that a picture book is of an all-absorbing interest; and we owe it to the child to encourage the development of the best there is in this pictographic impulse, as a means both of expression and impression. Children will in early letter-writing use pictures where words fail, and while they should be given entire freedom in the choice of what to draw, good taste and good execution may be encouraged from the first.

It is probable that the first crude art of the race sprang out of the play-like activities indulged in. How is it that primitive people bestow great care upon articles when that care does not improve their utility or efficiency? Certain utensils and implements used by them do not have their effectiveness improved by being polished, and baskets might be less evenly woven. The workman is satisfying an æsthetic sense as well as a practical demand.

Here is evidence of the super-abundant activity which in its spontaneity resembles play, which is quite disinterested,

and from the exercise of which the actor derives pleasure.

Compare the play impulse with the primary impulse of the artist or poet. It originates with the same semi-conscious activity of the child at play, and it becomes the art impulse when he becomes conscious of it, and its value in the eyes of others. A true art impulse is characterised by a love of shaping beautiful things for their own sake, with no thought of advantage to self or to others. The actors are disinterested in that they are thinking only of the pleasure of the action itself, and are doing it for the sake of the enjoyment in the action; the result, effect, or future does not concern them.

Kirkpatrick says that if an individual takes such a pride or pleasure in his work that he would continue to perform it although relieved from the necessity of doing it, he is really playing while he works, and he cites artists and authors among those liable to be so influenced.

In play itself the desire to produce something beautiful is very much in the background, the result is not thought of and so a child's first efforts in drawing, poetry or music are essentially playful. The impression to be produced upon others does not influence him, enjoyment of his own productive activity predominates in the infantile consciousness, and each newly discovered harmony, in colour, or in form, causes him intense enjoyment all through the progress of its production.

This play impulse beddmes an art impulse when it becomes

conscious of itself as a power of shaping semblances which shall have value for other eyes or ears and bring recognition.

Play activity acquires a greater aesthetic importance when it becomes significant and representative of something.

Dances and games in the Kindergarten are easy because of the impulse to imitate, and it is higher imitation, when the child recalls the idea of something he has seen and tries to reproduce it.

Clay-modelling makes direct appeal to the half-artistic plastic impulse of the child. His early drawings are symbols and likenesses, and in his early essays he follows standards and methods of his own, although later he may become hardened into a fixed conventional manner.

According to Sully the child invariably starts with the human figure, and with the head in circular form; there is a general tendency to group the features too high and relative position is lost sight of. When new details are introduced they are magnified in size. Indifference to the trunk is marked, and it is often either an expansion of the head, or is in the form of a rectangle; but it is usually small in proportion to the head. The neck is not shown at all at first, and when introduced is almost in the nature of a caricature.

The first attempt to give profile is usually by the addition of a nose

In summing up one might say:

(1) In the drawings of children there is no element of artistic value; but it is suggestive, and indicates three stages of development:-

a. stage of formless scribble.

b. stage of primitive design.

c. stage of more sophisticated treatment of the human figure.

(2) The form is woefully misapprehended and proportion and relative position of parts are treated with contempt.

(3) The element of number is made light of and more than is seen is introduced.

What is the process a child's mind goes through, when he draws something?

To draw a thing from memory he must have at the outset an idea of the form and this image must translate itself into a series of manual movements; that is he must have an innate conception and a correlated process of execution. The visual image calls up the associated image of the manual movement, and in the process of drawing a whole form each step in operation is adjusted to the preceding steps. Perfect mechanism of the eye, brain and hand connections is required, also a high measure of volitional control and concentration.

A child has to acquire these co-ordinations, and a tendency to imitate is of great assistance to him. The process

is much the same as when he learns to speak and write, the effort being at first spasmodic and the character of the line indicating want of control.

He feels the need of producing effects with the smallest expenditure of labour, but he does not gauge his space, and makes his head so large that he has no room for the trunk. This is the case also when children are learning to write.

The influence of habit shows the child falling into a stereotyped way of drawing a face or figure. He apprehends one or two interesting features, and is blind to the rest, and his visual imagination is far in advance of his manual production. Being guided when he begins to draw by a mass of generalized knowledge, he puts into one design the features of full face and profile. His drawing is a description "his sense-perceptions have for artistic purposes become corrupted by a too large admixture of intelligence", and he may be compared with the adult who says the distant mountain is green.

This abstract treatment however is in the direction of true art, because he has a nascent sense of values. For pictorial purposes the trunk <u>is</u> of less value than the head.

In the addition of accessories children display a rudiment of art feeling and convey a personal impression; but if they try to draw something "pretty" they become critical and the work loses its character.

"When a germ of the aesthetic feeling for beauty arises, when a child falls in love with the mere look of things and tries to produce on paper what is pleasing to the eye genuine artistic work begins."

(b) Indications of aesthetic feeling.

In children there is a growth of the liking for pretty things before the art impulse has had time to manifest itself; as most children who are subject to any cultivating influence acquire a rudimentary appreciation of what their elders think beautiful, before they feel any impulse towards artistic production.

The first indications of favourable stimulation of the eye are seen in the childish regard for luminosity and colour. His aesthetic appreciation of form is evident in his regard for graceful movements, and a delight in the forms of motion. (The part which the motor factor plays in this appreciation is referred to in another place).

Children delight in "tiny" things, for instance birds, insects, shells; and the words"wee", "tiny", "teeny", "teensy", "dear little", predominate in their vocabulary. These words are used in a caressing and tender tone, and with a touch of fellow feeling.

A child delighted in caterpillars, and the expression, "come and see the dear little caterpillar" was frequently used; this joy and delight in the creature ceased as soon as it was accidentally killed.

They acquire while young and before formal education commences, a certain feeling for regularity and symmetry which is the result of observation.

The elementary pleasure of light, colour and certain simple aspects of form are the bases of a crude perception of beauty. The nearest approach to pure aesthetic enjoyment is a love of flowers, and even in these the colour, form and perfume must have an influence.

In their appreciation of nature, children have not the power of embracing a multitude of things in a single act of contemplation, so they have no feeling for landscape, but will pick upon one single point of interest; in this the child resembles the savage.

There is pleasure for the child in listening to sounds and in tracing them to their origin. Some of nature's sounds excite wonder and curiosity. Feeling for quality of tone comes first and it is followed by pleasure in rhythmic sequence; pleasure in regularly recurring sounds is instinctive and the first liking for music is based upon the instinctive feeling for rhythm. The same is true of the rhythmic qualities of verse in which the child takes such delight, in fact rhythm plays an important part in the aesthetic pleasures of all people.

Little ones show early that picture resemblances are understood, in the sense that they call forth reactions similar

to those called forth by realities. Sully says a child has been known to talk to pictures at the end of the eighth month, he is affected by them as he would be by the real object, and does not recognize them as representatives of something; this is not an aesthetic effect. The imagination of the child will tend to invest a semblance with something of reality, and imaginative children will give present actuality to the scene and events described.

It has been said that early childhood needs shapes and sustenance for its own thoughts and fancies, more than instruction, to help to make them citizens of the divine city of Romance.

The presence of true art feeling is indicated by a special quickness in the apprehension of art semblance as such. At first children may be liable to be hurt if anything is described or depicted greatly at variance with daily custom. They are apt to insist on a perfect detailed reproduction of the familiar reality as they see it.

As we have seen, art activity in childhood is all actions directed to an external result recognized as beautiful, that is, as directly pleasing to sense and imagination; and so a gesture or intonation of voice motived by a feeling of what is pretty or nice is a mode of art activity as much as the production of a more permanent aesthetic object such as a drawing.

(c) Imagination.

Everybody possesses some degree of imagination which it is his right and pleasure to express. The decorative and imaginative faculties are instinctive in us and in art, music, and literature men express what they feel: it is the confession of their hearts.

The power to represent the feelings is an intellectual accomplishment acquired by long practice, and as the outward form of expression is perfected and detail is elaborated the spirit is often sacrificed or lost entirely. This happens to the child as the critical side of his nature is developed.

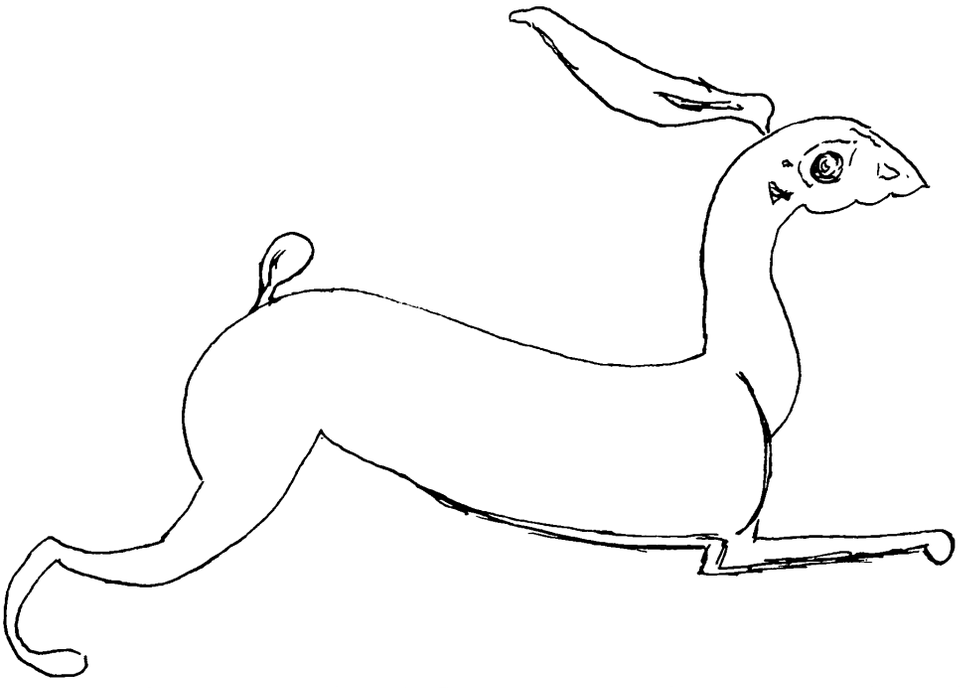
A horse race on an archaic vase is good because of its rhythm, not because of the resemblance of the animals to horses.

The study of nature is valuable for increasing our experience, and feeding our imagination. Ruskin says "All judgment of art finally founds itself on knowledge of nature."

Poetry and art do not exist in nature, but in the human mind that comprehends it; and if our imagination is greater than nature, it should be obeyed.

A conventionalized design representing the qualities of an object is better than a poor copy of the object itself.

Godfrey Blount gives us this copy of a hare on a Greek bowl round which it is supposed to be careering



The man who drew it felt the music of moving lines, and knew how to make the creature's body harmonize with them, his drawing displays purpose and power.

When the student is striving to copy accurately what is in front of him, he is drawing a bolt upon his imagination. It is more natural and more interesting for the child to create rather than to copy, and this creation is fed by his imagination.

The capacity for illusion is always the most interesting feature of child play, and the same child varies greatly in this respect at different times.

Children when drawing object to take nature as their model, they prefer to make the absent present by their art; and their ardour for drawing is considerably dampened by the practice in observation which school discipline requires. The child's model is a mental image, and the picture may be named after it is made.

As has been suggested drawing from copies or models disciplines the powers of observation and attention, and is a training in accuracy; but there is a danger if this course is pursued in toto, that the pupil will lack the training in self-expression and self-revelation which will help to develop the spiritual side of his nature.

To quote again from Ruskin, "Thoroughly perfect art is that which proceeds from the heart, which involves all the noble emotions:- associates with these the head, yet as inferior to the heart; and the hand, yet as inferior to the heart and head; and thus brings out the whole man. - - - - -
All art worthy the name is the energy - neither of the human body alone, nor of the human soul alone, but of both united, one guiding the other; good craftsmanship and work of the fingers joined with good emotions and work of the heart".

Little ones are at home in the world of make believe, and fantastic designs in children's books are suited to their imagination.

They learn to read from pictures before they learn to read from print, and try to draw before they try to write, their earliest and pleasantest memories are of stories illustrated in an imaginative manner; to them every work of art is a moral tale, "once upon a time" means always, and a story which ends with promise of prolonged joy treats of our faiths and hopes, loves and fears.

Development of the aesthetic impulse.

The artistic idea is an evolution from the faculties of seeing and hearing, and a training in aesthetics means the development of these faculties so that we may see and hear things with reference to harmony; so instruction in drawing and music must develop in the child mind a sense of inner balance and harmony.

The tendency to imitate inherent in man is one of the most powerful instruments for the transmission of emotions; and a certain inner imitation or reaction takes place in the beholder when he sees a picture or statue as well as when he is brought into contact with a reality. If the spectator of a statue or an actor is led to imitate the attitude or action of the object he is beholding, he has taken the first step towards producing in himself the object in question.

James says that by assuming the attitude appropriate to an emotion, we are taking an important step, towards the creation of the actual emotion, and the more faithfully we imitate the physical changes the more fully do we feel. By the process of imitation one puts himself into the object observed and thus becomes a part of it: it is a manner of response to a stimulus.

An instance of this occurred lately. A bronze statuette of Madeleine de Verchères by Hébert was carried into

a class-room; the figure is lithe, graceful, and erect, and as it was placed upon the desk the pupils unconsciously threw back their heads, and brought their bodies into a more erect position.

In moments of aesthetic enjoyment strong motor tendencies are usually present, and one is very susceptible to suggestion.

Münsterberg says if we enjoy a work of art it is the volitional acknowledgement of the will of the artist. We will with him, and acknowledge that his work is as we feel it ought to be. He says also that the art world is as valuable as the scientific world, and a lesson in drawing is a contact with the world of art.

When the child in the course of his career tries to produce not what he knows is there, but what is pleasing to the eye, he is beginning his artistic work, and it is ready for development.

Very soon now there may be made for his guidance certain simple rules or rather suggestions for balance or position so that the space to be covered, if it is for decorative purposes, may be filled in a manner which will at least not jar the beholder.

Aesthetic laws are of two classes: negative and positive:

1. Negative laws deal with the exclusion of pain, and the

elimination of ugliness and unrest.

2. Positive laws treat of the production of permanent pleasure fields, which is done by shifting the forces of attention, as pleasures are evanescent.

Sculpture, drawing and painting are classed as imitative arts because they are based upon a study of nature, but mere imitation is not sufficient; the material acquired from a direct study of nature must be developed by the architectonic process and transformed into an artistic unity. As a result of the scientific tendency of our age much art now is purely imitative.

The physical seats of æsthetic pleasure are the eye and the ear, although æsthetic impressions are not necessarily confined to these organs. Miss Puffer demonstrates how the tendency to touch or feel may have somewhat to do with the enjoyment of visual impressions of curved lines. Feeling a continuous smoothe, and curved surface would be essentially pleasant: this is the motor factor again, so that while Hildebrand speaks of the eye and the ear as the organs of æsthetic impressions, it is these plus the motor system or as Puffer expresses it the "psychophysical personality".

According to Hildebrand the eye possesses two faculties, namely:

1. visual perception at a glance,

2. perception made up of visual and kinesthetic factors and it

is through the latter that we are able to imagine solid form.

A sculptor or modeller gives expression to his kinesthetic perception by modelling with his hands from the solid; but while both the painter, and the sculptor have to deal with the relation existing between the visual impressions and kinesthetic ideas, only the painter has to express the form on a plane.

All sizes, forms and colours, have relative values, everything influences the value of everything else, and the total impression is the effect produced by the co-operation of all the factors in perceptual form.

Single parts have no meaning in themselves, and the impression of an object varies in relation to its surroundings. The hand, if viewed alone, appears large, if viewed in relation to the arm, it appears small. The hand has not changed but its perceptual form has changed, so great importance must be attached to mere grouping.

It is well known that equal lines may appear unequal by being differently placed, so by placement we may falsify, or strengthen or altogether lose the effect of an object. In all cases the actual form remains the same; but the perceptual form differs, so that the relation of an object to its environment becomes a part of its characterization. This will be referred to at greater length in the discussion of experiments.

The artist enriches our intercourse with nature, when he suggests situations which reveal the objects with more effectiveness; and perceptual form is richer in content than actual form. An artistic representation to be strong and natural must bring to bear out of the embarassing richness of nature those elementary effects which correspond to our most general conception of form. Children when they draw a face represent the essential parts of our ideas of perceptual form and in the human face painted or chiselled what the child brings out by a few strokes must be emphasised by the artist as being the essential effect. In an artistic sense a comprehension of the values of form is more essential than a comprehension of actual form itself; and to be effective in a work of art, the elements must be combined so that each may have full significance.

Hildebrand sounds a note of warning against the use of deception, which cultivates a lack of delicate discrimination and culture. A sensitive observer in looking at a panorama feels a lack of harmony between the muscular sensation of accommodation and convergence, and his spatial judgments; and this contradiction calls forth an unpleasant feeling which is quite at variance with the aesthetic feeling striven for. The better the panorama the more painful the impression. Wax figures also encourage lack of culture in perception, both these suggest expectations which are not fulfilled.

The distances and depths of a picture will be more easily conceived when objects are placed in few planes and when the distances between these are relatively great. (This also is referred to at greater length elsewhere.)

Two fundamental directions are the vertical and the horizontal. In nature the horizontal predominates and practically all that grows has an upward vertical tendency. These fundamental directions correspond to those inherent in our organism, and in our natural feeling; and objects so placed in a work of art lend stability to the total structure.

The conditions in a picture are felt and lived over by the observer, and it is the correspondence of the suggested impulses with the natural movement that makes the composition good; it is beautiful through the harmony with the conditions offered by our senses, and through harmony with the suggestions and impulses it arouses with the whole organism. All this is true because organic psychology tells us that emotion is dependent upon organic excitation. The presence of the horizontal in nature or in a picture is restful, because it suggests a tendency to assume the horizontal, and induces the restful feeling which accompanies that posture.

Children with a little direction will easily discern the importance of these effects in works of art, they will discover the leading principles, the strong points, and the general effect.

A class of girls averaging twelve years of age very quickly discovered the important part the vertical line plays in the pictures of Burne - Jones, also the triangular arrangement in the Madonna pictures.

The tendency to imitation may be used in developing the aesthetic feeling by the adjustment of environment, by commencing with the child and bringing him into contact early with surroundings which will tend to train him in aesthetics. "Nothing of beauty can pass by, and be altogether unperceived".

Artistic feeling must be a means not an end, and conditions ought to be maintained, which would make it a quality of the whole life rather than an independent activity. Skill in drawing should be sought as a means of expression, and historic style studied not as a mere model, but as an example of harmony; so power to express ideas in harmonious terms and to appreciate harmony will be gained.

Training through all grades in a perception of fine relations of space, tone, and colour, and the skill acquired in execution is an advantage alike to the student who continues and to the pupil who leaves school especially if he enters the industrial world.

Experiments.

Some interesting experiments have been performed in connection with aesthetics.

One class of these was performed upon advanced students, not so much with the object of obtaining information as for the purpose of conveying to the students information in aesthetics by means of a practical demonstration.

Certain pictures, not works of art, were shown, and the votes were taken as to which pictures were most pleasing and why they were pleasing.

Then the pictures chosen were discussed and analysed, the discussion and exposition being based upon Hildebrand's theories.

Hildebrand says that his object when making a work of art is to make it clear and impressive as a visual percept, these three ideas are discussed and are illustrated from the pictures chosen.

To make the pictures clear, and to convey correctly the depth relations Hildebrand arranges a series of planes, and directs the attention of the observer to these planes by objects placed so that they will be read from the front to the depth of the picture.

This understanding of the planes becomes very valuable if the student derives it from his own observation.

Sometimes a picture is improved by cutting off a part of it which interferes with the arrangement into planes. From this we infer that although the impressiveness of a picture depends upon its subject matter, yet for æsthetics, arrangement is of more importance than content, and if the subject matter is not well arranged the effect will not be such as it should.

An experiment of this kind is of value for two reasons:-

1. It gives the æsthetic values of the pictures for this group, and therefore for certain individuals.

2. By such experiments recognized principles of æsthetics may be expounded, discussed, and illustrated by application to the pictures in question.

Although the experiment was performed upon fairly advanced students, that is upon students who had some acquaintance with psychology, there is no reason why studies of the same kind should not be carried on with students less advanced in their course, and also with children.

With the latter the mode of procedure might be varied, and in place of being asked to state their preference, certain pictures which fulfil Hildebrand's three ideas might be explained in outline, so that these principles would be insidiously imbibed by the pupils.

This may be done by a judicious selection of questions, for instance:-

What object in the picture is nearest to you?

What object is farthest away?
What object in the picture did you notice first?
In this way the idea of the depth of the picture would be impressed upon the student, and also the means employed by the artist to portray this depth.

Aesthetics of Repeated Space Forms.

Another series of experiments performed by Eleanor Harris Rowland deals with pleasure or aesthetic appreciation derived from repetition.

That pleasure is derived from repetition is evidenced from the fact that it is used so much in art and especially in architecture.

Strips of cardboard were hung in a space, and up to four strips the repetition was not felt although it was known to be present. With the addition of the fifth strip the feeling of repetition began; but with the four strips a feeling of symmetry was felt which was enjoyed more than the feeling of repetition.

Several white strings were hung against a dark background, and nine subjects were experimented upon.

There are two modes of perceiving repetition:-
In the first the rhythmic element is pronounced, that is a motor response is felt, and when it is hindered the pleasure is lessened. The second takes the presentation as a symmetrical whole, or unit, and wants it all at once.

The strings were then grouped in "pairs", and afterwards in "pairs" and "threes". The latter arrangement changed the character of the "two" as well as of the "three" strings, so that the addition of a string was not purely intensive.

The quality was also changed because as an element became more interesting it became a unit.

The alternating figure has a distinct value also and irregularity in it was very irritating.

The alternation of the "three" and "two" strings gave more pleasure to the temporal or rhythmic type.

If every second string was doubled the result was confusion, it seemed too much work. 

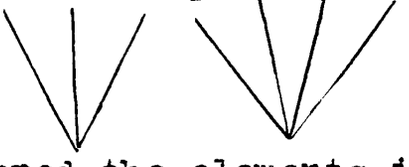
What makes the difference between the minor figure being an enrichment. and being a hindrance?

The minor spaces although they were rest periods for attention seemed to be periods for other kind of activity because if any change was made in them the subject of the experiment was irritated. A mere gap where the scheme remained the same was not so disturbing as an extra feature inserted, or as one noticeably changed. The subject could supply something; but could not alter so easily.

If they were grouped irregularly the pleasure was spoiled and no rhythm remained.

Suppose the lines were arranged in groups of "three"

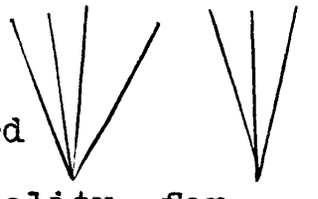
and "four" and the subject was asked not to group them; but to keep them separate, he could not do so.

To bind them into separate units the strings were united at the bottom 

The spatial type grouped the elements into a larger unity, and enjoyed the groups for their own sake, while the temporal type enjoyed the rhythm and went from one to the next in the series.

With these the "four" group was the major group.

When they were grouped some put the "three" group in the centre because of its beauty or unity, and some the "four" group on account of its size.

The balance of each group was next varied  and for some it was spoiled, it lost its individuality, for others the opposite was the case, that is it became more noticeable, and making the "four" unsymmetrical gave it prominence; but it lost coherence and interest and cannot hold its own as an individual thing as the "three" group does.

The general results were:-

1. Any variation of its unit is liable to shift the emphasis.
2. Whether the element becomes the unit or not does not depend on its prominence; but on the amount of interest it holds for the observer. When the unity of the "three" group was also varied it was said that the unity of both elements was broken up.

If the series excites a certain response in the observer that corresponds with his rhythmic organisation it is pleasant,

if not it is otherwise.

When the units are too close together or when alternating spaces vary irregularly the rhythm is disturbed.

The results arrived at were:-

1. Alternate spaces must be of invariable size or the unit is broken up.
2. Objects must recur at proportionate distances from one another.
3. The feeling of rhythm in visual sense is immediate and apart from knowledge.
4. Eight is the highest number that can be held in a rhythmic group.
5. Units tend to regroup themselves into two group elements.
6. Changes in the content of the major unit do not affect the repetition provided the alternate space remains invariable.
7. Observers have sometimes to learn a series before the rhythm is felt.
8. There must be a heavy unit at each end of the series.
9. Repetition of incongruous elements must be avoided.
10. The distance between the unit groups with a strong centre appeared shorter than between the rhythmic groups where the movement was not restrained at the centre.

Contrast between two types.

Some of the chief differences noticeable between the rhythmic and static types were:-

1. The static type could not bear repetition of the unit if it were not in itself agreeable, while the rhythmic type had little choice in the unit provided it was repeated.
2. The static type obtained enjoyment if not compelled to look along, while the rhythmic needed time to look along and enjoy the rhythm.
3. The static type was so taken up with the units, that it did not feel the uniformity or lack of it in the spacing, while the rhythmic type demanded uniform spacing.

These differences seem to be fundamental, and may suggest opposing ideals, and are illustrated by the difference in art appreciation between Japan and America. The former in general seems static, and the latter rhythmic; but of course there are both types in every race.

The Japanese have been looked to as the leaders in decorative art, and in decorative design they demand variation. The same ideal may be used over and over again; but the figures and the spacing must not be uniform, interest among the Japanese centres around one unit at a time.

The American tolerates uniformity of design ; but unevenness of placement, and in order to feel the rhythm he demands that time shall not be spent upon one unit, he is influenced by motor desire. It is even suggested that the Western desire of activity for its own sake may be the expression of the rhythmic desire.

By the Japanese uniformity of design was considered fatal to freshness of imagination. His ideal is to catch a glimpse of infinity. He cannot bear to be compelled to move on from one to another, and even the single art object must avoid symmetry.

In general the rhythmic leads to music, verse forms, regularly repeated designs even to athletics and science; but never to perfect moments of repose.

The static type tends more to the visual arts, such as exquisite material, colour, and workmanship, small detail and variety in design.

Studies in Symmetry by Puffer.

Puffer in her discussion analyses the pleasure derived from real symmetry, and that derived from apparent symmetry. The pleasure derived from the first suggests a harmony in the motor impulses evolved from association with the object and the natural motor impulses of the human organism. The pleasure derivable from the second and apparently a-symmetrical object conforms generally to the same principles.

It is shown conclusively that there is an aesthetic feeling for symmetry in primitive art, or in other words that savages and other primitive peoples take pleasure in symmetrical design.

For example the human form when used for decorative purposes appears almost entirely in full face or if used in profile, it is doubled, in fact all animal forms are frequently treated according to this method of repetition.

In the first drawings of savages when used purely for the purpose of pictorial representation, symmetry is quite lacking, and the savage as the child devotes his attention to the chief characteristics of the object to be represented even to the extent almost of caricaturing them. He draws in order to tell a story.

When drawing for ornamentation only, the meaning is not the essential part, and when the subject is freed from such a restriction he shows a natural tendency to symmetry.

The conclusions arrived at were that although much of the symmetry in primitive art was due to conditions of material, of convenience, and to imitation of animal forms, yet the tendency was in the direction of geometrical symmetry; and as only a small part of the symmetry used for decorative purposes comes from non-aesthetic influences, so as we have decided that there is innate in the individual an aesthetic tendency, we may decide that part of this tendency is towards symmetry, or "there is evidence of an original aesthetic pleasure in symmetry".

This having been decided Miss Puffer endeavoured to determine by a series of experiments, whether the pleasure

caused by objects apparently asymmetrical may not have been really caused by conditions similar to those of the symmetrical objects, that is whether the psychological state produced was not the same as that produced by symmetry.

In such a case a substitution of other factors would take the place of symmetry.

Dr. Pierce's experiments are alluded to and it is pointed out that he confines himself to the question of mechanical balance, and has dealt only with the questions of colour and size, without interest, movement and perspective. Miss Puffer goes farther than this and while she admits that balance is necessary will not concede that it is by any means mechanical balance only.

With regard to movement, she found that factors suggesting movement produce the effect the balanced object would produce after the movement was completed, and the tendency to balance lies at the basis of our preference. This may give way to space filling when the figure which is weaker gains interest, or "heaviness" by being brought nearer to the centre. This is still balance; but with the factor of interest added.

Intrinsic interest is the interest attached to an object apart from its place in the space composition, and it may be created by an especially attractive object in a picture, this intrinsic interest will make the object heavier.

The whole question is one of attention, certain objects in the picture demand attention which is given by the beholder in the form of motor impulses directed towards the object of attention, and the picture will balance or otherwise according as to whether the motor impulses generated are in harmony with our physical organism.

The artist must therefore have in his picture elements which do not necessarily balance themselves; but which will create in the spectator motor impulses which balance.

These decisions were based upon the study of about 1000 pictures of many types.

Among the altarpieces the most interesting object was often balanced by the direction of attention; but very often in pictures of this nature balance is maintained by the placement of objects.

In a study of portraits, pictures apparently not so well balanced as Madonna pictures, the principle of symmetry was well maintained, as even when the head was not in the centre the direction of attention or a vista was found to balance mass and interest.

In landscape pictures a vista will often balance a noticeable part of the picture.

Elements in a picture which are of static character disperse the attention, while those of dynamic character concentrate it, so a combination of the two is ideal; animation

and balance is the result. To conclude, then, substitutional symmetry is richer in suggesting motor impulses than is geometrical symmetry.

The feeling of reverence induced by an altarpiece such as a Madonna picture is helped by fixation of attention to a central point high up in the picture which ~~induces~~ invites the mood of reverence or worship.

So a pyramidal form gives unity and induces a mood appropriate to the subject of the picture.

A diagonal line on the other hand while it secures unity also makes for activity, as the attention moves across the picture, and movement and return of attention are the result. The diagonal type will portray scenes of grandeur, and if a vista is introduced there is concentration with the grandeur.

These two attributes are gained for landscape pictures by means of the pyramid and of the V-shape.

The presence of geometrical symmetry in the pictures of the early artists seems to have been a result of conditions, such as the filling of a symmetrical space, rather than a desire for balance, and may be compared to the decorative primitive art, where a space had to be filled and where it was done in a symmetrical manner.

In contrast to this is the descriptive art which suggests the telling of a story without regard to balance.

As art progresses the rigid symmetry merges into the

substitutional symmetry and the narrative picture becomes balanced. Both attributes are united in the space composition of modern masters in art.

These are some of the means adopted to bring about the favourable stimulation of the eye which is the psychophysical organism, and which is brought to repose.

Application of Experiments.

The performance of experiments in aesthetics leads to definite conclusions, and these conclusions are facts upon which we may base not only our ideas of aesthetic judgments; but also our principles for the guidance and formation of these judgments.

In considering the results of the last two experiments we may conclude that it would be wise to strike a happy medium, for instance the union of the static and rhythmic types of apperceiving may lead to a happy ideal in art and architecture, just as in the experiments on symmetry it was seen that beautiful things which are apparently asymmetrical really yield to the innate desire for balance by an intrinsic interest being added to the side which is weak from the point of view of mechanical balance.

Mere repetition or continuity may lead to monotony; but certain elements susceptible to combination among themselves will suffice to create ornaments whose variety may be multiplied indefinitely.

The earliest form of ornamentation and therefore the earliest form which yields aesthetic pleasure is the rhythmic, the rudest ornaments found on ancient pottery are mere repetitions.

Comparison is one of the first exercises of the imagination, which is in itself the source of all art production. As food for comparison let us introduce variety and contrast, i. .e. alteration in place of repetition. It must be introduced with due regard to balance and harmony which will be done by a careful observance and study of nature, and so the study of the development of the aesthetic sense may be correlated with the other studies.

The repetition and alterations in nature should be noted and studied, for example, feathers, limbs of trees, notes of birds, of insects, coats of animals, shells, and also at the same time colour contrasts and harmonies.

The curved line affords more possibility than does the straight one, and again nature may be used for our object lesson, leaves, branches, animals and even the human body ought to be studied. In fact the child takes naturally to the drawing of the human form, he invariably commences with it, inanimate objects do not appeal to him, his delight is in motion, seen in his drawings. Through the study of the human model the power to deal with simpler models is gained, the eye is opened and the emotional nature is quickened.

The tendency to repetition may be directed, and yet at the same time care should be exercised against its over-development.

Experiments almost identical to the one on repetition described may be performed with young children, by using sticks in place of strings, and in order that the sense of colour contrast and harmony may be tested and developed at the same time, the sticks may be variously coloured.

From a utilitarian point of view the study of the variety of design, the attention to detail, the exquisite workmanship, and the colours of Japanese designs would be of advantage to our country as she progresses industrially. How much better prepared we shall be to make, manufacture or appreciate designs if the principles of balance and harmony have been instilled in a general educational training!

Drawing is a universal form of expression and is valuable for the training of the perception, the senses, and the will. After the first period of enthusiasm when the child draws freely what is in his mind, the period when his drawings are symbolic rather than realistic, he soon comes to the stage when he realizes the inadequacy of his work. Now he needs encouragement and instruction, or drawing may become for him mere mechanical imitation. Miss Puffer proved that primitive peoples take pleasure in symmetrical designs, and when the child is not drawing to tell a story, he also finds an aesthetic

pleasure in symmetry. This tendency should be encouraged, and the pupil trained to take pleasure in mechanical balance, he may be told and will see that a framed picture requires the longest lines near the outside, an unframed one the long lines near the middle. He can see that if a short line is to balance a long one, the former must be farther from the centre than the latter, and he will now begin to appreciate beauty of form. Intrinsic interest, or interest in an object for its own sake without regard to position will follow, and the "heavy" object must be balanced by other salient features such as a vista. This appreciation will be developed by the study of pictures as a whole, or in parts; cut off a part of the picture to see whether the balance is affected.

In drawing almost more than in any other subject individual work is essential, even the simplest drawing is the expression of an individuality and the product of a certain type of disposition, sameness among pupils in a drawing class is an ominous sign. The pupil should be encouraged to create on his own account not to memorize or imitate, so that although set methods are almost worse than useless, general suggestions may prove helpful for an appreciation and production of artistic forms.

The idea of unity is ingrained by study of the pyramidal form in portraits and Madonna pictures; in the latter the attention is fixated to a central point high up, this induces

the mood of reverence or worship, compare the spire of a church or a Gothic Cathedral. Activity as a result of diagonal lines is noticeable in many well-known landscape pictures, this could be delineated in a very few minutes spent in any art gallery.

As a result of psychological experiments in connection with judgment of pictures by children, the narrowness of their observation, their inability to appropriate the picture as a whole, and the devotion of their attention to detail was remarked. Education should aim therefore at widening the scope of attention and training the children in a capacity, which is never attained by an uncultured person, i. e. the capacity of seeing parts in relation to each other, and in subordination to the whole.

Conclusion - relation to culture.

Such a question might be asked as - has the art-instinct any function in the development of the race? Now the doctrine of development holds that if an instinct is deep seated, it is because it has been of service to individuals as members of our race, and as the art-instinct (that impulse towards the expression of our deepest emotions) has been proved to be very deepseated within us, it must be of service to mankind.

Its social value has been referred to, the mutual understanding of art between nations or individuals is a foundation for mutual regard and sympathy. But we may go farther than this, the study of aesthetics, and even of that

one form of it embodied in our word "art" will do much for the development of morality. Maeterlinck says "Nothing in the whole world is so athirst for beauty as the soul, nor is there anything to which beauty clings so readily". He is of course speaking of inner beauty or harmony; but surely it is an aesthetic value, just as love which is spoken of as harmony of souls is classed among such values, and the development of the inner beauty is helped by the development of the outward forms.

As every human being is endowed with a soul and as the spiritual life is the real life of man the ethical results of education are important, and there is need for training of more than the mind and the body.

At the present time there seems to be something wanting in education, a subtle something which used to be contributed by the home, which is no longer obtained there; but which the schools do not provide.

An attempt is being made to instil training in morals, by means of illustrated lectures, and a society called the "National Institution for Moral Instruction" has arranged lectures illustrated by slides made from photographs. They are applicable to, and intended to convey ideas of conduct upon certain occasions. The factor they work through is the motor impulse.

The same end might be achieved by a wise choice of

pictures which would serve the double purpose of imbuing the pupils with aesthetic standards and moral principles at the same time. To illustrate, "The Merciful Knight" a picture by Burne-Jones was studied with a class of girls of about thirteen or fourteen years of age. The Knight who had been wronged, and who started out "to avenge his adversary" was arrested by the sight of a wayside shrine. He falls down before the Christ, and in his ecstasy believes that the Image bends forward to bless him. Under the picture is the sentence "Of a Knight who forgave his enemy when he might have destroyed him, and how the image of Christ blessed him in token that his acts had pleased God". From an aesthetic standpoint the composition of the picture is good, the shrine and knight to the left, and on the right to balance them the vista with the enemy in the distance. Incidentally knighthood, with its aims and ideals is discussed, and great attention is paid to the story in which some of the strongest human emotions are portrayed. Where could one find better material for a moral lesson?

In conjunction with this picture and while studying it, the pupils learned George Frederick Scott's little poem on the wayside cross.

A wayside cross at set of day
Unto my spirit thus did say:

"O soul, my branching arms you see
Point four ways to infinity.

"One points to infinite above,
To show the height of heavenly love.

"Two point to infinite width, which shows
That heavenly love no limit knows.

"One points to infinite beneath,
To show God's love is under death.

"The four arms join, an emblem sweet,
That in God's heart all loves will meet."

I thanked the cross as I turned away,
For such sweet thoughts in the twilight grey.

"The aesthetic and religious side of child nature is developed by the beautiful prose he reads, the songs and hymns of school, and by the forms he draws and models, not to speak of the sinister ministers of beautiful surroundings."

Care must be taken in the choice of pictures used for aesthetic and moral purposes as artificial standards may be adopted, and one may become accustomed to forms intrinsically bad.

For young children works of art that appeal because of their subject or colour should be chosen, pictures that fail to attract will have little influence.

With reference to the effect of art study and appreciation a sentence from a well-known novel might be quoted:- "There were tulips red, tulips yellow, tulips purple and scarlet and mauve. The little hunchback was already there painting them, hugging up close to his easel, taking much more into the heart of him than he probably ever puts down upon his canvas".

The splendours of dress and the decorations of houses and temples show us that the beautiful is conjoined with whatever is of worth, honour and dignity or even of value in our daily life. It is associated with whatever we admire or venerate; especially are æsthetic aids connected with religious feeling. It is easier to be good, loving and holy when surrounded by the charms of life such as flowers, beauties of nature, spells of melody, of poetry, or the fascination of eloquence.

Beauty depends first upon mind, which must perceive it, and ideal beauty is what the mind imagines. Art aims at educing and realizing the divine possibilities of our nature, it is inclusive of nature, is nature impregnated with humanity, and must not be regarded as a by-path or as a plaything for leisure hours; but ought to play a part in the life of all men. Leonardo da Vinci saw beauty in everything. Groos I think it is who says that our capacity for æsthetic enjoyment is in later years very meagre in comparison with the unconditional surrender to it of a youthful soul, e. g. the joy of children in fairy tales.

If this is the case, and possibly it is if we take the mass collectively, may it not be due to a defect in education which allows one of our inherited instincts to become dulled? All children and some adults are artists. In an age of specialization and urban life play becomes necessary for the

development of man's power, and just as we open playgrounds to children in order to provide an outlet for that which will have way, so the field of aesthetics opens up an opportunity to continue for the youth and man the work that has been begun for the child, and to provide him with art galleries, music and literature that will give food for his imagination. Artistic enjoyment is the highest and most valuable form of adult play. In the various occupations of mankind only a limited number of mental powers are employed and these only partly so. This would have a disastrous effect on man if art did not supply the deficiency of stimulus. In art man has a capacity of pleasure for himself and others, which is based upon self-illusion and which by widening and deepening human perception and emotion tends to improve the race.

As aesthetic delight comes from within, with it comes happiness which is the unity of the inner world in its will-impulses and which is in itself aesthetic. We have no wish of our own when enjoying a work of art, and the less there is of our own wish or will the greater the harmony with the lines and forms of the object. Münsterberg says "To live one's life in all the fulness of its creating energies, to will from the deepest soul in every experience with things and fellow-men, to feel the suggestions of new wills which stream together with the fundamental will of the self - such a moving equilibrium of the inner world is the highest happiness."