STRUCTURAL ANALYSIS AS THE BASIS OF TEACHING ART: FOUR STUDENTS ANALYZE THEIR WORK

by - . Rodney Heather

A Thesis

in

The Faculty

of

Fine Arts

Presented in Partial Fulfillment of the Requirement for the degree of Master in Art Education at Concordia University
Montreal, Quebec, Canada

November 1976

• Rodney Heather

1977

ABSTRACT

RODNEY HEATHER

STRUCTURAL ANALYSIS AS THE BASIS OF TEACHING ART: FOUR STUDENTS ANALYZE THEIR WORK

This is a thesis consisting of a video tape with typescript material that documents how an art class was conducted through the use of structural analysis.

Four high school students are presented on video tape. They answer questions concerning their intentions for doing the art work; their use of media, forms, and ideas; and the degree to which they feel fulfillment of their aspirations and accomplishments. Their answers are correlated as a structural analysis in the typescript material accompanying the tape.

The typescript material defines the scope of the study, offers theoretical considerations, includes a structural analysis of the work of the four students, provides observations, conclusions, implications for further study, and three appendices.

The thesis describes how the formulation of an aesthetic theory of structural analysis was applied to a teaching situation in order to enable students to develop and understand the significance of their art work.

ACKNOW LEDGEMENTS

I wish to thank the following people: my advisors, Associate Professor Stan Horner and Dr. Helen Shumway, for their assistance in the development of this thesis; the art class of Beaconsfield High School who produced much of the substance for this investigation; and my video technicians, Eric Cugars and Daniel Lecomte, for their assistance in assembling the video tape.

To my wife Helen, who persevered with the family functions during the demanding moments, I wish to offer my loving appreciation.

TABLE OF CONTENTS

PART	•		PAGE
	ABSTR	ACT	11,1
	ACKNO	WLEDGEMENTS	(fy
I	Еѕтав	LISHMENT OF A STRUCTURE FOR ANALYSIS	· •
	1.1	Origins for Using Analysis	1
	1.2	Structuralism Defined	1
	¥ 1.3	Assumptions and Questions	2
	1.4	Statement of the Hypothesis	3
	1.5	Procedural Guidelines for Using Analysis	3
	1.6	Description of the Population and Setting	4
	1.7	Conditions for Analysis	4
	1.8	Video Taping Schedule	. 5
Ą	1.9	Treatment of the Students and Their Art Work	[′] 5
II	Summa	RY ANALYSIS OF THE STUDENTS' ART WORK	7
	2.1	Elise Chodat	,7
	2.2	Cathy Moffatt	8
	2.3	Dave Canzi,	9
	2.4	John Purdy	11.
Ш	THE P	PROCESS OF STRUCTURAL ANALYSIS CONSIDERED	12:
•	3.1	Consideration of the Hypothesis,	12

3.2	Observations	12
3.3	Conclusions	15
3.4	Implications for Further Research	17
LIST OF RE	FERENCES	18
APPENDICES	•	
1		19
2		20
3		22

PART I

ESTABLISHMENT OF A STRUCTURE FOR ANALYSIS

1.1 ORIGINS FOR USING ANALYSIS

When I began teaching in 1968, I used analytical procedures in the classroom as a means of assisting students to discover their goals in art. My use of analysis in this way came about naturally as it had been integral to my undergraduate training in fine arts. In the years immediately following, I consciously searched for a personal philosophy of teaching. The role that analysis played became more prevalent as I used it as a method of investigation and reflection on the art work in my classes. When the theory of The Structure of Art was published in 1971, I was ripe for its message, and as I became familiar with it I extrapolated the theory to develop a technique for teaching in art education.

1.2 Structuralism Defined

Structuralism has been applied to literature, linguistics, anthropology, art and psychoanalysis. There is no single definition for

Jack Burnham, The Structure of Art (George Braziller, New York, 1971). For an overview of this theory, refer to The Structure of Art, pp. 1-61, or a summary of it by Rodney Heather, "An Investigation Into Jack Burnham's, 'The Structure of Art,' Investigart 3 (Concordia University: Montreal, Spring, 1974), pp. 36-62.

elements which reveal their logical coherence within given objects of analysis." It is used in an attempt to uncover the intermal relationships which give different art works their form and function. Broadly speaking, it is used for defining systems of signs and is hence the basis of semiotics. Since signs have as their function the ability to communicate meaning, structural analysis reveals meaning in the relations behind anything to which it is applied.²

1.3 Assumptions and Questions

The theory of the <u>Structure of Art</u> maintains that all art work integrates the forces of opposition it seeks to express. When a balance is acknowledged between opositions, the art work acquires meaning. It was determined that structural analysis exposed meaning when applied to professional art work. Based on this assumption, the following questions were asked:

- 1. What effect would analytical questions have on students when asked about their intentions for doing art works?
- 2. What would be the effect of conducting analysis of student art works while the students were in the process of making them?
- 3. What would be the effect of analyzing art work after it had been completed?
- 4. Would the use of structural analysis reveal meaning in the art work and establish the value of the art work to the student?

²Jacques Ehrmann, ed., <u>Structuralism</u> (Anchor Books, Doubleday, New York, 1970), p. ix.

^{*}See Appendix 1 for list of oppositions.

5. Would analysis as a basic procedure for conducting an art class achieve an acceptable quality of art work in the field of art education?

1.4 STATEMENT OF THE HYPOTHESIS

Based on the foregoing questions, the principle questions this thesis sought to answer were

- 1) Can the theory of structural analysis be used as the basis for teaching a high school art class?
- P) Do high school students develop and learn about their art work when it is consistently subjected to the questions and formulations of structural analysis?

1.5 PROCEDURAL GUIDELINES FOR USING ANALYSIS

In order to use analysis without causing problems of confusion or insecurity in the students, I established certain guidelines. Each student was responsible for initiating his/her project. As the teacher, I was responsible for providing any kind of assistance required, and for implementing the process of analysis in all matters related to the making of art work. The act of analysis was to be used as a means of reflection for both the student and myself on the art work. It was also understood as the basis for a student to synthesize his/her aesthetic position on a piece of work.

1.6 DESCRIPTION OF THE POPULATION AND SETTING

The inquiry into structural analysis as the basis for teaching art took place at Beaconsfield High School, Beaconsfield, Quebec, during the school year, 1974-1975. I conducted the inquiry with the only available grade eleven art class, a mixture of five boys and sixteen girls of mixed interests and artistic backgrounds.

The class was held in an art room with standard equipment and facilities for a comprehensive high school in Quebec. Each student worked at a desk and had a personal storage drawer; materials were always available from cupboards and shelves around the room. Finished work was always displayed in the room. Under an 'open door' policy, art students not scheduled into other classes were always welcome to continue their work in the room.

1.7 PROCEDURE FOR ANALYSIS

As the video tape shows, students underwent oral analysis of their art work with me at appropriate intervals throughout the year.

Analysis of the art work took place under essentially five conditions:

(1) when an appropriate degree of work had been achieved in the making process (2) when the student wanted it (3) when I deemed it to be necessary (4) in the weekly forty minute critique session in which finished art work previously approved by me underwent class analysis, and (5) at the end of the semester.

1.8 VIDEO TAPING SCHEDULE

January to April, 1975. In May, taping sessions in which individual students analyzed the complete body of their work for that semester also took place. Four tapings of individual students were chosen for the master video tape because of their compactness of the process of analysis in the limited time desired.

1.9 TREATMENT OF THE STUDENTS AND THEIR ART WORK

As is illustrated by the video tape, I asked questions most of the time and seldom gave opinions or references. The process of analysis that the student underwent with his/her art work was confined to establishing the relationships in the art work in regard to form, content, the student's intention for each art work, the making process of each art work, and the degree of personal fulfillment achieved from doing the work.

At the end of the school year, I conducted a structural analysis through the use of the video tapes, and according to Burnham's natural/cultural dichotomy. Analysis of each student's body of art work proceeded systematically. Features of 'expression' and features of 'content' were aligned in columns headed 'natural' and 'cultural' respectively. These features were then aligned in the quaternary.

Appendices 1, 2 and 3, pp. 19-22.

⁵App. 131 x 1, p. 19.

how and in what sense each student's art work developed during the period of investigation, and to see if the work that they accomplished could function as art.

Appendix 2, p. 22.

PART II

SUMMARY ANALYSIS OF THE STUDENT'S ART WORK

(In order of appearance on the video tape).

2.1 ELISE CHODAT

At first glance, Elise's work appears to be influenced heavily from styles known from art history. Upon hearing her define her work, however, she states that her intention is to express her experience in a visual manner with as much intensity as she can recall from the initial experience.

Her technical ability is personally developed, albeit with influences of styles like Impressionism and Non-objective Art, but she has personalized them and uses whatever materials and techniques she thinks can satisfy the experiential requirements of image making.

Her work, therefore, exists on two levels of meaning or the 'Real' and 'Denotative' systems of analysis. 7 It is based within the content of the images and the description of the recalled experiences. This supports the way in which all her images appear different from one another while the process behing the making of them is essentially the same.

⁷See Appendix 3, p. 22.

/ - 7 *-*

Elise's work is interpreted according to the following equation:

thoughts and feelings the making of images with any technique that is suitable for expression of the image images that are made by techniques that she has learned from sensing art styles a series of images that symbolize her intense experiences

There is a strong correspondence between the diagonal parts of the equation. This is because her work visibly suggests a "plane of content" and a "plane of expression." This characterizes what Burnham calls the "real system". However, the fact that it has been necessary for her to verbally elaborate about the true significance of several pieces of her work illustrates that her work exists on more than one level of meaning. In this case, the "plane of content" is not analogous to the "plane of expression"; the "plane of content" is replaced by the "plane of denotation". Hence, the system of denotation is used here to accommodate the expression of Elise's experiences.

the paintings as the recall of experience the description of the experiences expressed in the artwork

the various symbols used to compose the paintings the unconscious use of forms from the history of art

2.2 CATHY MOFFATT

Cathy's work stems from her perception of plants in her home. She has adopted the plant form and created a series of images with each successive image based on the one previously completed. Through the process of arbitrarily transforming the plant form, she drops aspects

of naturalism and evolves the form into an abstraction. Her work is based on interpretation and reduction of formal relations. Analyzed, it appears as:

flowers
images that are simpler than pre-vious ones

the reorganization of the elements of the previous image a series of images with each a variation of the previous one

2.3 DAVE CANZI

Dave started off the year by drawing a composition of a motor-cyclist (not available for video taping), a three-quarter view of a person on a lightweight bike driving over a sand dune. His strong interest in lines that exaggerated the concept of perspective influenced him to shift to making images that had a strong affinity to the principles of Op Art. As he evolved each work thereafter, he attempted to naturalize the Op style, only he found he could not work with the principles of Op Art and, at the same time, develop a content in the image that was of his own invention. His last attempt at this is illustrated by the composition of five planets in the sun's rays.

He finally abandoned the direct association to the Op Art style and switched spontaneously to the forms and symbols of a television commercial. The resulting surrealist image was not a psychologically acceptable image for further development. He, therefore, abandoned this type of image but in his next rendering, kept the notion of representation and combined it with the strong linear qualities of perspective. This marriage, in the form of a car image, brought him back to a stylistic basis that he was working with at the beginning of the year. This last composition is the solution to his search for a

balance in the form and content of his work. By the relationship in the equation, he naturalizes the cultural quality of Op Art or perspective and culturalizes his natural tendency to draw vehicles.

The development of Dave's work is described by the following three equations. The first represents the first and fourth steps in the evolution of his work that satisfy the requirements of the naturalization/culturalization process. In the second and third equations, the content side of the equations (the left side), consists of two cultural entities rather than the necessary balance of a natural in the place of the numerator and a cultural in the place of the denominator. When the Op Art principles are renaturalized in the final car composition, the balance is reestablished and meaning occurs.

(1) dynamic looking vehicles rendering of the compositions in an integral way

treatment of shades
through line drawing
the relation of the
treatment to the form of
the vehicles

(2) design treatment from Op Art use of the perspective characteristic of Op Art



use of perspective lines arranged in an Op Art design

idea from a commercial drawing of the form and content of the Life Saver commercial



the spontaneity of working with the commercial idea a composition of elements from the television commercial

2.4 JOHN PURDY

John is concerned with the socio-technological realities of the twentieth century. Analysis of his work for a balance of qualities shows:

personal imaginings of twentieth century sociotechnological events the depiction of the events as imagined

expression of his thoughts through mythic symbols images that express his belief of the twentieth century

PART III

THE PROCESS OF STRUCTURAL ANALYSIS CONSIDERED -

3.1 CONSIDERATION OF THE HYPOTHESIS

My intention in this thesis was to use structural analysis as a basis for teaching art to high school students. I sought to discover if it was possible to establish a procedure in which I would not instruct on the various notions pertaining to art ideas, but in which I would analyze student art work, and based on the information gained from analysis, suggest to the student that he/she follow the outcome of our interaction. As a teacher, it was necessary for me to ensure that the students seriously manifest through their art work, the various experiences of making art, and that I have a means of evaluating the art work. To these ends, I established a procedure based on structural analysis for the analysis of student art work. I then used this analysis to evaluate the significance of the work accomplished.

3.2 Observations

The students began their art work without hesitation. This can be attributed to several factors: most of the students had chosen

to take the course; the students possessed a personal concept of what art was about, and went about expressing it; the paraphenalia of the art room suggested the art process; and I told the students to assume responsibility for initiating their art work and carrying through with it.

It was my intention to circulate through the class in order to make contact with the students. I allowed the students to begin their work and assisted in some of the minor problems of getting started. Analysis of this stage of making art generally referred to: (1) resolving conflicts of intention (2) determining the type of equipment and materials to use, and (3) considering the design of the theme or composition. Students who sought my advice at this stage were considered to have accomplished a degree of work that produced a conflict that warranted a resolution as soon as possible. Students whom I recognized to be in this primary stage of work and unable to proceed on their own were approached and questioned about what they might do. When a student in this stage formed an intention, he was left on his own to work it out.

The next stage of analysis concerned more advanced problems related to the making process of form and content. Before I began to interact with a student in this stage of work, I judged whether a significant change in some aspect of the artwork had occurred. The judgment was based on my knowledge and experience as a teacher and my feeling that the student would be receptive to analysis of the work at that time. Students whom I bypassed because they showed intense involvement in their work, I returned to at a more appropriate time. The questions that I asked were styled after the work undergoing analysis and were

terminated when the student expressed an understanding of the structure or system on which he was or should be working.

In cases where I judged the making process to proceed at an insufficient pace for the goal desired, I approached the student and engaged in a summary analysis of the work in progress. My main intention was to have the student think through the next stage of the process required to complete the work and eliminate any factor which might cause a delay. In this way, the students concerned did not suffer from a lack of direction.

In order to show the finished work to the art class and allow it to be recognized as the work of particular students, I set up a weekly critique session. At this time, the student responsible for the art work was asked questions regarding its structure. These questions were designed to summarize the meaning of the work and to review for the class the relationships between the levels of ideas that the work represented. It was my hope that at one session or another, some of the students would discover ideas of interest that they might pursue on their own later. Most of all, however, the critique provided me with the opportunity to evaluate the work with the class and to signify to the students that these works were finished.

At the end of each semester, I analyzed each student's work for the development that had occurred. My intention, here, was to build the relationships within the various art works and to establish the factors that revealed meaning. Many of the previous questions and answers were reiterated, but this time in the new context and new relationships were formed.

The structural analysis conducted with each student was video taped. The relationships in the student's work were established, and a summary of the work of four students presented on the thesis video tape is given in the previous section of this material. This summary documents the aesthetic significance and characteristics of style that pertained to each student's art work.

3.3 Conclusions

Analysis, as the basis for teaching art, enabled me to conduct an art class and achieve results which could be considered desirable from a high school art class. The most significant results centered around the relationship of the process of art to structural analysis. Through the procedures mentioned, the students developed a stronger interest in their art and were able to work continuously on their own, forming as they went, new dimensions in their work. As the year evolved, I found members of the class to be confident in their views about their own work. I inferred from the summary structural analysis conducted at the end of the course that the students had acquired a sound knowledge of themselves through their art, and that they could see the development of their own style.

Even though the class as a whole exhibited very positive and satisfying results, structural analysis revealed several weaknesses in the approach. I found that while analysis revealed the nature of the problem at hand, unless the particular student concerned felt motivated, the work developed slower than expected. On occasion, this resulted

in students using a greater amount of time than was necessary to do the work. In order not to have this happen too frequently, I established a time limitation of two weeks for the completion of each art work. Invariably, this was not adhered to, but it made the slower students strive to fulfill the time limit.

While all of the students evolved styles that were recognized as their own, several in the class did so from working within a narrow range of visual ideas. I attribute this to the manner in which the form and content of the artwork were allowed to be intrinsically connected to the expression of it; aesthetic principles were not taught directly to the students but were acquired by the students through the art process.

I found that only students with good comprehension acquired notions that were based in historically formulated aesthetic principles and developed abilities to use them. These students were either academically motivated or had previous art experience. Those who were taking art for the first time in high school did not have the previous experience that might have enabled them to understand and integrate aesthetic principles in order to perform at a greater depth of expression. I feel that these inexperienced students would have benefitted more from a procedure that emphasized problem solving rather than a more ambiguous personal approach.

Structural analysis was used to conduct an art class and reconcile the various concerns of teaching art in both an individual and collective manner. While I feel that I may have achieved stronger results in personal expression than in the area of principles of form,

in no way do I doubt that structural analysis has enabled everyone connected with the study to gain a measure of success in art. In fact, the weaknesses pointed out are not so much those in the use of structural analysis, but in a lack on my part of not integrating the cultural aspect of art strongly enough with the students' natural abilities.

The use of an analytical procedure for teaching art to a high school class has demonstrated that it can form meaningful relationships in the art work. The use of the procedure with highly motivated or experienced students in art, however, suggests that structural analysis could be used with greater and more meaningful results.

3.4 Implications for Further Research

This study raises the following questions, open to speculation and/or controlled research:

- 1. What are the effects of structural analysis on subsequent student work?
- 2. What are the effects of structural analysis of historical works of art on subsequent student work?
- 3. What is the effect of group structural analysis of the process of structural analysis; and on subsequent individual student work?
- 4. What is the effect of structural analysis through video on that structural analysis and on subsequent individual student work?
- 5. What are the effects of the above on the teacher's subsequent procedures as well as the teacher's theoretical framework for structural analysis?

LIST OF REFERENCES

- ARNHESM, Rudolf. Visual Thinking. Berkely: University of California Press, 1969.
- BURNHAM, Jack. The Structure of Art. New York: Braziller, 1971.
- EHRMANN, Jacques, ed. <u>Structuralism</u>. New York: Anchor Books, Doubleday, 1970.
- FELDMAN, Edmund Burke. <u>Becoming Human Through Art</u>. Toronto: Prentice-Hall, 1970.
- FIELD, Dick. Change in Art Education. London: Routledge and Kegan Paul, 1970.
- HEATHER, Rodney. "An Investigation Into Jack Burnham's The Structure of Art! ", <u>Investigart</u>. Montreal: Concordia University, Spring, 1974.
- LEACH, Edmund. Levi-Strauss. London: Fontana/Collins; 1970,
- LEVI-STRAUSS, Claude. <u>Structural Anthropology</u>. New York: Basic Books, 1963.
- <u>The Savage Mind</u>. Chicago: The University of Chicago Press, 1966.
- The Raw and the Cooked: Introduction to a Science of Mythology: 1. New York: Harper Torchbooks, 1964.
- <u>Totemism</u>. Boston: Beacon Press, 1963.
- MORRIS, Charles W. <u>Signs</u>, <u>Language</u>, and <u>Behaviour</u>. Englewood Cliffs, N.J.: Prentice-Hall, 1946.
- ROBERTSON, Seonaid. Rosegarden and Labyrinth. New York: Barnes and Noble, 1963.

APPENDIX 1

Interviewing each student is necessary to structural analysis in order to establish the aesthetic or cultural reasons that each student has for doing the art work, since these are not always revealed from an analytical description of the art work. The following chart is used as a reference when conducting a structural analysis.

Division of Natural and Eultural Terms Applied to Art Analysis⁸

<u>Natural</u>

All 'real' physical entities
Assertion of the artist's
activities

Continuous time

Movement within the work (either suggested by the artist's activities or the subject matter)

Ground ...

Emotion

Mixed series, contrasts, and random units

Environmental () (unperceived whole)

Cultural

The decision as concept
Assertion of the viewer's perception

The instant (no time)

Fixed position with the work

Figure

Meaning

The unit, and self-objectives within a system

Antienvironmental (perceive parts of the whole)

Burnham, p. 49.

, APPENDIX 2

The theory of <u>The Structure of Art</u> has evolved from the work of Rolande Barthes and Ferdinand de Saussure in linguistics, and Claude Levi-Strauss in anthropology. Including Jack Burnham, the four authors have in common the formulation of their findings into dichotomies which enables the work of one author to be equivalent to that of another.

Burnham's theory operates on the basis of signs. Elements that oppose each other, such as 'natural' opposes 'cultural' are placed in a set in order to form a sign, i.e., $\frac{natural}{cultural}$. The numerator of the sign always expresses a natural quality while the denominator expresses a cultural quality. When a relationship is established between two or more signs, each sign assumes the role of representing either natural or cultural attributes of the art object in question. For example, in the equation, $\frac{image}{concept} \longrightarrow \frac{sform}{content}$, the left side represents natural qualities, and the right side represents cultural qualities. This is founded on the notion that natural qualities are 'perceived' and cultural qualities are 'ideational'. 9

For the quaternary equation to function according to Burnham's theory, there must be a strong correspondence between the parts of the equation. In mathematical terms, this is expressed by the following:

⁹Burnham, pp. 20-22. The sign " signifies an analogy between the two parts rather than their equality.

Natura1

Cultural

(Plane of Content)

(Plane of Expression)

content artist's intention



making process logical relation between the parts of the art object

or

content ←----- making process

artist's intention ← - - - logical relation between the parts of the art object

In the above diagram, the respective arrows refer to the following:

means "taking the opposite of the coefficients".

 \leftarrow - - - \rightarrow means "taking the opposite of the joining signs".

. . . . means "taking the product of the two operations."10

The equation functions to reveal the analogical relations between content and expression in a work of art. All successful art integrates the attributes of the two signs equally and fully as possible, so that when the signs are given their correct values, the opposition between them is reconciled. A strong diagonal correspondence between two signs signifies correct values.

Whereas all signs are divided into cultural and natural terms, cultural terms culturalize their natural counterparts and natural terms naturalize the cultural. Where either does not clearly occur, the art may be culturalized or naturalized on the ideological plane, or its structure may remain ambiguous, or it may not function as art at all.¹¹

¹⁰ Burnham, pp. 56-59.

^{11 &}lt;u>Ibid.</u>, pp. 48-49.

APPENDIX 3

The information given in the equations comes from one or more sources, and forms one or more of the three possible systems of meaning. These three systems are: (1) the Real System (2) the System of Articulating or Denotation, and (3) the System of Rhetoric or Connotation. 12 Structural analysis is carried out by analyzing information gained from either the art work, the student's or teacher's elaboration of it, and/or an aesthetic ideology on which the art work is based. This information is integrated into one of the three systems.

Together they can be used to explain almost all of the possible structural relationships behind art styles. For instance, some of the Surrealistic, Dadaistic, hermetic and religious art, and much of the figurative avant garde art of the nineteenth and twentieth centuries is defined by the Real System. The Denotative System is used to define the meaning in all non-objective art, including Suprematism, Constructivism, de Stijl, Abstract Expressionism, Color-Field Painting, Object Art, Process Art, and sometimes Surrealism and Dadaism. It is also used to define much of Conceptual and Ecological Art. When no expression takes place as in the ready made, the Connotative System is used in order to establish meaingful relationships. The following illustrate the relationships in the three systems of structural analysis.

¹²Burnham, pp. 52-61.

1. The Real System

. . 🦫

ceived

Content Expression

<u>content</u> artist's intention making process logical relation between elements in the art work

In the above equation, content or the 'natural' is analogous to expression or the 'cultural'.

The System of Articulation.

Denotation = Expression

*description of the artwork signifying the experience the 'content' or metalanguage description of the art work through the experience per-

making process
the neutralizing function
of the art work's content
or formal relations on
the content of previous
art

In the System of Articulation, there is a plane of expression but no plane of content that reflects known subject matter. However, the art work derives its meaning from verbal support of the artist or critic, and this description replaces the plane of content.

3. The System of Rhetoric.

Content = Connotation

content artist's intention

the most authoritative writing about the art work as a categorical description the aesthetic ideology behind the art work (the equilibrium of the natural/cultural dichotomy as expressed in an object)

In the System of Rhetoric, there is a plane of content but no plane of expression. Hence, the plane of expression has been replaced by another called the plane of connotation. This plane represents the ritualistic or contextual description that is formed to provide recognition to the object perceived.