A STUDY AND SPECIFICATION OF ART APPRECIATION IN TERMS OF THE STRUCTURE OF VISUAL PERCEPTION

DISSERTATION

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By

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A study and specification of art appreciation in terms of the structure of visual perception
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As the area of art appreciation has expanded, and as its philosophy and methods have developed, it becomes increasingly important to investigate the implications of this subject-matter field with respect to various other discoveries in related studies. In light of present-day empirical data, particularly in the field of perception, many of the principles and assumptions directing the teaching of art appreciation must be questioned. The contribution which the area of perception, along with other empirical studies, can make to the teaching of art appreciation must be shown. To meet the need for a comprehensive statement regarding the implications of per-
ception for art appreciation has been the primary reason for undertaking this inquiry.

I wish to express my deep appreciation of the valuable assistance offered to me over the years by Professor Hoyt L. Sherman. His aid and patience has been instrumental in seeing this study through to its conclusion.

To the other members of my doctoral committee, Professor James Grimes, Professor Virgil Hinshaw, Professor Lauren Wispe and Professor Kurt Wolff, I wish to acknowledge my gratitude for their continued assistance throughout my graduate studies.

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introduction

... for our only criterion of the matter is human perception. So we are obliged to say that: the more the perception of the artist is in accordance with the highest attained efforts of human perception, the greater will be his work.

Vernon Blake (1)

I have been occupied for a number of years with the prob-
lem of teaching art appreciation. Specifically, I have sought for an approach that would provide the student with a functional and actional basis for making esthetic judgments. In this effort I have become acquainted with a variety of ideas and programs now used in the teaching of art appreciation. Besides the contradictory nature of many of these ideas, I found that the majority had no "warranted assertibility" in light of known facts about organismic-artistic processes. Generally, most of them were grounded in philosophic or historical methods and seemed traditionally bound by the limitations of those areas. It has been my experience that the use of such points of view made no effect upon the student's capacity for esthetic judgment.

In spite of the failure of these programs, they were of immense value to this inquiry. Through study, the general patterns of their confusions began to emerge. Once these confusions were established, the weaknesses of their assumptions and conclusions became apparent. The inefficacy of the present teaching of art appreciation could now be corrected and stated in functional terms and forthwith dealt with concretely.

One of the major causes for the failure of the art appreciation program may be attributed to the underlying motive of the colleges and universities in adding art appreciation
to their curriculum. This motive may be seen as twofold: 1) as a revolt against the overstressing of science in scholastic studies and 2) a revolt against overspecialization. Thus, the introducing of art appreciation to the curriculum was more or less a corrective measure - not a positive program. One will have great difficulty in finding a program in art appreciation that has a structure paralleling that of other university disciplines. For this reason it should not be too surprising to find the teaching of art appreciation to be fraught with certain confusions from the outset.

A second cause for the dilemma of these programs lies in the failure of art educators to show the direct relationship which holds between the understanding of the arts and science. Few attempts have been made in the arts to utilize many of the basic components of various scientific areas. The empirical disclosures of psychology, neurology, biology and fields devoted to the study of human behavior have had little influence on the teaching of art appreciation. Nor have most of the dictums of art teachers been checked against these areas of inquiry. This isolation of the arts and artist from the empirical data of other endeavors has led to a personal dogmatism in the teaching of art appreciation. It therefore becomes necessary to point to this relationship by a means which is acceptable, not
only to the scientist, but to the art educator as well.

Art appreciation has largely concerned the student with styles, techniques, surveys of historic periods and a minutia of biographical data. As such, the third part of the dilemma in art appreciation teaching arises. The material covered is usually arranged as a survey of the development of the visual arts. The student is provided with a series of categories into which various art forms may be placed. Realism, classicism, idealism, cubism, etc., are given as closed systems for classification. This procedure expects the student to learn to differentiate esthetic forms on this classificatory basis. Once able to do this it is assumed that he has gained some ability to appreciate works of art, or at least he has laid the ground for future esthetic experience. Such presentations, however, avoid the real problem of form, order, organization and structure as related to the visual arts.

From the categorical and classificatory studies to which the student is submitted, there is little evidence to support the claim that he is capable of esthetic judgments in any functional or operational sense. Rather, his inability to handle the esthetic in terms of empirical evaluations is shown by the house he erects, the furniture he buys and the general decor with which he surrounds himself.
Therefore, for the subject of art appreciation to have an operational validity, it becomes necessary that it provide the student with a functional framework. This system must provide the student with a foundation from which he can develop a personal esthetic judgment in the presence of present and future artifacts.

This dissertation is concerned with the development of a point of view that places emphasis upon the individual's perceptions in relation to esthetic form. It will show that an awareness of the factors inherent in perception makes it possible for a more conclusive and related study of the visual arts to be instituted. It is hoped that such a method will provide the student with an effective means for engaging actively in the appreciation and evaluation of the visual arts.

"I hate everything that merely instructs me without increasing or directly quickening my activity."

Goethe (3)

This dissertation will deal with the following major points:
1. A specification of the terms used in this inquiry. This dissertation is based on a fundamental treatment of visual perception as it relates to art appreciation. Perception is treated as a transactional process. Therefore a specification of "perception" and "transaction" is given. Terms implicit within, and necessary to, the latter are classified.

2. A criticism of the system of "identity".
   A criticism of the Aristotelian system of "identity" is undertaken to show the limitations which must be removed before a more functional and operational ground for art appreciation can be provided.

3. A criticism of the terms "art" and "appreciation".
   This criticism amplifies the ambiguous and non-definitive character of the terms "art" and "appreciation" as used by other authors which this dissertation will attempt to exclude. The criticism specifies the necessity for a re-examination of the conditions which permit such semantic conclusions to be drawn.

4. A specification of the term "art".
   A specification of the term "art" is given from
an analysis of the organism as an abstracting agent in a perceived environment.

5. A specification of the term "appreciation".

"Appreciation" is examined in the light of the preceding analysis and is specified from an organismic-environmental point of view.

6. Explanation and application of fundamental visual phenomena. (Visual Demonstration Center, The Ohio State University.)

A series of visual demonstrations, which offer significant disclosures as to the origin and nature of perception, will be used to effect a relatedness between the inquiries as noted above and the actualization of common experiences. This inquiry shall further attempt to show that these demonstrations clearly provide a basis for the construction of an internal frame of reference which releases the individual from introjected valuations, thereby allowing for greater security in the discriminatory judgments made by the individual. Finally, the inclusion of these demonstrations of fundamental visual phenomena will show how the teaching of art appreciation can be made more
effective.

1. Blake, V. Relation in Art (New York, 1925), p. 43
The proposed approach to the teaching of art appreciation entails a significant shift in emphasis from traditional methods. Rather than searching for an "esthetic", 
"religious", or "historical" method for evaluation of art works, this proposal is based upon a method which emphasizes the transactional nature of perceptual behavior.

It is postulated that perceptual transactions are instrumental to any activities involved in the visual arts, regardless of whether the activity be concerned with the projection and creation of such works or with the projection in terms of critical observance.

"We call the process by which the organism makes a phenomenal object under the impact of external forces, the process of perception. . . . It is obvious that the psychology of perception will be of very great importance for the psychology of art; for not only does it investigate the establishment of the art-objects in the spectators who are to enjoy them, but . . . perception of his own work guides the artist throughout his act of creation."

K. Koffka (1)

A delineation of the structural aspects inherent in the two terms, perception and transaction, are necessary to and fundamental for the position held here. We have chosen the following specifications as being not only the clearest
and most concise, but also for this context, the most operational.

The specification of TRANSACTION is taken as critical to perceptual behavior and therefore is propaedeutic to this dissertation. Thus—

"Transaction is inquiry of a type in which existing descriptions of events are accepted only as tentative and preliminary, so that new descriptions of the aspects and phases of events, whether in widened or narrowed forms, may freely be made at any and all stages of the inquiry.

"Transaction is inquiry which ranges under primary observation across all subject-matters that present themselves, and proceeds with freedom toward the re-determination and re-naming of the objects comprised in the system.

"Transaction is Fact such that no one of its constituents can be adequately specified as fact apart from the specification of other constituents of the full subject-matter.

"Transaction develops the widening phases of knowledge, the broadening of system within the limits of observation and report.

"Transaction regards extension in time to be as indispensable as is extension in space (if observation is to be properly made), so that 'thing' is in action, and 'action' is observable as thing, while all the distinctions between things and
actions are taken as marking provisional stages of subject-matter to be established through further inquiry.

"Transaction assumes no pre-knowledge of either organism or environment alone as adequate, not even as respects the basic nature of the current conventional distinctions between them, but requires their primary acceptance in common system, with full freedom reserved for their developing examination.

"Transaction is the procedure which observes men talking and writing, with their word-behaviors and other representational activities connected with their thing-perceivings and manipulations, and which permits a full treatment, descriptive and functional, of the whole process, and inclusive of all its 'contents', whether called 'inners' or 'outers', in whatever way the advancing techniques of inquiry require.

"Transactional Observation is the fruit of an insistence upon the right to proceed in freedom to select and view all subject-matters in whatever way seems desirable under reasonable hypothesis, and regardless of ancient claims on behalf of either minds or material mechanisms, or any of the surrogates of either."

Dewey and Bentley (2)

PERCEPTION is specified as that which

"refers to those interactions be-
between an organism and its (necessary) environment in which the form of response is governed by the signal or sign significance as contrasted with the energy strength or quality or pattern of the stimulus configuration itself. In these cases the signal or sign significance of the stimulus comes to exist (either spontaneously or effortfully) as an emergent from certain specific previous organism-environment interactions of the individual. Responses in this restricted aspect of the total gamut of interactions, then, are always indirect; the reaction is not governed solely by the energy characteristics or preformed pattern of stimulus-neural configurations; it is determined by the meaning the individual's prior experiences have 'given' to the stimulus configuration (i.e., the conceptual set, or assumption, or personality configuration, or schema defined as an emergent from prior perception). The reaction need not, of course, be verbal; as Boring has pointed out it may be communicated to the observer in an almost infinite number of ways."

Blake and Ramsey (3)

For the purpose of graphic clarification of the various components involved in this statement, a chart (see Figure 1) is included. On the basis of this chart, PERCEPTION may be seen as an integration of the factors as diagrammed. Critical to this chart are three basic categories of behavior: PAST EXPERIENCE, PURPOSE and ACTION. The explanation of each term which follows, extends the operational basis of this inquiry.
"PAST EXPERIENCE is that which the viewer brings to a given object-situation (stimulus) in a given perception, thus endowing the external object (the stimulus pattern) with most of its complex meanings. The 'reality' of the object under view is not intrinsic to the object per se but lies in an integration of the stimulus pattern (object) and the perceiver's PAST EXPERIENCE."

"PURPOSE is the means by which PAST EXPERIENCE is integrated and given a specific direction. Through PURPOSE, the organism not only selects and integrates that which is appropriate within its PAST EXPERIENCE, but in doing so, it simultaneously distinguishes a specific stimulus from an infinity of stimuli intrinsic to any given object-situation. By the simultaneous processes of ordering PAST EXPERIENCE and defining the specific stimulus, PURPOSE establishes a basis for ACTION."

Hoyt Sherman (4)

ACTION is the ordering of both PAST EXPERIENCE and PURPOSE so that behavior resulting from such an ordering is deliberate and directional. As such, it is open to criticism and alteration. The success of any action is dependent upon the integration of externality and internality. Where such integration does not take place there results a disjunctiveness of kind. It is this disjunctiveness in behavior which is open to recognition and reorganization.

These specifications must be kept in mind and referred to constantly throughout this dissertation. It must be remem-
bered that they are directly related to the disclosures provided by the Visual Demonstrations. As the specifications are somewhat complex in structure, a clearer understanding of them may be had through experience with and study of the Visual Demonstrations.

Since these demonstrations deal with the origin and nature of perception, they form the basis from which this writing is structured. That they spell out the function of "past experience", "purpose" and "action" as principal factors in perceptual behavior is of major significance. Acquaintance with these demonstrations will generate a clearer understanding of this dissertation. A reading of Hoyt Sherman's "A Manual of Operation with an Emphasis on the Arts: The Visual Demonstration Center, Part I" provides significant data which further shows the relevance of the demonstrations for the issue at hand.

Therefore:

1. In dealing with the problem of "art appreciation" and its visual components, the problem of how man reacts to his environment perceptually must be considered.

2. In order to consider the factors inherent in the nature of perception, we find it necessary to point to evidence beyond the written
word for experiential exemplification of what is meant by the term "perception".

3. In the Visual Demonstrations a basis is provided for common experiences which clarify otherwise abstruse disclosures.

4. In the Visual Demonstrations, an operational ground is provided on which the validity of certain statements about visual processes can be tested.

5. In providing new and challenging insights which effectively illuminate human behavior, the Visual Demonstrations show a way by which perceptual behavior as related to works of art can be given a new orientation.

6. In summation, the demonstrations provide a laboratory situation where the assumptions of this dissertation may be tested and observed. Much of that which has been called the "mystery" in the creative phase of the artist-in-process can be transferred to a level which is open to empirical verification. These demonstrations provide a dramatic situation whereby the layman can more effectively be shown a functional procedure for the manipulation of his own exper-
In light of the above descriptions and for those which follow, this dissertation will be primarily concerned with a system of namings known as "SPECIFICATION". This procedure is qualified by the passage which follows.

"Specification is the type of naming that develops when inquiry gets down to close hard work, concentrates experimentally on its own subject matters, and acquires the combination of firmness and flexibility in naming that consolidates the advances of the future. It is the passage from conversational and other 'practical' namings to namings that are likewise practical—indeed, very much more practical—for research."

"It opens and ranges. By the use of widened descriptions it breaks down old barriers, and it is prepared to break down whatever shows itself as barrier, no matter how strongly the old characterizations insist on retention. What it opens up it retains for permanent range from the furthest past to the best anticipated future. Also it retains it as open. It looks back on the ancient namings as at least having been designational procedure, no matter how poor that procedure was from man's twentieth-century point of
view. It looks upon further specifications as opening a richer and wider world of knowledge. In short it sees the world of knowledge as in growth from its most primitive forms to its most perfected forms. It does not insert any kind of a 'still more real' world behind or beneath its world of knowledge and fact. It suspects that any such 'real' world it could pretend to insert behind the known world would be a very foolish sort of a guessed-at world; and it is quite content to let full knowledge come in the future under growth instead of being leaped at in this particular instant. It welcomes hypotheses provided they are taken for what they are. Theories which sum up and organize facts in ways which both retain the conclusions of past inquiries and given direction to future research are themselves indispensable specifications of fact."

Dewey and Bentley (5)

In the approach to art appreciation as undertaken, a categorical specification for the proper appraisal of this work is provided in the following quotation. Careful notation of these points as they relate to this dissertation will reduce the occasion for terminological misunderstanding.

"1. We employ no basic differentiation of subject vs. object, any more than of soul vs. body, of mind vs. matter, or of self vs. not-self.

"2. We introduce no knower to confront what is known as if in a different, or superior, realm of being
or action; nor any known or knowable as of a different realm to stand over against the knower.

"3. We tolerate no 'entities' or 'realities' of any kind, intruding as if from behind or beyond the knowing-known events, with power to interfere, whether to distort or to correct.

"4. We introduce no 'faculties' or other operators (however disguised) of an organism's behaviors, but require for all investigation direct observation and usable reports of events, without which, or without the effort to obtain which, all proposed procedure is to be rejected as profitless for the type of enterprise we here undertake.

"5. In especial we recognize no names that pretend to be expressions of 'inner' thoughts, any more than we recognize names that pretend to be compulsions exercised upon us by 'outer' objects.

"6. We reject the 'no man's land' of words imagined to lie between the organism and its environmental objects in the fashion of most current logics, and require, instead, definite locations for all naming behaviors as organic-environmental transactions under observation.

"7. We tolerate no finalities of meaning parading as 'ultimate' truth or 'absolute' knowledge, and give such purported finalities no recognition whatever under our postulation of natural system for man in the world.
"8. To sum up: Since we are concerned with what is inquired into and is in process of knowing as cosmic event, we have no interest in any form of hypostatized underpinning. Any statement that is or can be made about a knower, self, mind, or subject – or about a known thing, an object, or a cosmos – must, so far as we are concerned, be made on the basis, and in terms, of aspects of event which inquiry, as itself a cosmic event, finds taking place."

Dewey and Bentley (6)

One point should remain clear to the reader of the following discussions. I feel that the great variety of confusions existent in this area of study is the result of something defective in the underlying assumptions that influence the general approach of others. In the development of this procedure, I trust the nature of these defects will become evident; and I hope that any specific criticisms I am compelled to make will be taken as concerned solely with the nature of my inquiry and not with personalities.


2. Dewey, J. and Bentley, F.A. The Knowing and the Known (Boston, 1949), pp. 122, 123, 124


4. Sherman, H. The Visual Demonstration Center, A Manual for Operation (Columbus, O., 1951), p. 4
5. Dewey, J. and Bentley, F.A. op. cit., p. 162, 163, 164

6. Dewey, J. and Bentley, F.A. op. cit., p. 120
chapter two

a criticism of the system of identity

The use of the historic and traditional system of "identity" has undoubtedly caused more unnecessary problems and perpetuated more primitive types of evaluation in the field
of art appreciation than any other number of combined factors. It must be acknowledged that it is deeply em­bedded in our language structure. As a hangover from primitive, pre-scientific, anthropomorphic societies, it has caused irrevocable damage and fostered many irrelevant arguments in the field of art evaluation. A cursory reading of almost any text dealing with the topic of art appreciation or history will reveal an astounding number of examples in which the principle of "identity" is utilized. Would that these texts had little influence on the reader. Extensive as they are, however, as authoritarian treatises in modern society, they lead to the continuance of under­development and regression of creative thinking. Primi­tive "identification", reactions to highly developed visual forms, widen the breach between artist and observer in 1953 society. What is meant by "identity" as used here will be considered below.

A non-Aristotelian approach seems most able to remove the problems which arise from the use of such a system as "identity". Those acquainted with modern "psycho-logics" and mathematical and neuro-physiological constructs, will be prepared to accept the term "non-Aristotelian" as undefined. A critical analysis and orientation process toward such a view may be found in Alfred Korzybski's book Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics. The major implications of
the system may be generalized as follows:

"This evaluation is based on a functional rather than zoological or mythological approach and considers 'man' as 'an organism-as-a-whole-in-an-environment.' Here the reactions of humans are not split verbally and elementally into separate 'body,' 'mind,' 'emotions,' 'intellect,' or different 'senses,' etc., by themselves, which affects the problems of 'perception' when considered from a non-elementalistic point of view. With a time-binding consciousness, our criteria of values, and so behavior, are based on the study of human potentialities, not on statistical averages on the level of homo homini lupus drawn from primitive and/or un-sane evaluational reactions which are on record."

A. Korzybski (1)

One of the purposes of this dissertation is to deal with art appreciation at a semantic level. Appropriate to this purpose is the utilization of the non-Aristotelian system. The explicit reasons for its inclusion are twofold.

First, the artificial immobility of a two-valued "is" of identity, subject-predicate, logic is excluded. Through exclusion of these factors, a functional, actional, behavioristic, operational language can result. This permits the involvement in modern asymmetrical implications of "order" allowing for more obvious and true-to-fact evaluations. An example of this will be given below.
Secondly, this system orients evaluative processes toward an organismic position. It takes account of the various orders of abstracting at their distinct and proper levels. As will be shown, an accounting for the process of abstracting is of major importance in overcoming the false evaluations so often found in modern esthetic criticism.

The following quotations illustrate the limitations of an Aristotelian system. If the reader is careful to note the broader implications of the writers cited, the importance of relating them to the present inquiry will be clearly seen.

"The belief or unconscious conviction that all propositions are of the subject-predicate form—in other words, that every fact consists in something having some quality—has rendered most philosophers incapable of giving any account of the world of science and daily life. . . ."

B. Russell (2)

"Philosophers have, as a rule, failed to notice more than two types of sentence, exemplified by the two statements 'this is yellow' and 'buttercups are yellow.' They mistakenly suppose that these two were one and the same type, and also that all propositions were of this type. The former error was exposed by Frege and Peano; the latter was found to make the explanation of order impossible. Consequently, the traditional view that all propositions ascribe a predicate to a subject collapsed, and with it the
metaphysical systems which were based upon it, consciously or unconsciously."

B. Russell (3)

"Asymmetrical relations are involved in all series—in space and time, greater and less, whole and part, and many others of the most important characteristics of the actual world. All these aspects, therefore, the logic which reduces everything to subjects and predicates is compelled to condemn as error and mere appearance."

B. Russell (4)

"The evil produced by the Aristotelian 'primary substance' is exactly this habit of metaphysical emphasis upon the 'subject-predicate' form of proposition."

A. Whitehead (5)

"In summary we find word and thing in Aristotle surveyed together but focused on permanence. In the later Middle Ages they came to be split apart, still with an eye on permanence, but with nothing by way of working organization except the tricky device of the 'concept' as a third and separate item. Today logic presents, in this historical setting, many varieties of conflicting accounts of definition, side-slipping across one another, compromising and apologizing, with little coherence, and few signs of so much as a beginning of firm treatment. We shall proceed to show this as of the present. What we may hope for in the future is to have the gap between name and object done away with by the aid of a
modern behavioral construction which is Aristotelian in the sense that it is freed from the post-Aristotelian dismemberment of man's naming activities from his named world, but which at the same time frees itself from Aristotle's classical demand for permanence in knowledge, and adapts itself to the modern view of science as in continuing growth. Act and product belong broadly together, with product, as proceeds, always in action, and with action always process. Word and thing belong broadly together, with their provisional severance of high practical importance in its properly limited range, but never as full description nor as adequate theoretical presentation, and always in action."

Dewey and Bentley (6)

"The symbol A is not the counterpart of anything in familiar life. To the child the letter A would seem horribly abstract; so we give him a familiar conception along with it. 'A was an Archer who shot at a frog.' This tides over his immediate difficulty; but he cannot make serious progress with word-building so long as Archers, Butchers, Captains, dance round the letters. The letters are abstract, and sooner or later he has to realise it. In physics we have outgrown archer and apple-pie definitions of the fundamental symbols. To a request to explain what an electron really is supposed to be we can only answer, 'It is part of the A B C of physics'."

A. S. Eddington (7)

The Dormouse. . . went on: "—that begins with an M, such as mouse-traps, and the moon, and memory, and muchness—you know you say
things are 'much of a muchness'--
did you ever see such a thing as a
drawing of a muchness?!
"Really, now you ask me," said
Alice, very much confused, "I don't
think--"
"Then you shouldn't talk," said the
Hatter."

Lewis Carroll (8)

"When I was a child, I spake as a
child, I understood as a child, I
thought as a child: but when I be­
came a man, I put away childish
things."

The first Epistle of Paul the
Apostle to the Corinthians -
Chapter 13:11

Common to the language problem of the appreciation of art,
as well as to all linguistic problems, is the handling of
the verb "to be". To clarify the position held in this
dissertation, an examination of the Indo-European use of
the verb is undertaken. Generally speaking, "to be" is
accepted as roughly serving four ends. It is used:

1. As an auxiliary verb
2. As the "is" of existence
3. As the "is" of predication
4. As the "is" of identity (9)

The first two, being necessary to English and usually harm­
less, are bypassed. The latter two, however, must be given
close attention. If, for example, one says while looking
at any given work of art, "that is a beautiful green (or
red, or shade, or dark, or configuration, etc.)" everything
"known" about the nervous system and the structure of the empirical world in 1953 becomes a falsification. It must be recognized that there are no "greens", or "reds", or "shades", or "darks", or "configurations", etc., in art forms, only radiated waves of specific length. When the statement is changed to "I see the green (or red, or shade, etc.) as beautiful," then it is no longer a falsification of facts, 1953.

What may seem to be a good deal of childish bickering over terminology and correctness of statement is intended as anything but that. Close consideration of the analytic procedure used in almost all presentations concerned with art judgments shows a decided favoring of this "is" of predication. Two things of major importance emerge from such a course of action.

1. On the false assumption, largely because of past experience and common usage, that the "is" of predication is true to fact, the organism-as-a-whole is forgotten. The perceptual process, on either the part of the creator or the beholder, becomes self-actional and therefore largely figural in nature. Resulting evaluations are delusional in character as they are false to fact to begin with. Regardless of their literary merit, they can lead to nothing
but the most primitive and elementalistic habits.

2. Furthermore, dependence upon this system leads to severe contradictions between what may be named as the "creative act" and "observer reaction". The tendency to rely on the predicative operation from common experience strengthens belief in its ultimate reaches. The organismal-environmental-transactional process is foregone. Structure as a relational factor is either superficially postulated or else unconcernedly bypassed. By ignoring the electro-colloidal process of abstracting, evaluations come to be placed out in the object, resulting in misevaluations.

"For instance, our statement that identity has often to be understood in a structural sense does not entirely suffice. Traditional logic regards it as a very basic rule that the items of discourse—concepts, propositions, and so on—have to remain rigidly identical if repeated. Important as this rule is for certain questions of validity, it does not generally fit real thinking. In real thinking processes, items often do not remain rigidly identical; and as a matter of fact, precisely their change, their improvement is required. If an item, concept or proposition, recurs in the process and appears from an atomistic point
of view as identical, it very often is not really so. Its functional and structural meaning has actually, and fortunately, changed. Blindness to such a change in meaning often impedes productive processes. In real thinking the functional meaning of an item, of a proposition, that meaning which changes as thinking advances, is of the utmost importance—without it thinking gets sterile; without realization of that change one does not grasp the line of progress. For statements, etc., have a direction in their context. It is here that a basic feature of traditional logic comes to the fore; its disregard of the intense directedness of live thought processes as they improve a given situation."

Max Wertheimer (10)

The fourth, and ultimately the most important, point to be dealt with is the "is" of identity. Since this has led to the many ramifications mentioned earlier in this chapter, close attention must be given to the following points. These are decisive in, and critical to, setting up the point of view of this dissertation.

The extensional meaning of "identity" as it is to be used in this problem is explicitly set forth in the following quote:

"'Identity' as a 'principle' is defined as 'absolute sameness in 'all' ('every') respects.' It can never empirically be found in this world of ever-changing processes, nor on
silent levels of our nervous systems. 'Partial Identity' or 'identity in some respects' obviously represents only a self-contradiction in terms. Identification, as the term is used here, can be observed very low in the scale of life. It may be considered the first organic and/or organismal relating of 'cause' and 'effect,' order, etc., when lower organisms responded effectively to signals 'as if' they were actualities. On lower levels such organismal identifications have survival value. Laboratory observations show that the amoeba will exhibit reactions to artificial stimulations, without food value, similar to its reactions to stimuli with food value. The amoeba as a living bit of protoplasm has organismally identified an artificial, valueless-as-food, laboratory stimulus with 'reality.' Thus, although the reaction was there, the evaluation was inappropriate, which does not change the biological fact that without such identifications, or automatic response to a stimulus, no amoeba could survive."

A. Korzybski (11)

Many day by day identifications are harmless. However, when carried over, by principle, into certain art areas they lead to frustrating or disastrous consequences. Three examples of identification and their results are given; one of a freshman "art student," one of an art historian, one of a "lay" art observer, which illustrate the nature of such consequences.

In the first example, the freshman enrolls in a drawing course. He is confronted with a tridimensional stimulus
pattern, e.g. model, still life, landscape, etc., and is asked to draw on a bi-dimensional surface. As a student with the usual past educational and living experiences, there is little or no awareness on his part of the role he plays as an abstracting organism. Singling out items, usually by name, he proceeds to put marks on the paper in front of him which will constitute an object to be identified with that which he identifies in the stimulus pattern (out-there) as an object. Reduction of a tri-dimensional world to a bi-dimensional field he finds extremely difficult, if not impossible. In due course, not only is the identification of physical objects with his own marking attempted, but he tries further to identify them with the markings of other individuals whom he considers successful at such a business.

This development is generally marked by frustration. Since the student's markings can be evaluated by him through the "is" of identity only, there is no other evaluational avenue open to him. His own individual qualities are obscured. Thinking in such a system fails to allow for an ordered or visual response since the inhibitory factor of identification is stronger in his neural system than the frequencies impinging upon it.

A second example is that of the art historian. To resolve all unnecessary arguments, the developed thesis of most
historians is recognized as more or less correct up to a
certain point. Their biographical, physical, cause and
effect statements are acceptable for now. The crux of
the matter is when they put these to work, identifying
them with the emergent form of the artist and assuming
they have then more or less given scientific or meta-
physical ground to their hypothesis. The following is
cited as an explicit example of this.

"The origin of the Gothic style was
primarily the result of the tech-
nically successful solution of an
architectural problem, namely, the
problem of the technical optimum in
the construction of abutments for
the support of the cross-arched
vault, in connection with certain
details which we shall not discuss
here. Quite concrete architectural
problems were solved. The know-
ledge that in this way a certain
type of vaulting of non-quadratic
areas was also made possible
awakened the passionate enthusiasm
of the early and perhaps forever
unknown architects to whom we owe
the development of the new archi-
tectural style. Their technical
rationalism applied the new prin-
ciple with a thoroughgoing con-
sistency. Their artistic impulse
used it as a means for fulfilling
artistic tasks which had until
then been scarcely suspected and
swung sculpture in the direction of
a 'feeling for the body' which was
stimulated primarily by the new
methods of treating space and sur-
face in architecture. The con-
vergence of this primarily tech-
nically conditioned revolution with
certain largely socially and
religiously conditioned feelings
supplied most of those problems on
which the artists of the Gothic epoch worked."

M. Weber (12)

The first error is in the assumed identification of the writer with the period he is writing about, which is an impossibility. Barely do you find any one of these individual's saying, "I think this..." and thereby qualifying their remarks from an individually abstracted level. He certainly does not intend to have one believe that the verbal "Gothic style" is to be identified with the solution of a purely structural visual problem.

Secondly, Weber hardly would expect one to be so naive as to believe that these terms, "Gothic style" are a further "result" of "the technically successful solution of an architectural problem." The identity of verbal and visual levels as postulated, is false-to-fact. Generalizations of the "Gothic", "Renaissance", "modern", type are harmless verbal handles as long as it is made clear that they are only that and are not to be directly overlayed or associated with art objects. What so often happens is that they are forgotten as mere categorical verbalizations and utilized in identifying processes to evaluate why or how certain visual forms come to emerge.

It is therefore necessary that the character of the verbal and visual be differentiated. All that can result from
the solution of an architectural problem is a pure visual form with no verbal attachments. Labeling of these same units can be accomplished by any "given organism with a language system", or the ability to construct one. So, "the origin of the Gothic style" came not through buildings or structures, but through organismal-linguistic manipulations, regardless of the source of stimulation.

Mis-identifications of this order can, in the long run, lead only to a maze of over-generalized, non-factual labels. These in turn can hardly become anything but misevaluations, misleading less critical readers into attaching what they read on to what they see. The read and the seen become overlapped, intermingled, misjudged. Summing this up concisely, it may be said that,

"There has always been a bit of a boggle on this point; and theorists of esthetics, in the desire to reduce their topic to one final and ruling consideration, have sometimes been tempted to take the beauties of nature as somehow an eject of our own artistic creativite, or a sort of miraculous simulacrum of values natively resident in the spirit of man; or on the other hand, to subordinate the goods of art to natural esthetic values, taking art as primarily representative of or otherwise derivative from the natural. But such reductionism is uncalled for; and these opposite manifestations in esthetic theory of the human tendency to harp on one string, are essentially fallacious. Romanticism, classic realism and
transcendental idealism are all of them unnecessary answers to a question which should never have been asked."

C. I. Lewis (13)

Example three is concerned with the "lay" art observer. Through the advent of common experience and education, this individual lives in a routine of identifications, harmless as they may be. Approaching visual art, identifying the artist with his own capacities to see the world realistically, forms on canvas are made into apples, in sculpture into man, in architecture and furniture into styles. Processes of visualization are unrealized, since he is continually verbalizing that which is perceived. His two valued "either-or" attitude continually objectifies "kind" rather than units, relations, structures.

Presented a departure from the normative, statistical average item in terms of a visual product, he again mis-evaluates this in terms of "don't like" to "crazy stuff". Criticism, based on a process of identification, emerges as non-intelligible, animistic and primitive. The individual, unable to differentiate between what is verbal and what exists at a silent, non-verbal level, is led to evaluative procedures which are "unsane."

Therefore, this dissertation postulates that the limitations of traditional esthetics (14) is unacceptable as a
basis for examining the processes involved in art or its appreciation. This, in turn, necessitates that a criticism and specification of the terms "art" and "appreciation" must be undertaken on a more functional and operational ground.


2. Russell, B. Our Knowledge of the External World as a Field for Scientific Method in Philosophy (La Salle, Ill., 1915), p. 45


4. See fn. 2 above


6. Dewey, J. and Bentley, A. op. cit., p. 176


8. Carroll, Lewis: Alice In Wonderland (New York, 1946)

9. This follows Bertrand Russell's generalized conception

10. Wertheimer, M. Productive Thinking (New York, 1945) p. 215


13. Lewis, C. I. An Analysis of Knowledge and Valuation (La Salle, Ill., 1950), p. 450
14. The term "traditional esthetics" is used here in the sense that "esthetics" is a study which largely has concerned itself with logical or philosophic concepts as related to the nature of esthetic values. Therefore, though it may exist as a science, it is mainly a study unconcerned with the empirical processes of the creative artist.
Essential to the basic assumptions of this dissertation is a specification of two terms, "art" and "appreciation". Initial failure to make clear how these words shall operate...
enhances the possibility of ensuing ambiguities and contrarieties. As a consequence, value judgments, having no centering, oscillate and result in meaningless abstractions. Concreteness of an invariant type is annulled. Avoidance of such a situation necessitates the delimitation of these words through structural specification. This representing a mode of classification shall be considered as such; and that which presents itself for classification shall be utilized in order to signalize the use of these particular terms concretely.

For this dissertation, an appreciative judgment has validity only when the system with reference to which the judgment was made is known. Obviously, conclusions drawn by one observer from one frame of reference will differ in kind from those conclusions drawn by another observer from a different frame of reference (1). Then, the concern here is with variations existing between points of view rather than with conclusions. Similarly, the critical problem becomes one of insuring that these terms will remain logically consistent with the frame of reference presented. Only then will it be possible to avoid inadvertent or inconsistent entries.

"Furthermore, the explication or the understanding of what is implicit in an intended meaning, is a matter concerning which it is possible to make mistakes. That such meanings
are our own when entertained—whether they are set up arbitrarily by ourselves or only adopted from current usage—does not preclude possible errors of this kind. We are capable of failing to observe what is involved in our own intentions and of mistaking our own meanings through inconsistency. The avoidance of such oversights and such inconsistencies, is a cognitive desideratum. This same possibility of error through inadvertence or inconsistency, is even more patent with respect to what is logically certifiable. Anyone who has ever accepted an invalid argument or advanced one, or has repudiated one which is valid, or who has been at pains to discover whether a certain conclusion follows from given premises, will be aware of this kind of possible mistake."

C. I. Lewis (2)

It may be properly deduced from the use of the term "specification" that some doubt is sustained as to whether any one sensible or right use of the terms under examination exists for use herein. Were it but possible to turn to one definition, much time and labor could be saved. But since there are no two terms in common usage which I wish to use, attention must be focused on the criteria of correctness which shall serve as ground for my specification.

As a definite procedure, it becomes necessary to make explicit what is meant by the doubtful use of the terms as they are sometimes used. This will point up what results in the failure clearly to establish what the intentions of
any given writer were in the implications of the intended meanings. Verification of the persisting doubts about such implications requires attention to an analysis of those statements which attempt to explicate and certify what is meant by the term "art".

Following are a series of quotations, chosen for two reasons: (1) they tend to amplify the ambiguous and non-definitive character which this dissertation will exclude and, (2) they specify the necessity for a re-examination of the conditions which permit such semantic conclusions to be drawn.

* * *

"A work of art is a creation, and the creation is not accomplished in the act of embodying in a material object what is already in the artist's mind, but in the act of insight into the objective world by virtue of which it assumes form and order. Hence the artist is primarily the discoverer, just as the scientist is; the scientist discovers abstract symbols which may be used for purposes of calculation and prediction; the artist, the qualities of things which heighten their human significance. What these qualities are depends upon the individual artist and the medium in which he works."

Albert Barnes (3)

Art is first considered as creation. Creation is stated as
an accomplishment of ordering "in a material object" the objective world by the act of insight. Barnes does not regard this as already existing in the artist's mind. The statement seems to say that there is a basic difference between mind and insight and that the two can exist apart from each other. Art is then made an emergent, in this light, from some activity which is governed by something other than the mind itself.

Talk such as this gives rise to the conception that the creating organism can be dichotomized and treated as something different from the organism in its customary role of knowing. Insight knowings of this type are viewed with apprehension here. If insight knowings can exist apart from other types of knowing, it seems highly improbable that insight could be established as a known factor.

Failure to clarify what is intended by the term "insight" leads to the rather tenuous position that insight as such embodies itself in a material object so as to be called "art". The organism finally becomes an accessory to the fact, almost assuming the position of an unneeded part of creation. Close examination reveals further that this tends to become much more the truth than may first be suspected. Cursory reading of the type of analysis which emerges from such a context shows such criticism to be founded on the basis of inexplainable insight. Awkward
semantic constructions about artists and their works result. The language becomes object-directed, concerned with ends rather than with processes and emergents. Meaning is based on the writer's observations and past experience and deals with the significance of content rather than with the artist's process. And in such case, a frame of reference is revealed to be largely based on intuition rather than observed fact.

Comparison of artist and scientist as discoverer bears out the inherent weakness of this whole concept. Obviously, Mr. Barnes' statement about the scientist as discoverer of abstract symbols must be regarded as a naive assumption. Loose language of this sort however again muddles the problem of the artist and his discoveries. Disregard of how organismic abstraction takes place permits one to speak of "qualities of things" without concern for their consequences. This assumes that the "thing" out there has qualities which exist apart from the process of abstracting and can be projected once they are found. The argument here is not one of the idealism-realism type, but consists of the form which asks whether one can project qualities of things which exist within the object realm. Failing to disclose what one means by the qualities of things, as occurs here, has led to more confusion in the arts than was ever necessary.
A second problem arises when these same discovered qualities, postulated at one moment in the thing, are relegated to a dependency on the individual artist. This scheme invites the construct of two frames of reference, and ultimately a relativeness without an invariant factor by which either is controlled. This occurring, dualisms of the most ambiguous type appear. Judgments of art works are finally decided by personal manifestations without ground for empirical confirmation.

Explicitly, what is demanded here is a greater conciseness of language. Regardless of whether qualities are contained within objects or not, the only thing an artist in the visual process of abstraction can be concerned with is those cues which can be handled in terms of his own projecting system, regardless of what medium he (artist) works in. Organization of these cues into some unified existent without the phenomenal interval of an abstracting organism seems highly impossible. Forgetting this permits the conflicting verbal elements as noted above to emerge and still appear sensible.

If these kinds of definitions, as referred to in Barnes' study, remained isolated and non-effective, there would be little to debate with here; but taken seriously and enlarged upon, they lead to serious incongruities. Notation is made of this when some three pages after the above
"A work of art, however, is not only a vehicle of imaginative insight, it is a material thing, and as such it must be itself pleasing."

Albert Barnes (4)

The shortcomings of the first definition, the overlooking of the organism in its environment-relationship, signalize the concept that works of art again exist apart from individual experiences as some sort of pleasing items. Again it is difficult to understand what is meant by art works as pleasing in themselves. That such is possible is not debated here. But for the act of appreciation, this "pleasing" element certainly cannot reside apart from the act of experiencing and still retain any relation with the individual experience.

"Pleasing" as a fact, therefore, cannot be adequately specified apart from its constituents in the full development of the subject matter. To keep it out in the object, as if it were a part of the stone or paint, is to deny the transaction which takes place in the full realm of creative perception, either in the creative state of making or appreciating that which is made.

What this dissertation disagrees with is the kind of language which gives rise to the speculative position of
items such as "pleasing" as existing outside the realm of any perceptual transaction. It is thus held that "pleasing" must eventually be considered as an organismic functioning; a part of the whole stimulus-organism-response pattern and not a mere quantum of the material thing. In this way, appreciation can be related to an active state of response and localized as being empirically determined. This position regards "pleasing", "appreciation", etc., as experiences integrated into a part of attitudes, so extended in time-space as to be observable characteristics and so open to confirmation as to be reliable data in the establishment of further value-inquiry.

Hence, we reject such terms as "insight", "imaginative insight", "qualities of things" and "pleasing" when they are used in isolation; when developed as significant signs for behavioral patterns but placed outside the frame of a transactional procedure.

The following quotation, from one of the most popular textbooks of the day, exemplifies what occurs when no clearly established position of inquiry is held. It may be noted also that such statements as these, as harmless as
they appear when taken out of context, have had grave results in the affirmative stages of art criticism. They have become ingrained in the literature until they are used as the basis for justifiable explanation of the artist's position: and this wide-spread evaluative scheme is no longer to be taken lightly in a society which lays claim to being anything but primitive.

"To achieve the harmonious organization of color and line in design prompted him (Cezanne) to distort the physical appearance of objects."

Robb and Garrison (5)

Critical to this sentence is the verb, *to distort*. Funk and Wagnalls College Standard Dictionary gives the following definition:

"distort, vt. 1. To twist into an unnatural or irregular form. 2. To give a strained meaning to; to interpret falsely; pervert."

The use of the term "distort" here then would seem to indicate that Cezanne may have done several different things to his paintings (design), since the author of the statement quoted fails to define what he means when using the term. Assuming that the first definition is applicable here, then several distinct problems arise.

First, in order to match the term "distort" with Cezanne's
configurations, one must literally make out of those same painted configurations, objects. When this occurs, then there has been a basic differentiation of subject and object, for otherwise the term "distort" could not have been employed and this results in nothing but a running series of verbal contradictions of the worst sort.

Secondly, such verbalization introduces the unnecessary problem of "identification". When the Cezanne process in question is observed from such a position as indicated by the quotation, the writer in attempting to qualify the pictorial organization by comparison with physical appearance, misleads the reader by pointing to a non-existent entity. Only from this viewpoint could the verb "to distort" emerge in such context. To consider that design is to be "identified" with physical objects is viewed with apprehension here.

Thirdly, this statement assumes that all viewers know the "reality" of the "physical appearance of objects" under view. "Reality" in this sense becomes little but a hypo-statized underpinning for the making of the statement and must be refuted since such an unexplained assumption leads to the linguistic misconception prevailing here. Acceptance of the statement must be also discarded because it introduces so-called factors parading as known "realities" without recourse to direct observation of same.
Fourthly, and finally, such a widely accepted analysis indicates that little or no attention is paid to the organism in its environmental role. Had this writer reviewed either his own or Cezanne's experiences from an organismic level of direct observation, it would immediately have been seen that such a statement is both ambiguous and contradictory as it concerns the nature of harmonious organization.

"In our opinion the only way out is less loose talk and more criticism of language, less emotional acting and more scientifically disciplined thinking, less metaphysics and more positivism."

R. von Mises (6)

The next quote illustrates another type of generalization which this dissertation wishes to exclude. Although the terms may be relatively free from confusion, the sentence emerges as a generalization lacking in operational significance.

"Art has always been a function of human life, perhaps the most comprehensive and universal besides theoretical thinking. Therefore, it is a key to the understanding of
the totality of life."

Otto Benesch (7)

Since the author at no other point defines what he means by the "function of human life" it is difficult to know how art is operative in such a scheme as this. Taken in its plurality, art then becomes a by-product of many individual efforts. This stands in contradiction to the actuality of art as an emergent of particular rather than general efforts. On this ground, I wonder if this pronouncement, so often made, is not a representation of a misconception held in lieu of more basic considerations of the artist's processes.

More specifically, this concept has probably arisen as a result to concern one's self with philosophic inquiry about life. Art becomes merely a handmaiden to the centering of a philosophic position. The subject is looked on, as well as the creator, as a means for seeking answer to the causal nexus of history. A synthesis of sorts is formulated, with art and artistic problems always playing a secondary role. Criterion for the substantiation of this statement goes begging in the remainder of Mr. Benesch's book. At no other place does one find an accurate or definitive account of what is meant in this quotation.

Reliance on unexplained and unclarified hypothesis of the
sort concerned with in Benesch's first statement makes possible the type of assessment indicated in the follow-
ing:

"The overwhelming richness of uncouth nature fills the little panel. Tall beeches form a tight network with the undergrowth; one form is interlaced with the other. The forest as a unit is supposed to enter the picture space. Although we see only a part of it, its unlimited extension in height and depth is suggested. A soft breeze seems to move the branches, so that the high lights of the leaves glitter. The forest is the main content of the picture, while the holy legend is reduced to a sparkling color spot."

Otto Benesch (8)

This is a description of a painting by Albrecht Altdorfer (9). What is questioned here is whether the author is talking of a painting or whether this is merely a verbal expression of his own past experiences with the motif depicted. This dissertation does not question the right of Benesch to develop such metaphorical jottings. What it does question is the advisability of allowing these linguistic projections to be related or identified with the painting or stimulus pattern.

Obviously, no painting contains such things as "uncouth nature", "tall beeches", "soft breeze", or "holy legend". But the terminology used herein strongly suggests to the
reader that these items are believed to exist in the painting. Failure to distinguish between these poetic happenings as responses by the way of an abstracting organism can have dire consequences.

For one thing, it might be assumed from Benesch's writing that this was the ultimate purpose of Altdorfer in constructing the painting referred to. At best, this can remain little more than a theoretical assumption with no certain way open empirically to examine its truth or falsity. Objection then is constituted on the ground that this is only a provisional aspect of a personal type, presuming in the object the namings as listed. Such terminological positings are perhaps known to the individual who posits them, but there is no possible ground on which they can be confirmed by other knowers who are without the personal frame of reference used to create these knowings as stated.

Further disapproval of this language obtains when it becomes a basis for judging the achievements of the painter observed. Applied to the seen of the painting surface, this talk becomes questionable. Placed in the realm of happenings as a part of the impingements playing on the experiences of the painter they have some meaning. At that point they can be examined in their relation to other forces which tend to modify reactions in terms of the projected. Then it is that the language is of cause rather
than of painting. Clear realization of the proper position of these aspects within the constituted limits of the transactional process of creative activity is necessary before any understanding of the ultimate projection can be had.

Segregation of these namings into legitimate categories must take place before any appreciative response of a visual sort may be expected. Any rationalization which declares that conceptualizations as indicated above have any empirical basis in visual processes are only relying on the most dubious double talk. That which exists as metaphor must be discriminated from that standing for visual totality. Continuing to intermingle these as common substantives clouds the whole possibility of specifying the term "art". And failing to specify the term at the outset leads only to this confusion as noted.

Summing up, the attempt has been made here to point out what occurs when no clear concept related to the defining categories of terms is entertained. Ambiguities of the type illustrated can be removed on the insistence to "center" the creating organism in its proper position as related to both the object situation and its response pattern. With this environmental field adequately specified by an observing organism, acceleration of a more
positive appreciative level may be attained.

Theodore Greene's definitions of "art" provide further evidence of what occurs when such definitions are constructed from a non-transactional point of view. Qualification of this statement type is dependent on a form of linguistic maneuvering rather than on observations of the artist-in-process and is therefore included as an example of what is to be avoided as part of this codification.

"A work of art is here conceived of as a distinctive type of man-made object endowed with formal beauty; beauty, as a function of aesthetically satisfying form; and aesthetic quality, as the generic differentia of all aesthetic objects as such."

Theodore M. Greene (10)

The first problem to be dealt with is that of man-made objects which are "endowed with formal beauty" and so named as works of art. From the point of view of this dissertation, the use of language in this manner can cause nothing but a series of intellectual headaches. Reliance on the term "formal beauty" has historically resulted in arguments concerned with definitions of beauty. The thing which happens is the development of an epistemological basis for
BEAUTY

X

VERBAL CONCEPT

ABSTRACTING ORGANISM

PROJECTION

VISUAL

Figure 2.
further substantiation of the verbal abstraction which gave rise to the program in the beginning. From the first statement there follows a definition of beauty. Assuming a definition to be:

"...a kind of statement, but one which neither requires nor can have any verification by recourse to sense experience. It represents a particular mode of classification; and such a principle of classifying cannot be determined by what presents itself, or does not present itself, to be classified. ..."

C. I. Lewis (11)

It is virtually impossible to see how the stamping of defined beauty on objects of visual processes can be achieved. Disregarding this point has led to many superficial procedures in this area. That visual art is not a terminological endeavor must be constantly reinforced at the expense of being repetitive. That it may stand as a sign for particular endeavors is true. Starting with beauty as a stimulus, one may visually comprehend the term. By the way of the abstracting system a visual emergent may in turn objectify the concept of the first happening. But to mistake the two as identical leads to the level of primitive association. The diagram which is included (see Figure 2) may be of some aid in conceiving what is meant here. Step I, finally evolved by other organisms, can be
legitimately held as far as this problem is concerned. This in turn may very well exist as a happening on which any organism in turn may care to act. Projections in visual form which tend to realize the purpose of this acting must come to exist in some form other than verbal. Therefore, attempting to say that II is endowed with I is false to fact or else some type of language not understood by some in the scientific age of 1953 is being used.

To focus attention on this displacement of words is of utmost significance. Assigning "beauty" as requisite to man-made objects in order for them to become art, governs the response of a given organism in its transactions with a specific stimulus configuration. Seeking beauty by a pre-established criterion in relation to a posited sign may only end in a disjunctiveness between that seen and that conceived. Conceptually set to seek for one quantum based on verbalizations, one may never react to those stimulus-neural configurations given in any visual transaction.

On the other hand, prior associations with "beauty" concepts may involve individuals in endowing objects of attention with meaning which has no relationship to the production of the originator of the object under view. Personal evaluations based on such a procedure may be relevant to the advent of pleasure. Temptation to practice this as
an analytic procedure to advance the cause of appreciation is great. Presuming it to have evidence in support of analytic processes is another thing. Such intuitive or personal circumstances are found hard to accept, since there can be no extension of the analysis beyond personal circumspection.

A second problem arises from this definition when Mr. Greene, in determining what is meant by beauty, names it as "a function of aesthetically satisfying form". Examining this statement reveals that beauty arbitrarily named as a functioning agent does not wholly accord with what has been previously discussed.

First, it is impossible to conceive of beauty as both an endowed property of objects and acting at the same moment as a function. Since "function" implies an act (12) and therefore the presence of an active participant, beauty takes on a conflicting dual character. Regardless of how such a term may be defined, it is held that the word or its denoted existent is not to be identified as active. At best, it remains as a signal or sign with its own structural quality. Whether its existence is of any import depends upon the nature of the active neural processes of an organismal relating.

Secondly then, when the topic of "aesthetically satisfying
form" is entered into, "satisfying" must be assumed to be an organismic construct in terms of some projected response. To posit, as Mr. Greene seems to do, esthetically satisfying form as part of the object under view by qualifying "aesthetic quality as the generic differentia of all aesthetic objects as such" leads to the most object-directed language possible. This is also viewed with apprehension since it leads to the attempted identification of a preformed concept with perceptual constructs. Consequent semantic reactions in turn are formulated on the basis of how closely stimulus-concept patterns are matched rather than on the basis of what response is gotten in terms of an organismally-environmentally oriented process.

Finally, the identification principle as a critical operation can lead to disastrous consequences. Oriented via the route of an object-centered language, individuals have a tendency to bypass the forming processes and projections of any given artist. Evaluations are governed by prior experiences structured at a primitive-verbal-identification level. Responses become restricted in the total gamut of transactions. Many otherwise valued forms are misappropriated. Individuals as a result become conformists, allowing society constructed of such individuals to remain in an underdeveloped or regressive state. What is then attained in the name of security is but a false assumption
which can lead to the very destruction of that which is necessary to society, creativity.

Here two examples are given as evidence of this type of identification-level thinking and the results which obtain.

The first is an extract from Mr. Greene's writing.

"...art is one among other significant human enterprises, and, like them, derives its significance from the artist's preoccupation with what man accepts as real. To ignore this basic characteristic of art is to do violence to its historical character and to rob it of much of its human import."

Theodore M. Greene (13)

This statement about the "artist's preoccupation with what man accepts as real" is certainly erroneous if one accepts as valid the idea of an artist as an abstracting system. Assuming that in a transactional sense the "real" is at least a part of the "realized", then the artist, 1953, if he is concerned with anything, is concerned with making real in his projections that which has little or no reality to men around him.

Certainly such would be the case in primitive societies. Here, visual forms are produced to become at least symbols of that which is certainly anything but the real at the outset (14). Art history or criticism, in ignoring this
manifestation, has consequently oftentimes made out of art something which it is not. If art is anything, it is a forming process realized. And to stamp it as the remaking of something which already stands as made reduces it to the non-abstracted if not improbable, level of imitation. Though primitives may endow painting, sculpture or architecture with identified realities, this could hardly take place until the objects existed in some form to later have ideas associated with them.

This particular instance clarifies in part the confusion existent in the realm of art today. Primitive peoples were at least quite clear about why they were producing inanimate objects. However, strange as it may seem, intelligent societies have allowed conflicting primitive concepts to survive until correct evaluations in relation to the arts are difficult to come by.

Preoccupation with the idea that a real stimulus exists both for artist and observer passes over the fact that the artist assumes as basic to his purpose the projection of the realized (neural) of the energy strength of the stimulus configuration. Observations thus construed at a real-object-existing level makes it possible for the observer to make value judgments in terms of likeness of the emergent-abstraction and the existent-stimulus. In so doing, the observer-observed is placed outside the process of
realization. And what comes to be called real in this case is only meaning derived out of the individual's prior ex­periences. The process-centered-reality of the creator, or observer, fails to become an actuality. Ascribing such realities, as in the first case, to observed objects perpetuates an archaic level of evaluation and is difficult to call valid.

Holding to this position of Greene's, as it becomes a broad philosophic concept, leads to the second illustration of conventional criticism. This passage from Lionello Venturi's writings is chosen because of the author's favored position as a critic in Western society.

"It is necessary, then, not to think of nature, not to relate to nature the work of art if it is to be understood. However, the abstract painting and sculpture which have been raging for about thirty years do not result in a work of art which convinces and exalts us. The reason is that such painting and sculpture are intellectual games, coldly composed. When Hegel thought of the face and the attitudes of the body become painting, he thought, in effect, of the eyes turned to the heavens by Guido Reni, 'painter of the soul', an expressionistic rhetorical picture of Jesuitical origin. This also was an abstrac-
tion, a scheme to make feeling as hateful, as false and immoral; coldly composed like a cubistic construction. The intellectualistic or moralistic scheme has displaced a mode of feeling in the craftsman; and the work of art is not born.

Lionello Venturi (15)

Romantic trappings of feeling and exaltation may exist as legitimate signs for critical discourses. When one turns attention to what painters and sculptors are basically concerned with, however, one finds Venturi's writing inconsistent. In the statement, "intellectual games, coldly composed" Venturi considers painting or sculpture as something which may, in the end, be warm, tepid, hot, cold, etc. in their being composed. That they may be is of course entirely dependent on the temperature of the space in which they are found. But surely this is not what is meant here. If it was, the whole matter would be simplified.

What occurs is nothing more than a bad use of language. The author in establishing a method of evaluation based on an end-product-point-of-view, is led to the ultimate pitfall of all such constructs. Because the superficial surface aspects of the art form are suddenly revised in face of all that which has gone before, the value of the art form is lost to this critic. This type of criticism, oriented in an environment which isolates the product from the pro-
ducer, fosters evaluations "by definition" in an Aristotelian sense. Works of art are considered as some "absolute" end, gained through some approach other than the "consciousness of abstracting". This hinders the desired functioning of the critic in a transactional role, so that verbal speculations become divorced from actualities.

Explicitly, Venturi's asides concerning the intellectualistic scheme of recent developments in art presupposes that there is some other way by which art, as an end, is brought into being. His reference to "a mode of feeling in the craftsman" would seem to underline this. Conceptualizations of this sort need to be critically examined, else one may be led to regard painters of one period as a species of mammal different in kind from those of another.

Returning to a previous point, art, if it is anything, is an organismic process of abstracting. Centered in this process is the activity of selection discrimination. And certainly for the existent nature of these two, the process of abstracting and the activity of selection, intellect (16) in some fashion must be present. Further assuming that an art product must have some organization as a stimulus-configuration for other viewing organisms, this organization is certainly not gained without the facilities of the intellect being present at some stage of development.
Parenthetically, what so often occurs here is that mentioning this factor brings into being the conception that the artist sits down and thinks out every step of his procedure before entering into production. As a matter of fact, this has become axiomatic in the development of many critical theories within this area. Although it may appear as a most naive concept, it has led to many of the bewildering and non-factual statements found in general esthetics (17). The causal factor is again the total disregard of the individual in the so-called creative phase. That this creative phase is no more than a part of a cyclic process, activated at a somewhat different level when visual, must be clearly understood before headway can be made. Institution of the idea that creativeness is an entirely "feeling", intuitive, mysterious, etc. development lying outside of intellectualization is pure fallacy.

Static entities of the "feeling" sort point to an ever increasing need to examine the painter or sculptor in his environment. Too long has man depended on his own non-visual world in conceiving art as something aligned with his experiences. Thus, statements as to how form comes to exist in a visual context are often based on nothing but hypothesis extracted from the realm of metaphysics rather than from the realm of operating artists. Hypothetical entries of this sort lead to the type of misconception
found in Venturi. Set to evaluate art on a singular ground of "feeling", the critic is lost when presented a shift in point of view. Or if not lost, he tends to confuse what issues forth here with what is extended from previous periods. If the whole of his basic assumption were to be reframed in the nature of a psycho-biological structure and generalizations based on facts, procedural results would be more confirmed and understood.

"We are shifting our focus of interest from static entities to dynamic processes and the order of events as seen in a context or field where there are inter-reactions and circular processes in operation... The concept of teleological mechanisms, however, it may be expressed in different terms, may be viewed as an attempt to escape from these older mechanistic formulations that now appear inadequate, and to provide new and more fruitful conceptions and more effective methodologies for studying self-regulating processes, self-orienting systems and organisms, and self-directing personalities... Thus, the terms feedback, servomechanisms, circular systems, and circular processes may be viewed as different but equivalent expressions of much the same basic conception."

L. K. Frank (18)

Awareness of the circular process of nervous systems in the transactional phase of creativity would have stayed Venturi from falling into the verbal trap which he constructs. The mechanistic formulation which is in evidence
and proves inadequate, could be avoided.

Injection of the following situation, although it proves comical, is enlightening. Venturi, in his charge against the moderns, releases the past-master from an intellectual bond. In carrying out this charge, however, mass education in art has spasmodically fallen back on a "feeling" process unbounded by "thinking" directives. In its emotional strivings, "art" has taken on an emotional connotation. Disciplines of direction and purpose have been suppressed as a process which inhibit creation. The emergent is a splash and dribble, squash and squeeze and generally non-intelligible, pointless spiraling (19). Asked to define, clarify or determine what is regulative, the answer is based on intuitive, emotional expression. So, what Venturi wishes for is achieved. But such achievements are costly in terms of a non-existent qualitative basis for intellectual examination within the field of art or appreciation.

The next quotation is included as a clear example of art serving the ends of socio-romantic, oriented critics. This schema has become a popularized manner of explaining away difficulties which ensue from a creative directive. Such
linguistic gyrations tend to introduce non-confirmable inferential statements. Developed as verbal signposts for instructional guidance, they endanger the consistent purposiveness of artist-observer relations.

"Every work of art, whatever its quality or period, has a dual nature and exists on two distinct levels... The artist, like everyone else, is exposed to the civilization of his environment, and his work reflects such external influences in varying degree... What must be understood is that each work of true art represents simultaneously the individual genius of its creator and the general character of the age in which it was born... Art transforms what men think into images and pictures."

Paul Zucker (20)

A dualistic approach to any art form as expressed above seems highly arbitrary and contradictory. To qualify any work of art as existing on two distinct levels "simultaneously" creates a polarity difficult to reconcile. This "naming" procedure treats art as a third thing, separate from both organism and environment. Zucker's namings as seen here are a part of his behavioral process and not necessarily known to all namers. It must be made clear that not all individuals may be prepared to respond to the sign-vehicle called "art" in the manner Zucker proposes. Therefore, such loosely constructed expressions must be banished.
Adjusting to the scheme as noted results in the typical example of organismal displacement. The last sentence indicates that the author clearly assumes art to be a transforming agent. This is considered a non-productive type of naming, since it leads to the consideration of art as a detached referent from the behavior process of an organism-in-environment transaction. Under Zucker's approach, art must be signifyed as a non-verbal sign having its locus in the organism. Only then will it take on any of the meaning which Zucker implies that it has. The point established here is that such namings as "individual genius" and "general character" must be carefully discriminated from the "thing" being named. Disregard of such develops only a confusion of what is visual and what is verbal.

To further elaborate on the above points, the following passage is included as an example of what occurs when the basis of "identification" is used in specifying what art is.

"A third view, which concerns the idea of the work of art as a product of human activity, refers to the position of such a work towards the external appearances of nature. It
was an obvious opinion for the common consciousness to adopt on this head, that the work of art made by man ranked below the product of nature. The work of art has no feeling in itself, and is not through and through a living thing, but, regarded as an external object, is dead. But we are wont to prize the living more than the dead. We must admit, of course, that the work of art has not in itself movement and life. An animated being in nature is within and without an organization appropriately elaborated down to all its minutest parts, while the work of art attains the semblance of animation on its surface only, but within is common stone, or wood and canvas, or, as in the case of poetry, is idea, uttering itself in speech and letters. But this aspect, viz. its external existence, is not what makes a work into a production of fine art; it is a work of art only in as far as, being the offspring of mind, it continues to belong to the realm of mind, has received the baptism of the spiritual, and only represents that which has been moulded in harmony with mind. A human interest, the spiritual value which attaches to an incident, to an individual character, to an action in its plot and in its denouement, is apprehended in the work of art, and exhibited more purely and transparently than is possible on the soil of common unartistic reality. This gives the work of art a higher rank than anything produced by nature, which has not sustained this passage through the mind. So, for instance, by reason of the feeling and insight of which a landscape as depicted by an artist is a manifestation, such a work of mind assumes a higher rank than the mere natural landscape. For everything spiritual is better than anything
natural. At any rate, no existence in nature is able, like art, to represent divine ideals."

G. W. Hegel (21)

There would be little need to quibble with such a passage as this in 1953 if it were not for the fact that this idea of Hegel's has been carried over into much of art criticism, 1953. Hegel was, of course, writing with the equipment at his control, which was at best less appropriate than our own. Therefore, most of the section quoted is left uncriticized. The only part dealt with here is the nature of "ranking" works of art in relation to "nature" and "divine ideals".

Bypassing all the philosophical debates which can be brought up, the only seemingly possible way by which this "ranking" process could be developed is through the aspect of "identification". If what has been shown empirically, 1953, holds, then "art" can hardly be compared to nature in any sense of the word.

Examining nature from the assumptions of the empirical, it is, as perceived, a gross macroscopic abstraction from an infinite series of events which becomes known as the objective level of sub-microscopic processes unperceived. "Art" in the same sense, exists at an objective level, emerging from the process of abstracting from a happening,
or event, or stimulus complex, level. In either case, the existent object under view is abstracted in some basic sense. What is postulated here is the obvious fact that the two object levels, being both abstractions of kind, must be distinguished in terms of the process of abstracting. Hegel's statements would seem to forego this development in the sense that he accounts for art as a by-product of man's mind but nature just gets there. There occurs a false splitting verbally of that which cannot be split empirically. And this ends in an "elementalism" of the most primitive sort.

But the important point to be made is that of the false identification of art with nature. Furtherance of this labeling system as a basis for judgment seems to be systematically inappropriate in light of what is "known", 1953. For one thing, such a language structure moves "art" from its centered, organismal, transactional position to one dealing with inconsistent entities. For another, the observer-critic is forced to seek out rather odd and unreliable critical assertions dependent on figural or verbal levels rather than based on form or visual components.

This is rather clearly demonstrated by Hegel's reliance on the "baptism of the spiritual" or "divine ideals" as verbal qualifications of mental activities. That these exist is not questioned. Existing as a part of mind, they are cer-
tainly involved as a part of the neuro-system of a sentient organism before they can be abstracted out at an objective-realized level. As such, they can be considered only as high level impingements on whatever abstraction comes to be realized in the fulfillment of specific drives so influenced by them.

What eventually becomes troublesome here is the attempted attachment of readers of Hegel's abstracted labels (spiritual values, divine ideals, etc.) on to visual works of art. Searching for such ends, results only in frustration. And why shouldn't it? Verbal signs are hardly to be found in items purely visual.

In conclusion, the writings of the various authors criticized, though inconsistent with present empirical behavioral data, taken at the proper level in the abstracting process, are perfectly harmless. This might also be said of most of philosophical writing which has concerned itself with art. Concern for these writings arises from the fact that many of them have been assigned a doctrinal position within the area of art appreciation. Those who have used them to force an issue of rules have led a parade of individuals toward an "unsane" position regarding the creative act. Removal of such "unsanity" can be achieved by the full use of the cognitive acknowledgment that the artist-in-
process and critic-in-process are abstracting from basically different levels. Both are confronted with entirely different stimulus patterns, with unique and individual systems, and to expect a sameness in both emergents is pure nonsense.


2. Lewis, C. I. An Analysis of Knowledge and Valuation (LaSalle, Illinois, 1950), p. 25


9. Painting referred to here is entitled "Forest with St. George and the Dragon" Done by A. Altdorfer in 1511


11. Lewis, C. I. op. cit., pp. 24, 25. Note the whole
of chapter II for a more complete analysis of this problem. See also Dewey, J. and Bentley, A.: The Knowing and the Known (Boston, 1949), Chapter 7, for a discussion of the problem of definition.


16. The term "intellect" as used refers to the basic psycho-biological functionings carried on in the higher nervous centers, particularly those impulses which are passed through the thalamus and sub-cortical layers to the cortical centers. This is of necessity based on an operational pivot and recognizes that it begs the question whether there is such a thing as a nervous system.


18. Frank, L. K. Foreward. In L. K. Frank, G. E. Hutchinson, W. K. Livingston, W. S. Mc-

19. For evidence of this, it becomes almost necessary to pay on the spot visits to art schools. It becomes most quickly spotted in courses going by the name "design".


21. Bosanquet, B. The Introduction to Hegel's Philosophy of Fine Art, a trans. from the German (London, 1886), pp. 54, 55
chapter four

a specification of "art"

Art at its simplest level may be specified as an organismal-transactional-process which involves at least three practical basic steps:

1. Stimulus pattern, happenings (external or
I happenings
External or Internal

Immediate physico-chemical electro-colloidal nervous impact of I

Organismal electro-colloidal reactions to II. "Feelings," "thinking," etc.

Linguistic reactions to III, the most complex electro-colloidal processes known. Primitive, Aristotelian, etc., language systems commonly involve and so induce identifications in value of I, II, III, and IV, resulting in mismevaluations.
internal) or whatever gives rise to the process of excitation within the nervous system which results in

2. An organismal electro-colloidal reaction which results in

3. A particular, material, non-verbal, ordered, organismic-projection. This differentiates it from the more common responses occurring at the level of verbalization(s).

Although it is necessary to split these aspects verbally, it must be remembered that they are not differentiated as such in the process of abstracting from an electro-colloidal point of view common to all organisms.

Critical to this approach is the full realization that this specification of "art" deals primarily with the organism as an abstracting agent. An awareness of the processes of abstracting is advantageous in understanding the structure which underlies the emergence of visual form in any given media. Clarification of this position resolves many difficulties in this area, turning so-called problems into trivialities or non-existent entities.

Alfred Korzybski's diagram (see figure 3) of the process of abstracting from an electro-colloidal non-Aristotelian
point of view provides one of the clearest charts available. It illustrates what is involved in the area of art production vividly and concretely. Used here as a basis for this discussion, careful study of it will make many of the following verbal complexities easier to understand.

What happens when our nervous system perceives a happening or event? (The term "event" as used in this context shall mean, in Whitehead's sense, an instantaneous cross-section of a process.) Say an individual looks at a landscape. What is seen is necessarily limited because of the nature of his visual field. This may be referred to as a first-order happening, occurring on a non-verbal level. Light reflected off of a multitude of surfaces impinges on the eye. From this lower nerve center there is begun a chain reaction within the nervous system resulting in some sort of electro-colloidal configurations within the higher nervous centers of the cortex. Since a sentient organism is involved, reaction to these configurations takes place in terms of "feelings", "thinking", etc.; evaluations of them continue to occur on "silent" levels. These first three steps are indicated in the diagram under Roman numerals I, II, III.

At this point two things can occur. The individual can speak about the organismal reactions as noted in step III.
This becomes what is called the verbal level of evaluation. Or, the individual can react in what is designated here as a particular visual forming process; that action which constitutes the basis of the (named) drawing, painting, designing, etc., visualization processes.

Six interrelated steps are involved in this abstracting process which is primary to the specification of "art".

1. It is seen that all art, "art" used here in the restricted sense of a man-made product, is concerned with happenings, whether external (landscapes, models, still lifes, etc.) or internal (thoughts, dreams, myths, etc.).

2. All art is a result of electro-colloidal reactions to immediate physico-chemical electro-colloidal nervous impacts.

3. In turn, art is a forming process, dependent on and centered in the structure of the processes of abstracting.

4. As such, art remains at a non-verbal level, concerned only with the evaluation of cortical configurations in terms of projection as limited by the material in which an individual is working.

5. Such factors as past experiences, purposes,
goals, drives, etc. are electro-colloidal in character and are considered here as other impingements affecting the "feelings", "thinking", "emotional", character of any given non-verbal art projection.

6. Art is a specific and unique form, to be evaluated from its individual position on the basis of the perceptual processes which control the purposive nature of the individual creator.

Further, this position provides a basis for the observer to differentiate between the happening, feeling and object. This clarification is of substantial significance in talking about art. If it can constantly be remembered that a painting, sculpture, building, chair, design, etc., is not to be identified with either a happening or a verbal label, great advances in evaluative procedure may be made. Through removal of the "thing identification" stress may be placed on the neuro-forming elements which constitute the structure of the projection under observation. This does not say naming is impossible or even unadvisable. It says that the "naming-named" is a response in kind, different from that which is viewed.

For example, one who looks at a drawing and says "tree" is only giving name to the abstracting process taking place
in him. Realization of this does not endanger, to any
great degree, his ability to evaluate properly. However,
no cognizance of the fact that what is called "tree" does
not exist "out there" as a tree can lead to misunderstand­
ings, prejudices, debates and a series of trivial argu­
ments. These same arguments are constructed at a purely
verbal level and are, therefore, needless in the first
place since the very thing being debated about never existed
at that level to begin with.

There is another consideration by reason of this specifica­
tion which must be raised. The nature of the designations
applied by me to the term "art" leave it open to the accu­sation that because of its generality it supplies no
system by which concrete separateness can be gained in
application in relation to the specific function of "art"
types. The problem can be more rigidly stated in terms of
the questioner who asks, "With such a specification, how
can you possibly differentiate between the architect (A₁)
who designs a building and the bricklayer (A₂) who is
instrumental to its construction? After all, both are
artists in their own way, and the designations offered
would seem to say that both are equal since both are cen­
tered in the process of organizing."

Careful examination of such questions will show the fal­
licious reasoning involved. If critics of my point of
view are careful to note the order primary to any abstracting organism, these types of questions will never arise in the area reviewed. Regardless of the emergent unit, any architectural designer is concerned with a greater number of measurable units (events) abstracted to a higher level of objective qualification than the bricklayer can ever hope to be in laying together parts. For those who would deny this, denial of the processes of abstracting as enumerated above must follow or else some language is being spoken which is not understood in this context.

Requisite to this approach is the acknowledgment that the serial, chain structure of the nervous system is paramount for further clarification of this problem. In both $A_1$ and $A_2$ the nervous tracts of each is involved. On the assumption that $A_1$ is dealing with a greater number of happenings in the designing of a building, it follows that a greater number of neuro-factors are crucial to the intensity and transformation of afferent nervous impulses passed through the thalamus, sub-cortical layers, cortex and returned in the efferent paths. In the case of $A_2$, the same order follows, but since fewer impulses are subsumed in the nervous category there is less chance for these same impulses to be blocked out by resistance, inhibitions, etc. In both cases the projection may be one of unity. The standard of evaluation must then be stated in organismal terms.
to be cogent. The level attained by either $A_1$ or $A_2$ is structurally related to the number of impingements handled throughout the whole transaction in which they are implicated.

With an understanding of order as a function of the human nervous system, art endeavors as such can be "sanely" judged. Differentiation between levels of attainment may be achieved when consideration of the transfer of nervous impulses through the stages of development are fully comprehended. Higher levels of achievement are attained by those whose capacities are developed to handle a greater number of impulses in the nervous mechanism in an order related to the survival pattern cortex of the organism itself.

In summation, specification of the term "art" resides in the organismically-centered-process of abstracting from a given event in terms of a manifold system of projection determined by the variant number of impingements within the neuro-construct of the organism performing the abstraction. This specification resolves the individuality of the organism as being absolute. Changes in art are then dependent upon the shift in events impinging upon any given organism at any given moment in time-space. In this category, art is a configurational emergent realized through interdependent organismic factors and not dependent upon external absolutistic objectives.
In view of the above statements, specification of the term "appreciation" may be superfluous. It is necessary, however, for that which follows, to carefully limit the mean-
The major premise of this dissertation is that "appreciation" involves the equivalent "phase sequence" of the process of abstracting as dealt with in the last chapter. Given a particular work of art (happening) which sets off a series of "firings" in the neuro-system and following these through to the affected cortical centers, the stage is set for varied types of reactions. One may occur within the non-verbal level of the motor-geniculate-viscera system. A more complex response may be developed at the linguistic level. Regardless of whether the response is verbalized or not, the act of appreciation is transactional in nature.

Critical to the act of appreciating is the full realization that it is a process-centered activity directly related to, and controlled by, the fundamental characteristics of perceptual behavior. The ability of an organism to appreciate works of art is directed by its capacity to control its past experiences, purposes and actions in the process of perceiving.

Therefore, it is proposed that the emphasis for "appreciating" works of art be placed on the processes intrinsic to perceptual behavior. In this way, "appreciation" is developed as a functional, actional and operational term.
Specifically, "appreciation" is a process of "learning". In order for the act of "appreciation" to have any influence on individual behavior, something must be learned by the perceiver.

"Learning" is generally specified for this dissertation by the following remarks. Learning is basically the process of combining the members of any series through an attitude of synthesis, so that such a process allows for the emergence of solid or stable units (1). Or it may be said that,

"intentional learning essentially means intentional organizing."

W. Kohler (2)

Or it may be taken to mean,

"a changed relationship between the central effects of separate stimulations, and does not directly concern the precipitating stimulus, or, primarily, the motor response whose control is imbedded in the central activity."

D. O. Hebb (3)

Common to the above definitions of learning is the element of organization or relationship. On the basis of the assumption that appreciation and learning are interrelated, the problem of appreciation is then one of a particular type of relating or organizing specific phenomena given in
works of art so that a perceptual organization is effected. Those factors which influence, inhibit or modify the individual's capacity of perceptually organizing, are the behavioral constants of past experience, purpose and action.

Finally, for appreciation to occur in any verifiable sense, one is restricted to those immediate factors relevant to the art object under view. The problem becomes one of basically organizing those perceptual factors which were an immediate part of the originator's percept in the act of abstracting.

"For to perceive, a beholder must create his own experience. And his creation must include relations comparable to those which the original producer underwent. They are not the same in any literal sense. But with the perceiver, as with the artist, there must be an ordering of the elements of the whole that is in form, although not in details, the same as the process of organization the creator of the work consciously experienced. Without an act of recreation, the object is not perceived as a work of art. The artist selected, simplified, clarified, abridged and condensed according to his interest. The beholder must go through these operations according to his point of view and interest. In both, an act of abstraction, that is of extraction of what is significant, takes place. In both, there is comprehension in its literal signification—that is, a gathering together of details and particulars physically scattered into an experienced whole. There is work done on the part of the perceiver as there is on the part of
the artist. The one who is too lazy, idle, or indurated in convention to perform this work, will not see or hear. His 'appreciation' will be a mixture of scraps of learning with conformity to norms of conventional admiration and with a confused, even if genuine, emotional excitation."

John Dewey (4)

1. Muller, G. E. *Abriss der Psychologic* (Gottimien, 1924), p. 25
In the preceding chapters I have attempted to state the matrix of this dissertation: First, that the teaching of "art appreciation" was to be examined from a new point of
view. Secondly, in order to remove the contrariety in namings existent in this area, a specification of "art" and "appreciation" was considered. The third part of this endeavor is to relate these criteria of namings to a process which is functional, operational and transactional in nature.

Art appreciation, to become a valuable area in education, must be able to effect an awareness of the formal properties of its study, e.g., painting, sculpture, architecture, ceramics, etc. This dissertation assumes that such properties are intimately and directly connected with the "multi-ordinal" aspects of perception. It is maintained that organisms involved in this study are primarily concerned with perceptual behavior as it effects their way of viewing works of art. Therefore, the teaching of art appreciation must be able to demonstrate the difference between the levels of customary and esthetic perception so that the organism may justify its evaluation of art works on warranted grounds.

There are three specific problems which the teaching of art appreciation must be prepared to meet. These are:

1. A clarification of the major problems intrinsic to art and its appreciation. A ground must be provided so that a group of students may analyze the "indeterminate situation" from
an individual point of view, determined by personal experiences. The students must be offered determinate and ingenious phenomena, operational and functional in character, which effectively illuminate the perceptual behavior of organisms and make it possible for an experiential and relevant type of inquiry to take place.

2. Given a class of students who have had little or no direct experience with art activity, one is faced with the difficult situation of changing individual behavior through group control. Art appreciation must be so taught that each individual will experience the operation employed so that equivalent results may be expected. Failing to accomplish this allows the conclusions inferred from such an operation to be invalidated. This calls for a controlled situation in which the irrelevant personal behavior of individuals must be discovered and mastered.

3. The limitation of time. As a rule, relatively few hours are given over to this study in college courses. Therefore, the teaching procedure must be able to transmit information
and significant disclosures rapidly as well as concretely. The point of view structured under this limitation must be available as a guide and reference for future value judgments.

To show clearly how the above problems may be dealt with in an explicit and concrete system, attention is now turned to an explanation and application of certain visual demonstrations pointing out their relationship to the teaching or study of art appreciation.
star point demonstration

A. This demonstration consists of a box lighted from within with three small holes in the facing of the box. It is so constructed that light from the holes to the right and left of the center hole can be controlled (see Figure 4).

The first step in this experiment is to switch on the center light, making sure that this is the only light which can be seen in a blacked-out room. The observers are asked to fixate on the "star point" and when something begins to occur to comment aloud about what happens. Within a matter of seconds, various individuals begin to emphatically state that the point of light is moving - "to the right", "to the left", "up and down", or "in a circle". As soon as the instructor is certain that all of the group are experiencing some motion of the light, the house lights are switched on.

It is immediately pointed out, by calling attention to the box and the pinpoint of light in a fixed position, that the perceived motion is in the mind of the observer and that the light itself does not move. Of importance is the fact that all the observers experienced a point in motion
regardless of its directional movement.

1. It may be pointed out from the above experiences with the star-point that stability of any perceived relationship is dependent on a field relationship structured in terms of **figure-ground**. As is noted, without a **ground** the **figure** (point of light) is unstable. Relating this to the act of appreciation, the student can be shown the necessity for having more than a single bit of evidence on which to base his judgments concerning works of art. Before he is able to establish the validity of his own concepts about what art is, he should provide himself with evidence to support that which he thinks or says. Before any fixed relationship obtains between himself and that under observation, a number of ideas must accrue to the indeterminate situation before it can be stabilized. As will be pointed out later, many of these ideas in turn must be discarded as irrelevant and new ones sought after. This step dramatically introduces to the student the necessity for re-examining at the outset his own concepts about what he thinks art is. If he comes with one preconceived notion (figure) he finds on the basis of this experience that in all likelihood the notion needs to be reinforced or altered with added experiences (ground).

To assist later discussions pertaining to art, it can be readily pointed out that what the student first assumed to
be motion in a point turned out to be only a projection of that which is native to his own organism. This resolves the point of misidentifications at the outset, making it possible to show that what the uninitiated think art is, is only a part of their own symbolization of experiences which may have nothing to do with the creator's activities or point of view. Hence, the actual awareness or knowledge of any individual's phenomenal field is limited. The problem for both student and instructor is to increase this field so that a greater relatedness between the viewpoint of the artist and observer will be gained.

By way of illustration, the criteria of judgment about art based on subject matter appraisal can be openly questioned on the ground of this demonstration. As this is analogous to the single point of light, the observer can be asked if this approach would seem to have any evaluational stability in the role of the appreciator since it appears to be only a single bit of evidence. The same question can be reversed and asked of the artist who contains this as the only frame of reference, outside of a certain technical proficiency. In consequence, the supposed rightness of this common approach can be experientially questioned, which aids tremendously in opening up various other approaches to the problem at hand.

2. This demonstration provides an extremely proficient
means for providing an understanding of the two terms *figure* and *ground* which play an all-important role in the structure of perception. By pointing to the star-point, and giving this the name *figure*, the student can quickly be made to see the nature of this concept. With the room lights on, fixating on the star-point, the observer can be shown the multi-ordinality of the term *ground* by pointing to a number of factors which fall into his visual field but are not fixated. In this manner, it can be further demonstrated what is then meant by an integration of figure and ground for achieved stability within a perceptual field. The experience may then be named a *field relationship* and the student henceforth can point to this on referral to this term. In this manner, these terms may go undefined and yet have a definite position within the realm of experience. Observers are introduced to an operational, functional and actional basis of language.

B. Attention is turned to a second phase of this demonstration. The observers are asked once again to fixate the star-point and to set it in "motion". As soon as this happens, the two "wing" lights are switched on. With their presence, the apparent motion of the center point of light stops. However, after a short period of time, most observers will tend to see all three lights move. Attention
is drawn to this fact because it has serious consequences in the study of art appreciation. (See Figure 4a)

1. From the demonstration it can be pointed out that "visual stability" is dependent on the observer being able to integrate a number of series of points which constitute the ground for any emergent figure. It can be concluded from this that requisite to any forming process is the achievement of stability. Since stability here is shown to exact a relationship between points in a field structured in terms of figure-ground, it follows that those dealing with visual processes, e.g., the painter, architect, sculptor, are necessarily involved with the equivalent problem. Given an art form for examination, the observer must be prepared to seek for that related field which validates the ability of the originator to handle these stabilizing agents. This again points to the necessity of becoming aware of those factors which play an important role in the production of visual forms. That this is no mere game of guessing can be shown by the structure and course of life-behavior in its definite pattern of integration of transactional phases of organism and environment. This pattern definitely foreshadows the general pattern of art-making. For art grows from a state of man's desire to integrate certain of those experiences arising from an organic-environmental field with achieved stability.
as primary to the end in view. Awareness of this factor must be postulated before the observer is able to make any fair or adequate decision about works of art.

2. The second experience of the flanking lights tends to bear out the thesis of integration. As the student observes the three points of light beginning to "move" he can experience the tendency to unify perceived items. In this case "motion" is seen when all three points are integrated into a unit, that which was ground (the two wing lights) tends to disperse itself and enter the phenomenal field as figure. Thus, there being no ground, the figure again becomes relatively unstable.

From these points the observer can be shown that a drive towards unity is basic to the perceptual nature of the organism. It can then be stated that this would seem to be a characteristic of esthetic form. Faced with the process of abstracting, the artist must take as a part of his task that of unifying that which he projects. Preliminary to the projection of such, however, is an awareness that unity exists in some phase. Whether or not this awareness arises from a perceived external or internal field of happenings, it must come to exist as relevant to his actions in the course of artistic endeavors. Otherwise, that which is projected can obtain without any significant order or meaning. Thrown confetti on a sheet of paper could derive
the name "art". This suggests then that unity and order are of extreme importance in the making of works of art. At the same time it points out the basic importance for reviewing the purposive nature of perceptual actions which relate to the appreciator in order that recognition of the serially connected processes and consummatory closures of art may be had.

Finally, this demonstration points to the need for a number of points of judgment before any stability for that judgment is constituted. Appreciation of any given object based on a limited set of factors would evidently tend to dissipate itself rapidly. The age old adage of looking twice before buying points this up. On this basis, the observer is encouraged to look longer, thereby enlarging the field which he is basing his appreciative attitudes on. Looking longer of course entails the problem of looking for that which is significant to that which is being looked at. In order for this to occur, the field of operations in which the artist is involved must to some degree be understood. The greater the understanding the greater the potential of the integration of a perceiving-perceived relationship is enhanced.

3. The whole of the demonstration affirms for the observer the cue of position as related to the perceptual environment and thus to art. The course of experiences as witnessed
is dependent on whether the star-point, or points, are positioned in a darkened or lighted situation. In the former, apparent motion is perceived while in the latter the point(s) are seen as fixed. This demonstrates not only the importance of position of figure but also the ground which assumes position within the phenomenal field. Positional relationships are therefore primary to the strivings of goal-directed organisms and necessarily become instrumental, functional activities of appreciative development.
A. This demonstration is so designed as to emphasize the cue of \textit{size} as related to perception. In a more complex fashion it also takes under consideration the cue of \textit{brightness}. The demonstration calls for a rather elaborate piece of equipment and may be foregone in the ordinary laboratory situation.

The demonstration calls for two balloons so fixed that they may be alternately changed in size by reducing the air in one while inflating the other. The balloons are equally illuminated with rather dim lights in an otherwise darkened room. Observers of this phenomenon are asked to close one eye while the operator increases and decreases the size of the balloons alternately. (See figure 5 for an approximation of what is seen) Students asked to report what they see respond with the answer that the balloons tend to go back and forth in space. The larger balloon appears to "come forward" while the smaller one apparently "recedes".

1. With the experience of the balloon demonstration, the student can be shown how his past experiences dominated what he perceived. A response of "advancing" and "receding"
is determined by the continual activity of everyday living; the fact that customary perception translates the small into distance and the large into nearness. Since nearly every observer who sees this demonstration for the first time reacts in the same manner, it may be concluded that cue of size is critical to judgments concerning space. Of importance here then is the factor of past experience. This experiment affirms for the observer that he does bring to such an object-situation certain habits which confirm the meaning of the stimulus under view. Otherwise, he would merely see the balloons get larger and smaller.

With this in mind, the student may be impressed with the concept that the way he views works of art is determined by his perception influenced by his own experiences. Assuming that what is observed is out there and not part of his own perceptual behavior leads to the basis of misevaluations in the field of appreciation. It may be shown from this that acceptance of works of art on the basis of style, decor, period or subject is open to questioning, since these are verbalizations which lead only to verbalized ends and common patterns which have little to do with visual processes.

2. It is immediately clarified upon reflection that what the observers saw as real "recession" and "advancement" was actually two balloons being made larger and smaller.
This states again the misidentification of perceptions and opens up vital ranges of thought concerning the nature of the abstracting process. Specifically, it questions the advisability of judgments based solely on past experiences which are not checked out against the perceptual field of now. The individual who is to render evaluations, thereby increasing the appreciative span, must be prepared to orient these towards the point of view established by the creator in order for a verification of the perceived to occur. An awareness of this factor clarifies the intent of the art object under view, removing many of the blocks which stay the act of appreciation itself.

In order that the viewer could respond to this stimulus in terms of "back" and "forward" it was necessary that he unconsciously assumed that the balloons remained constant in size. This furthers the attempt at showing what is meant by misidentifications. Only when the students "identified" the aspect of constancy could they respond as stated. In the same way, art appreciation can be shown too often to rest on the same premise. As long as one item such as perspective, style, system, etc., can be held constant, then the looker can be satisfied. No conflicts arise to bother him. All is resolved on the basis of one standard. Appraisal is endangered, however, the moment a supposedly new form comes on the market. The best support-
ing argument for this is shown by what occurred in Twentieth Century art circles. Designers approaching the problem of architecture were to revamp the whole of the area. Critics and buyers were at best hesitant in the acceptance of new forms since they had long relied on previous styles as a basis of qualitative valuations.

In summation, this point should have some convincing aspects relative to the student's behavior concerning the nature of judgments with which there has been little experience. If appreciation is to continue and grow, it must in the opening stages, be constructed on some factors other than non-visual and socially accepted constants.

3. It can be pointed out to the observer the role which size as a cue plays in determining the composition and scale in art forms. Before an appreciative attitude can be brought into play, one must have some realization of the intention of the artist. To gain this, an awareness of how the cue of size manifests itself in various projections is necessary, since evidently this cue governs in part the nature of the perceptual act.

Primitive art provides an excellent example of the manifestations of size. Here the cue is evolved in a field of relationships which objectifies the symbolic. Things of greatest value or importance are projected as the largest
in schemes of painting and sculpture. Size then plays a
definite role in the uniqueness of such a form.

In western art, the same was true for much of both bi-
dimensional and tri-dimensional forms. This ended with
the Fifteenth Century, however, when man turned his atten-
tion to visual fields and slowly shed the symbolic as
primary to his abstracting system. Size emerged in a field
of objects as a sign for "distance". Emerging from this was
a system known as "perspective". Responses to art objects
were then governed by the ability to view this system from
a point of view related to angular size experiences. This
constituted a new "reality". As is shown by the balloon
demonstration, the mechanics of angular size was false to
facts from the artist's point of view. Modification of
size projections was demanded upon the projection of visual
fields which were to be integrated.

From this point, the lay observer can be shown the danger
of holding constant a construct certified by authority
rather than experience. Assuming perspective as implicit
in painting since the quattrocento has led to serious mis-
evaluations. Perspective, once formulated as a rule,
exists outside of the abstracting processes basic to
visualization. Continuation of it as a basis of judgment
for the esthetic qualities of a work of art is "unsane"
since it preempts the individual characteristics of a per-
Finally, it can be demonstrated that size, for the artist or designer, is primary to integration and becomes an esthetic quality rather than a mere sign for "distance" or "depth". The student must be prepared then to suppress his customary experiences with size phenomena in order to gain a fuller appreciation of the purposive nature of the creating organism. For critical differentiation between the ordered emergent and non-esthetic projections, the student must become aware of conflicting assumptions which are shown through the experiencing of this demonstration. Its inherent value is not that it points out the serial connections in works of art but rather that it points up the necessity for the reorganization of the observer's perceptions as related to the viewing of creative works.

B. A somewhat more difficult but valuable demonstration may be had by varying the brightness of light on the balloons. Alternating the size of the balloons while increasing the light on the large one and decreasing the light on the small one, the observers note a marked effect of the balloons moving back and forth in space. (See Figure 5c)

1. It may be concluded from this that when brightness is related to size as shown the apparent effect of distance is greater. This is a postulate of the light and shade school
of rendering. Through the use of such a correlate, the effect of depth could be readily sustained, particularly on a two-dimensional surface. It will be noted, however, that the purpose here is one of attaining depth in projections rather than integration. Brightness therefore plays only a secondary role in the activity of organizing. This quickly led, from the time of its inception, to a thinly perceived esthetic form. But out of it grew a tradition which resulted in a system of "reality" from which society was to draw many of its conclusions regarding the nature of art. That is, affected depth was requisite to harmony or order.

C. The third part of the demonstration is simply a reversal of Section B. In alternating sequence, the large balloon is dimly lit while the small one is fully illuminated. Most observers tend to sustain the size cue and the small balloon is seen as being further away than the large one. Some observers tend to give greater emphasis to the brightness cue and the opposite occurs.

1. This demonstration supports the thesis that there is no direct correlation between brightness and size in past experience. Regardless of the brightness of objects, the form of them remains constant. On this basis, the student can be shown that to evaluate the worth of a painting,
sculpture, etc., on the effects of brightness as conceived from past experience may be of a really superficial order. Merely because an individual has distributed lights and darks across a surface in "correct" order does not insure that such a distribution is integrated.

Again it is possible to point out the weakness of preconceived concepts concerning the nature of form. The assumption that "reality" or "order" in art is dependent on one proper method of handling "light and shade" is dispensed with in this demonstration. In spite of the effects of light and dark, size was still held as a constant and the order of "advancing and receding" was experienced. The organism involved in perceiving is therefore forced to suppress brightness as a cue for distance if he is to gain a stability within his own visual field. Attainment of such is necessary to the integration which follows and is primary to unified projections.
A. Although one of the simplest of the demonstration, both to construct and operate, it is perhaps one of the most important. The demonstration consists of three different length lines so that they are progressively shorter from left to right. These may be three slits illuminated from behind or as merely shown in Figure 6. The observer's attention is directed to the three lines. They are seen as just three lines on a plane. At this point the observer makes some quip about "telephone poles". Almost immediately the observers see the lines as projected in space. The average response will be that the larger line appears to come closer while the smaller one apparently goes back in space. Associated with the content of "telephone poles" the three lines no longer are seen on the plane.

1. This demonstration points up the importance of past experience as a governing agent in his perceptions and value judgments. The moment mention is made of "telephone poles", the whole of the observer's field is changed, changing in turn his response to three lines on a plane.
It is immediately assumed that the three lines are of the same length through the identification of them with poles. This identity forces a simultaneous reordering of the given situation with the observer projecting a tri-dimensional space. The assumption that similar things are identical governs the response of the individual to this particular stimulus pattern.

From this experience, the student can be shown how important his past experiences are to his perceptual behavior. It has been clearly demonstrated that by speaking two words the whole of what was seen was radically shifted. By analogy, it can be cited that the verbal may institute a serial connection in art, affording a particular pattern for judgments or appreciation which tend to alter seriously the original purpose of the artist himself. With this in mind, the appreciator should be wary of those verbalizations which impinge on the visual processes which are basic to all art forming. Such terms as "space", "roundness", "firmness", "solidity", etc., must be carefully examined in the light of actual experience. Otherwise, the onlooker may be continually seeking after some non-existent with the result of displeasure when none of these are found. Or, assuming these (roundness, firmness, etc.,) do exist a priori to art activity, the looker may continue to evaluate and appreciate only that which fits his own set, abridging
2. Extending the implications of this demonstration brings to light the importance of differentiating between the non-verbal and verbal levels of abstracting. By so doing, it is possible to clarify for the student the necessity of removing the clause of identification in order that his response to given situations may be more in accord with his own abstracting processes, thus enhancing the possibility for more stable behavioral responses to be instituted.

Returning to the demonstration, the observer first sees three lines on a plane. This fully accounts for what is seen, regardless of how the viewer may wish to verbally state it. As long as he stays within this framework his descriptions will be relatively free of conflict with the happening itself. But the moment a verbalization such as "telephone poles" is introjected into the situation, a contrariety between the nature of the stimulus and the individual response arises. It can be pointed out that such a contrariety is existent only as long as the observer brings his own experiences to bear upon the event under view. With this clearly in mind, the student can be shown the necessity for suppressing many of his customary experiences in attempting to expand his range of appreciation. As long as he continues to view art objects in a
purely object-directed fashion, he can hope only for stereotyped and incorrect evaluations to occur. The observer's responsibility then becomes one of attempting to localize the point of view of the creator in order to evaluate the structure properly. This does not say that acceptance is warranted by such a position. But it does offer a broader field for choice and rejection.

3. This demonstration further clarifies what is meant by the terms object-directed and non-object-directed response in perception. The former is illustrated when the observer assumes "telephone poles" and projects a tri-dimensional space. Here size and position become instrumental to distance. The latter is determined by the observer's response to three lines; that is, they are merely seen on a plane as a formal structural pattern which constitutes an end in itself.

With this as a basis, the student can be shown the necessity for suppressing his object-directed attitude when coming into contact with works of art. Since esthetic organization can be structured only in the formal abstractions of position, color, size, overlay, etc., regardless of the emergent "subject", the looker must be prepared to give attention to these cues in order to perceive what has been projected by the creator. Otherwise, there will be a
tendency to confuse the art form with the referent, with the result that fresh experiences of appreciation are inhibited. This ends in a tendency of seeing in cliches.

Analogous to this situation is the following situation. An individual goes to the store looking for a set of silverware. Wishing only to purchase this single item, he chooses the ware in almost complete isolation. His response in terms of buying is object-directed, since little or no attention is given over to the formal aspects of what position the silver will assume in the environment in which it is to be used. No attention is paid to such factors as room size, table pattern, drapery fabrics, etc., and as a result no integration between the thing purchased and the position it finally assumes is had. With the process of forming instilled in the selector, a greater potential of relationship could be gotten with the ultimate in greater interest and variety being achieved in the living processes.

Simple as this illustration may seem, it points up the necessity of being able to differentiate between the perceptual and conceptual tendencies held in a modern society. Scientific and technological advances have made it imperative for man to suppress the tune of "similar things are identical" in order that he might conceive a less monotonous and stereotyped environment in which to live. If man
is to continue to exist compatibly within this realm of progression, he must be prepared to exile that primitive extension which binds him to the thesis of "identity". As the following quotation so vividly points out, primitive peoples, both artist and observer, are perceptually controlled by the law of "identity".

"It is a well-known fact that primitives, even members of communities which are already somewhat advanced, regard artificial likenesses, whether painted, carved, or sculptured, as real, as well as the individual they depict. 'To the Chinese,' says DeGroot, 'associations of images with beings actually become identification, both materially and psychically. An image, especially if pictorial or sculptured, and thus approaching close to the reality, is an alter ego of the living reality, an abode of the soul, nay it is that reality itself'. . . Such intense association is, in fact, the very backbone of China's inveterate idolatry and fetish-worship. . . A young widow has a child by a clay statue of her husband; portraits are endowed with life; a wooden dog starts running; an artist, meeting a horse of a certain color in the street, recognizes it as a work of his. . . How then can a portrait be 'materially and psychically' identified with its original? To my mind, it is not on account of a childish trust in analogy, nor from mental weakness and confusion; it is not due to a naive generalization of the animist theory, either. It is because, in perceiving the similitude, as in looking at the original, the traditional collective representations indue it with the same mystic elements. If primitives
view the pictured resemblance differently from ourselves, it is because they view the original otherwise also. In the latter we note its objective and actual characteristics, and only those: the shape, size, and proportions of the body; the colour of the eyes; the facial expression, and so forth; we find these reproduced in the picture, and theretoo, we find these alone. But to the primitive, with his perceptions differently oriented, these objective features, if he apprehends them as we do, are neither the only ones nor the most important; most frequently, they are but the symbols or instruments of occult forces and mystic powers such as every being, especially a living being can display. As a natural consequence, therefore, the image of such a being would also present the mingling of characteristics which we term objective and of mystic powers. It will live and prove beneficial or malevolent like the being it reproduces; it will be its surrogate. As soon as we realize how primitives view entities, we see that they view reproductions of them in exactly the same way. If their perceptions of the originals ceased to be mystic, their images would also lose their mystic properties. They would no longer appear to be alive, but would be what they are to our minds, merely material reproductions."

Levy-Bruhl (1)

From this it can be seen that for a more "sophisticated" society to control its perceptions in relation to esthetic organization it is necessary to remove the confusion existing between the art form and referent. Attention must be
given over to the formal properties which constitute the level of esthetic projection. Ignoring this permits an otherwise educated society to manifest primitive tendencies and causes unwarranted conflicts to emerge. The regenerative social behavior of individuals is slowed in relation to cultural modifications.

This is most clearly demonstrated in recent architectural trends. Individual awareness of an organizational potential would permit more rapid entries in the utilization of newly processed materials, whereby a fundamental break with past, and often mediocre, styles could be gotten. This would allow the development of more functional and organical living quarters, providing the individual with an opportunity to extend the relationship of his internal-external environment. Until it can be clearly shown, as in the "telephone pole" demonstration, that identification is a relative, primitive and non-rational basis for forwarding judgments in organizational practices, little can be done to change the customary perceptions of "statistical average experiences".
A. This demonstration is largely concerned with the source of perceptions. The demonstration is constructed in a box with three peepholes through which the individual views successively three cubes which appear to be alike. After the observer has assured himself that "cubes" have been seen, he is shown what he has been looking at by having him look inside the box. Much to his amazement, he finds three arrangements of strings, lines and wire, each of which he perceived as a cube. Respectively, he notes the cube on the left is made of wires. The one in the center consists of a line drawing of a cube in perspective. The one on the right is a set of wires to which some strings are attached, having no resemblance to a cube whatsoever. (See Figure 7 for pictorial arrangement of this demonstration). Obviously, two of the three objects which were assumed to be "cubes" are anything but. For the observer, this should challenge the old adage that "seeing is believing".

1. For the course of art appreciation, this demonstration clearly establishes that past experience is of major consequence in determining "what is seen". In every individual
case where "cubeness" results from observation, it can only be the observer's response to a retinal stimulus pattern since all else is eliminated from the field of vision. Both in the case of the drawing and the cluster of wire and string, "cubes" can only come to be seen because of the viewer's past experience with similar retinal patterns.

The import of this experience lies in the fact that the observer determines what he "sees out there" by the experiences which he brings to certain situations. In relation to art, what the student will find and enjoy is largely based upon his previous experiences with art forms, or what preconceptions he entertains as to what art forms should be.

At the most elementary level, the observer who conceives of the painter as one who paints "heads", "bodies", "trees", "etc.", will search for that stimulus pattern which is adequate enough for him to identify his experiences with. On this basis, the most successful of artists are those who can give "character" to the pattern viewed. What is "seen" then becomes "reality" for the observer and his immediate goals are served. To him this is real art.

What is open to question here is obviously whether the individual has made any judgments concerning "painting". Since painting is a series of responses in relation to given stimuli, objectified in terms of the projected cues
of position, size, brightness, etc., it is evident that it has little to do with "heads" and "bodies". Response to the stimulus painting in terms of realization of objects is then evidently false to fact.

Pressing this point is necessary before the observer is in a position to modify his position concerning not only the act of painting, but all other art activities as well. Before he can get at the structural essence of art objects, regardless of their moment, he must be prepared to assume that his past experiences do not always deliver a confirmation of what is seen. It may be added, that before any significance of art as such may be had, many of his experiences may need to be suppressed before new experiences may be actualized.

2. The second point emerging from the demonstration for emphasis is that of a point of view. Looking through the peepholes acknowledges one point of view. Looking over the top of the demonstration structures another. The former provides a set of cues from which the perception of "cube" is drawn. The latter provides a set of cues which are at variance with the concept of cube. In the first case, the observer firmly concludes that what is seen in each instance is a "cube". (This author has witnessed many individuals passing through this demonstration and rarely has he seen anyone deny or question whether cubes are
actually existent in the box). Confirmation of "cubeness" is based on a single point of view in this case, for there are no other possible cues offered on which one can base a judgment.

The second step, of looking in the box from overhead, provides a second point of view, which modifies the original concept of "cubeness" to a considerable degree. This modification of course is entirely dependent upon where the demonstration is seen. The observer who returns to the peephole will still see a cube, even though he is aware of the fact that what is "out there" is only a cluster of lines or wire. It may be concluded from this that perceptions are modified upon shifting the point of view of the perceiving agent.

This shift in viewpoint is essential to the process of art appreciation in several ways. If one is to attain any understanding of the artist in process he must be prepared to shift to this level. This amounts primarily to a shift in point of view with perceptual modifications following. Refusing to do this accounts for the breach between customary and esthetic behavior.

As two points of view in this demonstration provide the observer with more accurate information as to what is seen in response to the stimulus-pattern, the same should carry
over into his experiences with art forms. Here the viewer should be prepared to seek out more than one basis of judgment before acceptance or rejection of the viewed is completed. Such action will prove beneficial in the long run, for once the observer attempts this he find himself in the all-exciting process of forming rather than being locked to the antithetical object-directed position.
A. Of the demonstrations thus far discussed, this is one of the most intriguing. It re-enacts certain of the perceptual properties found in the balloon and telephone pole demonstrations, showing as well the significance of the overlay cue.

The demonstration consists of a piece of metal, so cut with fenestrations as to appear similar to a window in perspective. To heighten the effect of a window, cast shadows are painted on both sides so that the observer is given the impression that the window also has thickness. The window has a small red cube attached to its shorter side. Projected through the frame is a short piece of pipe. This apparatus is welded to a thin shaft which in turn is fastened to the shaft of a motor which revolves the window at one revolution per minute. (See Figure 8)

To begin the demonstration, the operator switches on the motor and so illuminates the window that it is the only thing seen in the room. The viewers are asked to close
Diagram of trapezoidal window

WINDOW

CUBE

PIPE

ACTUAL MOTION
OF WINDOW

APPARENT AND
ACTUAL MOTION
OF CUBE

APPARENT RECIPROCATING
MOTION OF WINDOW
one eye and in so doing several interesting phenomena are witnessed. The trapezoid window appears to "flip back and forth" instead of completing a revolution; the red cube appears at times to completely leave the window and apparently moves in one complete cycle; the short pipe is said to "bend" and "straighten out" as the window moves back and forth "against" it.

1. No complete or detailed explanation of the phenomena seen here will be attempted since these have been fully covered by Ames, Kilpatrick and Sherman elsewhere(2). In order that a relationship between this demonstration and art appreciation may be established, a brief note of what evidently occurs here must be acknowledged.

The trapezoid window, constructed in perspective, has a long and short side. For convenience, these shall be respectively called A and B. With the window in motion, as long as A is seen in the front half of the cycle (or closest to the observer) the window appears "normal" and moving in a clockwise direction. As soon as B moves into the frontal field, however, the window tends to begin to turn in a counterclockwise direction. This series of alternations sets up a "reciprocating motion" in the sequence of window revolutions. The viewer thus reports a "flip-flopping". (See Figure 8a)
Responding to his past experiences as governed by the cue of size as a sign for distance, the observer causes the window to move "back and forth" by continuing to place A in front of B regardless of their "actual" position. Hence, it is possible once more to dramatically point out the role which past experience plays in the observer's perceptions. Of importance is that fact that here the student can be shown that response to size is a learned process and not natively given. By suppressing size as a cue for "distance" and watching A and B in their actual size positionings, the reciprocating action of the window can be supplanted by seeing the window turn in its full revolution.

For the latter to succeed, some time and concentration must be expended. Analogous to this is the point that if one is to gain entry in the formal issues of visual organization, in all probability, a proportionate amount of study will have to be given over to the problem. In other words, the suppression of certain visual cues emerging out of prior experiences which determine customary modes of perceptual action are not easily dispensed with. The appreciation of visually integrated projections is not to be anticipated as something either native to the organism or easily grasped. Those who seek for pleasure in "art" must be prepared to labor. That the task of the creator is a playful or automatic response must also be given up in
light of this experience.

This demonstration continues to emphasize the necessity for being "centered in process" rather than allowing an "object-directed" attitude to govern the observer's perceptions. As long as the organism's projection system is aligned with size as sign for distance (object-directed), what he sees will be in conflict with what is inherent in the nature of the structure out there. This is shown by the movement "back and forth" reported by the window observer as against the full revolution of the window itself. Once the idea of window is suppressed and size cues taken as an end in themselves (process-centered) the observer will be able to control accurately his response to the motion of the window (structure). The full impact of this in related areas of the visual arts calls for the removing of such pitches as style, perspective, realism, idealism, romanticism, cubism, etc., before any functional and actional realized esthetic behavior can take place.

As long as individuals continue to choose housing on the basis of "styling" rather than on the process of organic designing, from which "style" is the emergent, no really operational structure can result. It is essential that this is made clear to the student who is supposedly being initiated by institutions into the operative nature of a democratic culture. As housing is primary to all such
individuals in such a culture, there seems no better place to emphasize the need for a process-centered type of thought.

2. The red cube illustrates an interesting note. Seen as an independent unit, it detaches itself from the window and completes a full revolution. This tends to underline the fact that that which has not been experienced before may be seen with greater clarity. Since cubes are not ordinarily perceived as attached to windows, the observer has no difficulty in getting it to complete its cycle. From this, it is plausible that if such terms as "houses" or "buildings" were removed from the actuality of architectural design, the fullness of the problem undertaken by the designer could be more readily understood. This calls for the repeated acceptance of clearly differentiating between that which is visual and verbal in the operations carried on by both designer and client.

3. The apparent "bending" of the pipe is a result of overlay. At certain stations, the window frame is seen to overlap the pipe, and as the window moves in a counterclockwise direction, the pipe appears to "bend" or to some observers, to "cut" through the window. The viewer, taking the cues of size and overlay as primary to the window, "bends" the pipe in the backswing of the window in order to retain the cues of his experience in a stable position.
The pipe, not usually seen as stuck through windows and therefore not a part of the perceiver's experience, continues in a rotary path. This, coming into conflict with the apparent movement of the window, causes the viewer to make a choice between what is most important here, the window or pipe movement. On the basis of his past experiences, the window is the thing chosen over all else in this environment and as a result the pipe must be bent, or allowed to cut through, in the window in order for the stabilization and definiteness of window to be achieved.

Experienced in this way, the goals of stability and definiteness in perception would seem to be verified. It further seems to warrant the assertion that one of the fundamental motives of organismic behavior is to perceive clearly. As Woodworth puts it:

"To see, to hear—-to see clearly, to hear distinctly—-to make out what it is one is seeing or hearing—-moment by moment, such concrete, immediate motives dominate the life of relation with the environment."

R. S. Woodworth (3)

The structural processes of forming in esthetic perception would necessarily be involved within this framework. However, it must be conjectured that such achieved stability and definiteness is dependent on a field structure, the properties of which are so related that they are both con-
tinuous and inter-supporting. When once the observer re-orient his experiences and is able to control the window in a complete cycle, then all events in this field are said to be continuous. Conflicts no longer arise and a "correspondence" to "unity" can be said to exist.
A. This demonstration provides a series of experiments by which individuals may dramatically review the relation of past experience to action in perception. When first shown the "room" the observer sees a set of oblique planes and openings which simulate a perspective drawing of a room. The floor and ceiling are tipped. Windows are of varying size. The left hand corner of the room is twice as far back as the right hand corner. Seated in an assigned position and viewing the room monocularly it suddenly takes on the shape of an ordinary room. All the angles between the floor and ceiling become right angles. The windows appear to be the same size. Observers sense themselves to be in the center of the room.

A brief explanatory note as to the optics of the distorted room is in order. When the room is viewed with one eye (monocularly) all angles subtended by the room become equal at the nodal point of the viewer's eye. With all angles being equal, the windows appear of equal size, the floor and ceiling appear horizontal and the whole situation takes on the appearance of "squareness". Since correspondent
HASTINGS PORE CONCENTRATION

PLAN

VIEW

OBSERVER
items apparently are the same size, the observer assumes them to be an equal "distance" away.

Although diagrams or photographs fail to communicate the weirdness of the demonstration, the plan of the distorted room and its appearance is shown in Figures 9 and 9a. This demonstration is easily constructed, on a small scale, out of cardboard and paint. As a matter of fact, for an effectual learning procedure, all students are requested to build one of these. Constant referral to it is necessitated by the complexities involved, regardless of the area of study.

1. To emphasize the role of past experience in action, and to mark the many implications following out this relationship, the observer is requested to proceed as follows:

Given a pointer, the viewer is directed to place its tip in the room's lower left hand corner. As soon as the room appears square, the observer is asked to quickly strike the upper right corner. On attempting this, the pointer is smashed against the back wall. Considerable difficulty is ensued in finally getting the pointer to its assigned position.

Once the student-observer has experienced this, talk of past experience and action can be more fully clarified as it is related to art appreciation. The apparent "square-
ness" on which the viewer acts can be named as the phenomenal ground on which the faulty ensuing action took place. This ground is a composite of all his prior activities as related to square rooms and which, as such, is specified as past experience.

It is essential that the student be made aware of the fact that, although he was fully aware of the fact that the room was distorted, he still acted on the basis that the room was square. Thus, it is clearly demonstrated that he was again allowing the statistical average of past experience to influence his judgments in the way he was to operate with the pointer. This positively points up once again the necessity for checking one's past experience against that which is being juried. Prior experiences with certain forms may fail to provide the data requisite to correct appreciation of forms which vary from this norm. Once this is impressed on the student, new avenues of approach through rigid questioning are available.

Parenthetically, this author, in explaining this position to professionally qualified persons, has often heard the rebuttal, "but why the demonstration? You can simply explain, via the spoken word, the necessity for shifting past experiences in judging works of art". Saying this often enough may eventually effect the audience hearing it. Not only does this prove time consuming, but the effectiveness
of such a procedure is dependent on the personality of one individual. With this demonstration available, the student personally and directly experiences the motivational aspects of the instructor. The need for personal justification of a point of view is reduced to experiential circumstances. Student-instructor relationship is planted on a non-verbal, actional ground, thereby becoming more positive.

After the viewer has succeeded in manipulating the pointer from one corner to the other with ease, it can be shown how past experiences become modified through action. When first striking the wall instead of the objective, the observer, through a process of trial and error, begins to adjust his swings by centering his attention upon arm movements (kinesthetic) rather than upon the belief in the "squareness" of the room. In the tendency to suppress the external characteristics of the room, the actor "internalizes" and brings into play a new set of experiences on which to act. Reflecting on this, the student finds that in the first phase, the perceived relationship of the "room" determined the subsequent character of his action. The second phase points up how his actions modified the perceived relationship of "room".

Once determined through personal experience, the student is aware of the reasons for structuring his information into action. Talk and readings about art may be an inroad
to appreciation, but until these verbalizations are checked out through active participation they may be nothing but literary mutterings. Constant looking at painting, drawings and sculpture with the realization that something may emerge from such a process is a valuable action. For the student to submerge himself in the act of doing is even more sufficient and, in the long run, more exacting.

In the case of individuals who are to choose a home for themselves, it could hardly be expected that they would involve themselves in the experiment of putting up a house to see whether it suited them or not. Experimentation can be undertaken at the model level however, and such is imperative for those who wish to achieve a certain stableness of mind before being committed to the rather costly business of architectural construction. Elimination of all error in such cases is, in all probability, impossible. But errors could be reduced if individuals would more often take into account what the demonstration points out, that faulty percepts and subsequent acts can be corrected by structuring information through action. Centered in this process, however, the observer must be prepared to pay greater attention to modifications rather than the end-in-view.

Critical to this point is that of the role of approximation in learning. The trial and error involved in completing
the assignment of the pointer marks this out. Although
the operator has an end in view, i.e., of striking the
upper left hand corner of the room, it is only through a
series of corrections based on approximate needs at the
moment that he is able to succeed. For the potential art
appreciator this is of major concern. It should be seen,
although the goal here is to achieve a lasting appreciative
attitude, that this is not to be achieved through a perma-
nent set of mechanistic devices. The observer must be set
to allow achievements of the moment to regulate his actions
in seeking the desired goal. Any completed definition at
the outset limits the viewer's range of activity. This
becomes nothing but a handicap in the long run of pragmatic
adjustments. In view of this, the individual should, in
his initial stages, start with a series of approximations
which allow him to stay centered in the process of choosing.
Since both learning and transfer have been shown to be
facilitated by such a position, it would seem that the
end-product point of view is anything but conducive to
esthetic levels of behaving.

The advancement of present day modular furniture units
serves as a concrete example of the process-centered atti-
tude. Although the interior space of rooms is fixed by
wall areas, a certain mobility within that space can be
gained by organizing units on a non-permanent basis. In-
Individuals may attempt one arrangement of furniture, live with it awhile, and if found unsuitable it can be rearranged. Great freedom of choice is allocated by such devices which permit a constant series of approximations to be made within one constant, the dwelling itself. Future developments in technological fabrication may even be extended to the point where housing itself will be so designed as to be mobile. Increasing from this manifold tendency will be a creativeness on the parts of individuals due to the fact that a greater number of approximations will be possible. Attention can thus be centered on the occupants' role of living rather than on the single and end-product aspect of style or personal likes of individual designers or builders.

B. A second effective experiment may be seen by having two objects, e.g., two individuals, two cards of the same size, two hands, placed in the window frames directly opposite the observer. The viewer, once the room is "squared" will see the two objects as markedly different in size. The windows, of course, appear to be the same size. The object in the left (large) window will apparently be smaller than the object seen in the right (smaller) window (see Figure 9b). Implied in this experience are the effects of ground on figure and angular size.

Both objects being of the same size, one subtends an angle
of different size since it lies at a different distance from the observer. Assuming the two windows to be the same size, the observer places them at the same distance. On this basis, the viewer places the two objects (figure) within the frames (ground) at the same distance and assumes them to be different in actual size.

1. This experience points out the stability which ground has over figure. The room is more stably organized in this percept, not because it is a more experienced pattern, but due to the fact that it acts as a ground for the perceived figure. As a result, figural characteristics can be reorganized to remove the conflict in which they are seen, thus allowing a more stable perception to emerge. With this in mind, the student can be shown the advisability of centering his attention upon ground rather than figure in shifting to a level of esthetic judgment. In the same manner, a check system of visual order is posited. The student, seeking for a basis of judgment, has himself experienced that requisite to integration on the part of the designer. In other words, the opportunity is given for differentiating between those designers who are ground directed (process-centered) and those who are figure (object-centered) directed. The former will prove to be more integrated because it is more stable in terms of perceptual activity. The latter, although perhaps more clear as far
as personal naming is concerned, proves to be less stable in an esthetic sense. This makes possible the removal of name calling, e.g., "good" and "bad", in studying works of art. Instead, there is a greater possibility of pinpointing the purpose of given works under view. Whereas one may suffice as a cover of a magazine, used as a sign for certain customary recall, another may be so structured as to have its ultimate end depend on stability (unity). Each can be granted its specific purpose and kept in its proper category.

2. Although not directly connected with the distorted room, another demonstration which vividly points out the primary function of ground in stability, is relatively simple. Taking a sheet of cardboard, large enough to cover an individual's face, a mask is made which can be secured to the head. Two pinpoint openings are pierced in the front so as to coincide with the foveal axis of the two eyes. With the mask on, the viewer has an approximate field of vision of three to four degrees in each eye. Positioned in a room, the viewer is asked to walk about. It is immediately observed that the masked individual has considerable difficulty in maneuvering. He begins to shuffle, feeling with his hands, bumping into objects and generally reacting to the environment in a most unusual manner. After a few moments, the person may report that he feels rather unstable himself.
it is quite obvious that the mask limits the range of vision to the fovea (figure) and all peripheral cues (ground) are eliminated. Depending entirely on a figural field of vision and the motor-tactual cues given through movement, the stability of the organism is greatly reduced. In working with this demonstration, the author has witnessed some individuals who become nauseated under the circumstances and ripped the mask off. They reported that everything "became so unstable they couldn't stand it".

Once experiencing this instability, the student has convinced himself of the importance of the relation between ground and stability (unity). It becomes quite clear that a figure (object-directed) centered attitude fails to offer much of a basis for achieved equilibrium.

This demonstration may be reversed by taking a clear pair of glasses and gluing a dime in the center of each lens. With the glasses on, the fovea (figure) is blocked in frontal vision, and yet the individual wearing them experiences no particular difficulty in moving about in space. Since peripheral (ground) vision remains generally unaffected, the viewer senses no reduction in the multiple cues offered for action and perceptual harmony is retained.
A. This demonstration, relatively easy to construct, is effective in showing how integration is achieved through coincidence of edge within a visual field. In a dimly lighted room, one wall is blackened by painting or hanging a black cloth. In front of this is placed a white rectangular card (coincidence plane). A few feet to the front of this plane are suspended two small rectangular cards of the same brightness. Playing cards are suitable, as they are common to all viewers. The observer may then be seated some distance to the front of this arrangement with the chin resting firmly, so that he can align the left hand edge of the right card with the right hand edge of the coincidence plane. In this position, what is seen is illustrated by Figure 10 and 10a. By staring at the small X, the reader may be able to assimilate the phenomenon as occurs in the actual demonstration.

1. The observer, with the right card aligned with the rectangular white plane, will suddenly notice that the card appears to lie in the same plane with the coincidence plane
PATTERN, INTEGRATION, DEMONSTRATION

PLAN VIEW

OBSERVER

BLACK WALL

COINCIDENCE PLANE

RAISING CARDS
to the rear. At the same time it is sensed that the card appears larger. This is clearly seen by checking it (the right card) against the card to the viewer's left. Both cards which were in the same plane, equidistant from the observer, now are apparently separated and appear to lie at distinctly different distances.

Having thus experienced this phenomenon, the student is offered a simple level explanation of the term integration. It is shown that integration is a process of sensory articulation, dependent on the point of view of the observer and not upon the inherent nature of the artifact under view. This is clearly shown by the fact that in this demonstration, the observer does the moving of the card, dependent upon coincidence of edge; the elements within the stimulus can be called static. Therefore, the dynamics of the transactional phase of integration are determined by organismal responses in the cycle of perceptual activity.

Carried to a higher level of analysis, this experience illustrates that integration (harmony, unity) is mediated through the organism and not through some thing "out there". Thus, integration in art is a projection in terms of what the artist (organism) has abstracted out in the process of forming. Unification of part-to-whole is dependent then on the projecting organism and its ability to relate both stimulus and response in the environment perceived.
It follows that appreciation of art objects will be dependent upon the observer's ability to perceive his own situation in an integrated fashion. In other words, perceptual unity is requisite to critical analysis in this area. Regardless of how any artist has handled the cues of position, size, brightness, material, etc., to effect a particular style or subject context, the observer must be prepared to seek for the factor of integration present in these arrangements.

On the basis of the demonstration, the one invariant in perceiving a total field is that of integration. Through such, stability and definiteness of size and "distance" is gained. This would seem to say then that the matter of subject and style in art are at best relatively superficial aspects on which to determine the worth of particular works. While both are emergents determined by the point of view of abstracting organisms, they can hardly be considered a priori to, or irrevocable constants, in organismic forming processes. Thereupon, the ability of individuals to draw the "body properly", "design houses in the style of", "paint in the manner of", must be revoked as cliches which have nothing to do with perceived units. Operating with such concepts can lead again to only the most "object-directed" and non-integrated propositions.

In the demonstrations, thinking playing card (style, sub-
ject-matter) will not cause integration of two planes to occur. It will aid the subject in placing the cards at a particular position in space. Only when the formal process of coincidence is observed will a modification of size in configuration occur. This demonstrates for the student that the appearance of given elements is dependent on the field in which they are structured. To paraphrase Sherman, an awareness of total field must be present in the viewer's process of observing in order that he may achieve a proper appreciation of each emerging element in an art form.

2. By changing the back-drop (black) to a lighter gray, the observer can be shown that brightness plays a secondary role in pictorial organization. Against such a ground, the card and plane may be delayed in "integrating", but it does not prevent integration. Although this is of no particular value in judging "finished works of art", it can be of some help to the observer in his own adjustments. As certain items in his environment seen discordant, change must be based on a configurational rather than a brightness relationship. This requires attention to a total field (ground) rather than to a single object (figure). Merely changing the fabric on one chair may have little to do with getting it to take its "proper" place in a room. The putting of "picture windows" in a dwelling to "style" it may have little positive effect on the organism-as-a-whole in living.
Only when such "living" is considered as a ground for particular activities (figure) will any relationship accrue between the two.

B. In conjunction with this phase of development, the cue of overlay provides another formalization into the problem of integration. Since the demonstration dealing with this cue is rather technically involved, the reader's attention is directed to a full description of it by H. Sherman in *The Visual Demonstration Manual* (4).

Of importance to this dissertation is the fact that through an awareness of overlay as a cue to the integration of monocular space the observer can again give attention to those factors which bear on visual organization in art objects.

A simple illustration of this may be seen in Figure 11. In Example A, the observer will find it possible to shift the large gray rectangle and the small black square in and out of the surface. Such oscillation is opposed to integration since the plane on which the figures lie tends to be visually destroyed. By overlapping the small square on the large rectangle however, oscillation tends to be reduced and a
simple integration is achieved. The two forms appear "to be together" and to support each other. The following passage makes explicit the relation of overlay to what is shown here.

"Because OVERLAY is an essential cue in the integration of monocular space, it has been and can be used most effectively in pictorial form. The presence of OVERLAY in pictorial form is one of the first signs of the ancient and primitive artist's (Egyptian's, Bushman's) awareness of the integration of a field of objects as seen from a single point of view... By making use of OVERLAY, modern artists have been able to dispense with SIZE as a cue for 'distance' (integration). This, in turn, has provided for a greater variety of the elements constituting the aesthetic form."

H. Sherman (5)

A specific use of this cue can be found prevalent throughout the idiom of modern day advertising and magazine layout. Across the facing of drawings and photographs are type faces announcing the product sold or the story being told. Although this centers attention on two items at once and tends to communicate rapidly both the visual and verbal, it further enhances the visual layout through the use of the integrating cue of overlay. Once seen at this simple level, multiple examples of this can be found in present day architecture, fabric design, interior layouts, and so on.
Through the indiscriminate and misunderstood use of this cue, however, it is interesting to note how it has emerged as a **stylistic** device in the area of design. This points up how other periodic schemes have become formalized as **devices**; e.g., classic ornament, Gothic forms, modern architecture, to "impress" societies. The original basis for their conception is overrun in such tendencies, reducing that which is produced to a distortion of the intent of the originator.
part h

gray ring demonstration

(we rtheimer - benussi)

A. Although this is not a direct part of the Hanover Series, it conclusively demonstrates the element of color contrast in figure-ground structure. The demonstration is easily constructed by taking two sheets of complementary colored paper, e.g., red and green, and mounting them side by side. In the center of the two sheets is pasted a medium gray ring. (See Figure 12) For the second step of the demonstration, the observer should have available a piece of black thread or a narrow strip of black paper long enough to cover the vertical line between the colors.

In dim illumination, the viewer looks at the gray ring on the colored background. The ring appears to be of a uniform grayness. Once this is established, the observer drops the black thread or paper (see Figure 12a) on the line of demarkation between the red and green background, thus dividing the gray ring in half. It is immediately noted that the left half of the ring, in the red ground, appears as a "green-gray". The right half of the ring, in the green ground, appears to take on a "pinkish cast". The
figure 19

gray ring demonstration
gray ring demonstration
induced hue, in both cases, is the complementary hue of the respective background on which each half of the gray ring is set. This is referred to as a phenomenon of color contrast.

1. For the art appreciation student, this demonstration again provides an experiential basis for the verbal context of figure and ground in customary and esthetic levels of perceiving. In the first instance (Figure 12), the customary practice of detaching figure and ground is witnessed. Since the ring is an example of marked closure, the observer has a tendency to structure this in an object-directed attitude, thereby giving attention only to the ring and phenomenally isolates it from the ground in which it lies. Splitting the ring in half (Figure 12a) however, causes a phenomenal restructuring to take place. The "object-unity" or figural characteristic of perception is "destroyed" permitting an effective structuring of figure and ground to take place. In the latter phase, an enhancement of the properties of the ring itself, through a modulated approach, is made apparent. This provides a concrete insight into the role of integration at the esthetic level of perception.

The basic objective of this demonstration is that it bears out some earlier assumptions concerning the point of view of the potential appreciator. Concern for subject matter
or style characteristics (object-directed) in art tend to inhibit integration in perceptual responses. The total field requisite to verification of forming processes at the level of esthetic organization is impeded. In order that esthetic integration may be actualized, maintained and enhanced by the perceiving organism, it becomes necessary to suppress the object-directed attitudes of routine perception.

As the observer of this demonstration may become somewhat skeptical as to the importance of "integration" as critical not only to seeing but also forming in art processes, it is advisable to point out that this concept does not spring from an analysis of art nor the demonstration alone. Rather, it is constituted by the generalized directions of the organism to unify the world of complexities around it. The following quotations, even in their differences, seem to support this.

"(The) basic propensity of living things (is) to function in such a way as to preserve and increase integration."

Mowrer and Kluckholn (6)

"Life is an autonomous dynamic event which takes place between the organism and the environment. Life processes do not merely tend to preserve life but transcend the momentary status quo of the organism, expanding itself continually and imposing
its autonomous determination upon an ever increasing realm of events."

A. Angyal (7)

B. Further underlining the nature of the contrast phenomenon in a figure-ground structure is the Wundt Bridge demonstration. This consists of two squares of black and white paper placed side by side. In the center of each is positioned two smaller squares of gray paper (see Figure 13). The observer notes that the gray square in the black field appears lighter than the gray square on the white ground. This can be referred to as a non-object directed percept.

Now taking a narrow strip of paper, the same gray as the smaller squares, the observer lays it between the gray squares to form a bridge. The previous contrast will be annulled (see Figure 13a). This is again an example of a customary object-directed attitude tending to erase the process of "integration". By "bridging" the two squares with a strip of paper, a closure is initiated which permits the observer to see figure over ground, thus detaching the two. It is obvious from this that the nature of esthetic integration is favored by a ground directed attitude. It may be concluded that in order for the organism
to achieve stability at an esthetic level it becomes necessary for attention to be directed to the total field of events in any stimulus so that an enhancement of the response may result.
The preceding discussion of the Visual Demonstrations has pointed out that the role of learning in perception is concerned with both the native as well as the learned. Certain of the demonstrations (star point) show that some sensory "preferences" are innate (8). Studies of after images, double images, autokinetic phenomena and illusions point out that the organism does contribute to its perceptions. It is concluded from this that natively given is not to be excluded from the role of perception as it relates to the field of art appreciation.

However, the empirical factor in the role of learning in perception is most decisive in the conclusions drawn from the demonstrations. The learned definitely influences individuals in their perceptions of the environment in which they exist. It may be said then that an organism's appreciative attitude is controlled to a large degree by the

"long and continuous process of socialization which characterizes each individual organism and which results in the modifications of structure and consequently of functioning that are attributable to experience. To understand the perceptual characteristics that determine the definitions given by an individual, attention must be given to the contribution made by the physical-cultural media through
which he has passed. Experiences within these areas determine the unique utilization of perceptive equipment and thereby produce reactive tendencies which serve as a basis for the evolution of 'self'."

Blake and Ramsey (9)

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It is to be concluded that a recognition of the native organismal factors inherent in perception cannot be slighted. They demand recognition on the basis of their determining what is to be differentiated as the learned in perception. It becomes finally necessary, in the face of the empirical phenomena offered by experiences with the Demonstrations, to show appreciation of painting, sculpture, architecture, drawing, ceramics, furniture, etc., is largely a matter of reorienting the learned in perception so that esthetic behavior becomes aligned with those native factors inherent within-the-organism.

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The Visual Demonstrations have disclosed the basic difference between monocular and binocular vision as it effects
the role of the organism in relation to esthetic and customary perception.

Customary perception is largely concerned with the positioning of objects in space. This meets the rather definite needs of life. Individuals are dependent upon their ability of localization and realization of not only what an object is, but as well, where it is. Acts of walking, driving, drinking, eating, etc., mutually confirm the necessity of "indepth" coordination. Experiences from motor, tactual, and visual operations re-enforce the abilities of the organism to control the three-dimensional world in which he exists. Binocular space as such, constitutes the space for motor activity. With the act of localization there is a concomitant motor set which carries with it the drive to act in depth. It may be concluded that binocular stereopsis is essential to customary perception, where the goal to be achieved is structured in terms of organismic action referred to as the spatial factor of distance.

Indepth effects normally experienced in binocular vision are dependent on the organismic processes of fusing similar, but disparate, retinal images in the visual (cortical) centers. Retinal disparity is produced through the act of convergence of two eyes on a single point (or object). This localized point in convergence lies at corresponding points on the retina, whereas all other points in the im-
mediate visual field lie at disparate positions. Fusion of these two retinal fields at the cortical level effects the sensation of stereopsis.

Thus, binocular viewing is instrumental to distance summation. Requisite to this is convergence which centers attention upon a single point, thereby eliminating emphasis upon field. Since esthetic perception demands attention on field rather than figure in order for the organization of the visual cues to occur, binocular vision must necessarily be suppressed in favor of monocular viewing. Mach's writing tends to illuminate this when he says:

"We usually see with both eyes, and agreeably to definite needs of life, not colors and forms, but bodies in space. It is not the elements of the complex, but the whole physiologic-optical complex that is of importance. This complex the eye seeks to fill out and supplement, according to the habits acquired (or inherited) in its environment, whenever, as a result of special circumstances, the appearance of the complex is incomplete. This occurs oftenest in monocular vision, but is also possible in the binocular observation of very distant objects where the stereoscopic differences consequent upon the distance of the eyes from each other vanish.

"We generally perceive, not light and shadow, but objects in space. The shading of bodies is scarcely noticed. Differences in brightness produce differences in the sensation of depth, and help to produce the modelling of bodies
Therefore, esthetic form is concerned with monocular cues as in contrast to the binocular space cues. In the same way, esthetic perception is concerned with seeing in terms of integration rather than in terms of the localization of objects in space or the appearance of things in depth. For the full appreciation of works of art, the individual must be able to shift to the level of esthetic perception. He must be prepared to deny the customary activities of a perceptual level which offers only cues as to where an object lies in space.

2. For detailed reports on the trapezoidal window see:
4. Sherman, H. op. cit. pp. 88-93
5. __________ op. cit. p. 92
8. Tinbergen, N. Has demonstrated that certain innate perceptual patterns are evidently inherited. See his paper "Social releases and the experimental method required for their study". Wilson Bull., 1948, pp. 6-51
10. Mach, Ernst The Analysis of Sensation (Chicago, 1914), pp. 208, 209
I shall now review the chief results of our analysis in the preceding chapters:

1. The teaching of art appreciation by individuals who rely on personal biases and unexamined assumptions has failed to change the perceptual behavior of students who study such courses. Therefore, social patterns or individual attitudes towards esthetic form remain largely unaffected.

2. Instrumental to all visual art activity, whether it be in the act of creating or appreciating, are the basic components of perception.

3. Before any headway can be made in this field of study, a specification of the terms art and appreciation must be made.

4. This dissertation entails a significant shift in point of view, of presenting a method for the study of art appreciation. It considers art as basically an artificial form which emerges as a transactional result of an
organismic response to a given set of stimuli.

5. A specification of certain terms and procedures is undertaken which are requisite to the operational and functional nature of this dissertation.
   
   a) A specification of the term transaction in its multiple aspects as resolved by Dewey and Bentley is included.

   b) The term perception is defined.

   c) The terms past experience, purpose and action are specified and the relationship holding between them and perception is shown.

   d) Reasons for the adoption and application of the visual demonstrations to this dissertation are enumerated.

6. To remove many of the ambiguities surrounding the terms art and appreciation, the traditional application of the "is" of identity and its accompanying Aristotelian system must be suppressed.
7. Such removal permits a more functional, actional, operational language to result. By allowing the various orders of abstracting to take place at their distinct and proper organismic levels, many of the false evaluations in modern esthetic criticism are overcome.

a) The "is" of predication makes it difficult for the perceptual processes to be treated properly and evaluations concerning the visual arts remain within primitive and elementalistic limits. Dependence on this system results in severe contradictions between the "creative act" and "observer reaction".

b) The acceptance of the "is" of identity in evaluating the visual arts leads to criticisms which are largely animistic, primitive and false-to-fact, 1953.

8. A criticism of the terms art and appreciation as used by other authors, points to the unsuitability of their use for this dissertation. This analysis shows:

a) The ambiguous and non-definitive character of the use of the terms art and
appreciation which this dissertation excludes.

b) The necessity for a re-examination of the conditions which permit such semantic conclusions to be drawn.

c) The writings of the authors' criticized are inconsistent with present day empirical behavioral data. Therefore, they inhibit the individual in developing any safe position regarding "art appreciation".

9. Art is specified from an electro-colloidal point of view with emphasis placed on the process of abstracting common to all organisms. That which differentiates art from common responses is the unique form projected in a particular material at a non-verbal level. The forming process is organismic in nature, dependent on the organism's ability to handle the cues given in its perceptual processes which are requisite to a unified projection. Thus, this specification of art is concerned with organismically-centered-processes rather than with end products.

10. Appreciation is specified basically from
the point of view just stated. It is concluded that the emphasis for "appreciating" works of art be placed on the processes intrinsic to perceptual behavior. Thus, appreciation is developed as a functional, actional and operational term.

II. To show the direct relationship which holds between the common and unique responses of perceptual behavior and "art appreciation", an explanation and application of a series of visual demonstrations from the Visual Demonstration Center at The Ohio State University is undertaken.

These demonstrations make explicit that an observer's response to an hierarchy of visual cues is determined by the integration of certain past experiences which are appropriate to his specific purpose of the moment.

Thus, it is shown that for an appreciation of works of art to take place, the commonality of perceptual behavior must be reorganized through a shift in purpose in order that new experiences may be had on which to base esthetic judgments.
It is pointed out to the observer of these demonstrations that the way they behave will be generally dependent upon their purposes. The manner of their living, the selection of their house and furnishings, the enjoyment of art per se will be decided by their attitude of perceiving the world around them from a common to a unique level. As Hilgard so aptly points out:

"We coordinate the data from the various senses by manipulating objects in the environment. We can know that our sense data are 'true' and 'accurate' only if they lead to objects that serve our purposes. If the paper fits the envelope, if the car gets through the garage door, if the pen fits the penholder, then all the perceptions involved have been realistic. Our world is in order; whether or not it is a real world may be difficult to answer philosophically, but by pragmatic tests we know that the real and the perceived are alike, for the environment meets our expectations and suits our purposes."

E. R. Hilgard (1)

In conclusion, it seems appropriate to summarize this dissertation with the words of Arthur S. Eddington:

"And yet, in regard to the nature of things, this knowledge is only an empty shell—a form of symbols. It is knowledge of structural form, and not knowledge of content. All
through the physical world runs
that unknown content, which must
surely be the stuff of our con¬
sciousness. Here is a hint of
aspects deep within the world of
physics, and yet unattainable by
the methods of physics. And, more¬
over, we have found that where
science has progressed the farthest,
the mind has but regained from
nature that which the mind has put
into nature.

"We have found a strange foot-print
on the shores of the unknown. We
have devised profound theories, one
after another, to account for its
origin. At last, we have succeeded
in reconstructing the creature that
made the foot-print. And Lo! it is
our own."

A. S. Eddington (2)

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I, Erwin Millard Breithaupt, Jr., was born in Columbus, Ohio, November 12, 1920. I received my secondary education in the public schools of the City of Marion, Ohio. My undergraduate training was obtained at Miami University, Oxford, Ohio, from which I received the degree Bachelor of Fine Arts in 1942. From The Ohio State University, I received the degree Master of Arts in 1947. In 1951 I received a fellowship from the Rockefeller Foundation and spent the year in specialized studies in the School of Fine and Applied Arts.