

## **ABSTRACT**

### **A STUDY OF THE PERCEPTION OF ART THROUGH GENERATING FORMS WITH SPECIAL APPLI- CATION TO THE TEACHING OF MUSIC**

**By**

**Howard L. Qvarnstrom**

The cause of music education may be advanced when each music educator exhibits two fundamental areas of knowledge--knowledge of aesthetic creativity and knowledge of the perceptual act.

Contemporary trends in music education seem to adhere to the common position which regards music education as ultimately aesthetic education. Therefore, to discern the principles in art through which balance, fulfillment, complementarity, unity in variety, and other descriptive terms become meaningful is the necessary task confronting each teacher.

In the final analysis, all musical experience is aural experience. The hope of the composer is that his composition will be heard by an audience. The responsibility of the performer is to give in actuality those sounds heard in the mind of the composer. What is the obligation of the listener? The aesthetic moment may

only be enhanced when each perceiver consciously seeks out the integral relationships among the elements in the art object. That which is cohesively ordered in its conception must similarly be responded to through a process of directed sensory selection.

It is the initial purpose of this study to examine the work of art (music) through the notion of generated, created, form wholes. Also, the response of any perceiver to the work of art in terms of perceptual wholes will be examined. The created and the experienced art form is discussed from the perspective of Gestalt psychology.

Created works of art sustain the principle of pattern. A pattern may be defined as an order among elements whose connection to each other are controlled by an understood principle. In Chapter II, the principle of affinity is evidenced through closure, grouping, proximity, and others. In terms of human sensory experience, Gestalt psychology suggests that the organism creates visual or aural wholes. From this premise, the Gestalt phenomenon is applied specifically to the evolution of musical forms.

It is the culminating thrust of this study to apply Gestalt theory to the task of music education. The application to practical functions is accomplished

by establishing a common basis of experience for the three areas of musical activity--creating, performing, and listening.

The principle of Guilford's psychological model, which describes the equal but separate functions of the intellect, serves as a foundation for the development of a Dynamic instructional model for the three areas of musical experience.

Finally, a representative teaching sequence is presented for each of the following levels:

- a. Elementary--Creative
- b. Junior High--Performing
- c. High School--Listening

In conclusion, music education as aesthetic education is adduced as the requirement of every music educator to recognize the active relationship of order among the elements in aesthetic objects. Of no less importance is the awareness that each activity in any music learning situation be focused towards the continual refinement of the instinctive sensory perceptual act--the aural discernment of created, performed, and listened to musical wholes.

A STUDY OF THE PERCEPTION OF ART THROUGH  
GENERATING FORMS WITH SPECIAL APPLI-  
CATION TO THE TEACHING OF MUSIC

By

Howard L. <sup>Luther</sup>Qvarnstrom

A DISSERTATION

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Music

1975



693938

## DEDICATION

To Him who provides grace, understanding,  
and patience--and to my loving wife,  
Coni, whose cheer and support  
were unfailing.

## **ACKNOWLEDGMENTS**

**This author is most grateful for the assistance and guidance given by the members of the committee:**

**Dr. Robert G. Sidnell, Dr. John F. A. Taylor, Dr. Gomer Ll. Jones, and Dr. James Niblock.**

## TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION . . . . .	1
Statement of the Problem . . . . .	1
Limitations of the Study . . . . .	8
Justification for the Study . . . . .	9
Survey of Extant Literature . . . . .	11
Hypothesis . . . . .	21
II. GENERATING FORM--THE DYNAMIC ILLUSION. . . . .	22
Dynamic Sensory Organization . . . . .	23
The Apprehension of Patterns . . . . .	27
Musical Time--A Dynamic Illusion. . . . .	41
III. GENERATING FORM AND THE MUSICAL PERSPECTIVE. . . . .	54
The Grouping of Pulses or Beats, by Means of More or Less Regularly Recurring Accents, into Measures or Bars, Pro- ducing What Is Known as TIME . . . . .	69
The Grouping of Sounds Based Upon Some Such Time-Scheme Into Musical Figures, Phrases and Sentences, with Definite Relationships One to Another, Resulting in RHYTHMIC SHAPE . . . . .	72
The Grouping of Such Figures, Phrases and Sentences Into Larger Paragraphs, Described as SUBJECTS, EPISODES, Etc., Each With Its Special Connection With and Relative to the Others . . . . .	78
The Grouping of These Larger Paragraphs Into Complete MOVEMENTS . . . . .	82

Chapter	Page
IV. LISTENING--THE BASIS OF ALL MUSICAL ACTIVITY . . . . .	89
The Morphological Model . . . . .	94
Creating . . . . .	97
Performing . . . . .	105
Listening. . . . .	115
V. THE PRACTICAL APPLICATION . . . . .	127
Elementary--Creative . . . . .	127
Junior High--Performing . . . . .	139
High School--Listening . . . . .	148
Conclusion . . . . .	156
SELECTED BIBLIOGRAPHY. . . . .	158

## LIST OF FIGURES

Figure		Page
<u>Chapter II</u>		
1.	Visual Manifold: An Ideal Circle . . . . .	26
2.	Visual Manifold: An Ideal Straight Line, An Ideal Isosceles Triangle . . . . .	26
3.	Proximity: A Principle of Formal Affinity . . . . .	29
4.	Proximity: Negated. . . . .	30
5.	Vertical Similar Preponderating Over Horizontal Dissimilar. . . . .	32
6.	Dark Circles Preponderating Over White Circles . . . . .	32
7.	Grouping: A Matter of Chance . . . . .	34
8.	Grouping: Segregation from the Totality. . . . .	34
9.	Grouping: Segregation from the Totality. . . . .	34
10.	Ravel, <u>Bolero</u> . . . . .	36
11.	Lozenge . . . . .	36
12.	Lozenge: Predominance Over the Circle . . . . .	37
13.	Closure . . . . .	38
14.	Polka-dot Pattern . . . . .	39
15.	Accents . . . . .	42
16.	Scale: Ascending and Descending . . . . .	46
17.	Haydn, <u>"Surprise" Symphony</u> , 2nd Movement . . . . .	46

Figure	Page
18. Rhythmic Pattern: The Illusion of Experienced Movement . . . . .	48
19. Beethoven, Symphony No. 5, 1st Movement . .	52

### Chapter III

1. Wagner, the "Tristan" Chord . . . . .	57
2. Bach, <u>Art of the Fugue</u> . . . . .	58
3. Brahms, <u>Symphony No. 3</u> , 1st Movement . . .	60
4. Brahms, <u>Symphony No. 3</u> , 1st Movement . . .	60
5. Brahms, <u>Symphony No. 3</u> , 1st Movement . . .	61
6. Brahms, <u>Symphony No. 3</u> , 2nd Movement . . .	61
7. Brahms, <u>Symphony No. 3</u> , 3rd Movement . . .	62
8. (a) Equal Perception of Beat; (b) Grouping of Two Beats. . . . .	70
9. Franck, <u>Symphony in D Minor</u> . . . . .	71
10. Bach, <u>Passacaglia in C Minor</u> . . . . .	71
11. Harris, <u>Symphony No. 3</u> . . . . .	72
12. Bartók, <u>Divertimento for Strings</u> , 2nd Movement . . . . .	73
13. Traditional, "Star Spangled Banner" . . .	74
14. Broiles, Study No. 14, "Organ Trumpet". . .	76
15. Brahms, <u>Symphony No. 2</u> , 3rd Movement, (a) Principal Theme--Part I; (b) Trio No. 1 Principal Theme--Part I . . . . .	76
16. Haydn, <u>Symphony No. 104</u> , 3rd Movement . . .	77
17. Bach, "Ricercar" from the <u>Musical Offering</u> .	79
18. Mozart, " <u>Jupiter</u> " Symphony. . . . .	79
19. Mozart, Piano "Sonata" K. 332. . . . .	80
20. Bach, "Sarabande" from <u>English Suite No. 1</u> .	80

Figure	Page
21. Faure, "Agnus Dei" from the <u>Requiem</u> . . . .	81
22. Hymn, "Pange lingua" . . . . .	81
23. Josquin, "Kyrie" from the <u>Missa Pange lingua</u> .	83
24. Josquin, "Credo" from the <u>Missa Pange lingua</u> .	84
25. Josquin, "Agnus Dei" from the <u>Missa Pange lingua</u> . . . . .	85
26. Bach, "Sicut locutus est" from the <u>Magnificat</u> . . . . .	87

#### Chapter IV

1. Guilford: The Morphological Model. . . . .	98
2. The Dynamic Listening Model . . . . .	99
3. Extension: The Development of Intonation . .	109

#### Chapter V

1. Mexican Folk Song, <u>Don Gato</u> . . . . .	130
2. Initiative: Pattern for Wood Block . . . . .	132
3. Initiative: Pattern for Castanets. . . . .	132
4. Association: Original Pattern . . . . .	134
5. Association: Contrast through Diminution . .	134
6. Accompaniment: Original Pattern, for <u>Don Gato</u> . . . . .	135
7. Accompaniment: Diminution Pattern, for <u>Don Gato</u> . . . . .	135
8. Bach, <u>Chorale Melody No. 19.</u> . . . .	140
9. Bartók, <u>Increasing-Diminishing.</u> . . . .	150
10. <u>Increasing-Diminishing:</u> An Arch Form. . . .	153

## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

In the quest for a logical analysis of the aesthetic experience, much attention has been given to the perception of art forms. Traditionally, attempts to describe or explain the value of art and beauty in terms of a specific aesthetic quality have proven to be too confined, either because of continual changes in historical style or due to the vague idea of what is intended by the word "aesthetics."

The generic term "aesthetics" has rather broad ramifications. Aesthetics may deal with the significance of art and the creative process, art as beauty, art as a means of emotional or psychological fulfillment and expression, or perhaps art as realized experience. Or, second, aesthetic examination may be focused upon the body or the work of art itself. In this aspect the work of art may be discussed as an aesthetic order of sensuous elements, in essence a coherent relation of parts with perceivable form, and as easily argued in architecture,



a useful function. A third concern of the study of aesthetics may be centered about artistic appreciation and criticism. In this instance the relation and perception of the work of art to and by the beholder is of paramount importance.

The study of aesthetics, as isolated in terms of illusion, beauty, technique, form, psychical distance, abstraction, or expression, presents a confusing and diverse spectrum of thought. Unnecessary argument may be avoided if, as Morris Weitz has suggested, " . . . esthetic labels are not pasted in one piece on the whole body of art, but rather are applied separately to the various constituents of the creative process, the esthetic artifact, and the esthetic experience."<sup>1</sup> Like religion and science, art may not necessarily be compacted or stripped down to one simple notion or single definition. Rather, the analysis of the ramifications of the study of aesthetics may make apparent an underlying consensus among critics not readily seen at a surface glance.

Art itself is the great reconciler of opposite poles which, in our practical life, ordinarily exclude each other. More than any other form of human experience, it combines such contrasting moments as variety and unity, familiarity and strangeness, repose and stimulation, order and spontaneity, the Apolline and the Dionysian moods . . . as Freud and Jung point out, art involves the harmonious coworking of the conscious and the subconscious . . . or, again as Schiller indicates,

---

<sup>1</sup>Morris Weitz, Philosophy of the Arts (Cambridge: Harvard University Press, 1950), p. 2.

art is the reconciliation of law and impulse; the form, the pattern, the "lawfulness" of the experience becomes the expression, not the repression, of impulse . . . as Lipps and Lee observe, the images of esthetic experience are seemingly objective and yet are colored by the emotion and sensibility of the beholder: the duality of subject and object disappears . . . or, as Aristotle and Maritain understand, the universal essence merges into the specific image; and the more seamless is the unity, the more perfect is the aesthetic moment.<sup>2</sup>

It has been stated that one profitable avenue for aesthetic discussion would be the investigation of the relation between the art object and the excitation of the sensory organs of the beholder. Not only has philosophic inquiry endeavored to develop a discursive basis for the explanation of the individual's perceptual experience, but also psychologists have exhibited great interest in devising evaluative tools that will both test and measure perception.

Psychology as a humanistic science is beginning to emerge from an uneasy rapprochement between the philosophical and poetical interpretations of the mind on the one hand and the experimental investigations of muscle, nerve, and gland on the other. And barely are we getting used to what such a science of the mind might be like, when we are faced with attempts to deal scientifically with the most delicate, the most intangible, and the most human among the human manifestations. We attempt a psychology of art.<sup>3</sup>

---

<sup>2</sup>Melvin Rader, A Modern Book of Esthetics (New York: Holt, Rinehart and Winston, 1966), p. xxxii.

<sup>3</sup>Rudolph Arnheim, Toward a Psychology of Art (London: Faber and Faber, 1966), pp. 1-2.

In essence then, one of the most significant aspects of aesthetic examination finds its focus in the analysis and description of human behavior and reaction to perceived art forms.

Man's attempt to understand the mystery of his daily experience and habit has been made evident since the beginning of recorded history and surely before that. As beings which rely upon the sensitivity of our sense organs to collect and receive stimuli from the world around us, individuals constantly find themselves adjusting and ordering these collected data so that a level of equilibrium may be achieved. Rather than being a catch-all for every diverse and unrelated stimulus impinging upon it, the human organism tends to be selective in its recognition and reception of assimilated input. This process of selecting and interpreting received input is called perception.

Behavior cannot occur in an organized way unless the individual can select . . . those stimuli that have a relevance for his needs. Adjusting cannot proceed unless the individual can also organize, can also bring meaning to the barrage of naked physical stimuli striking his receptors. Because we are sensitive to only a limited range of the physical energies in the world, we are by nature selective in our orientation to nature . . . but there is also selection from among those physical stimuli that the organism can register or is registering at any given moment. . . . The organism shuts

itself off from some stimuli and opens wide its input channels to others. Selectivity is one aspect of the organism's interpretation of the world.<sup>4</sup>

Although the preceding statement reflects the thinking of the psychologist, philosophers have been keenly interested in developing an orderly rationale for the explanation of how the human organism perceives the world about it. For example, the quest for the nature of knowledge has involved the dichotomy between the existence of a real object world outside the mind, and the existence of a world, in part at least, as a mental construct. As a part of a rather broad philosophical perspective, the problem of appearance versus reality, or of subjectivism versus objectivism, may be coupled with a search for the sources of knowledge as a basis for the consideration of fundamental epistemology. More important for the presentation of the problem at hand, the issue of the nature of knowledge is fundamental to the discussion and examination of other areas of philosophic inquiry, namely logic, metaphysics, and aesthetics.

Aesthetics may be defined as the selective apprehension or perception of the beautiful. Art is brought to fruition as a completed effort of artistic activity. Aesthetic apprehension or perception begins at the moment that art is fulfilled in its period of creative gestation.

---

<sup>4</sup>Fillmore Sanford, Psychology, A Scientific Study of Man (Belmont, Calif.: Wadsworth, 1961), p. 279.

If a man relinquishes the common way of looking at things, which is always ultimately concerned with their relations to desires and purposes; if he then ceases to consider the where, the when, the why, and the whither of things, and looks simply and solely at the what; if, further he does not allow himself to think of them conceptually (e.g., as things to be recognized, distinguished, classified, etc.), but instead of all this, gives the whole power of his mind to perception, sinks himself entirely in this, and so yields himself to the object present that he loses himself in this object, . . . then his state is that of aesthetic contemplation, and the object of it is an aesthetic object.<sup>5</sup>

Because works of art are conceived by the creator and are addressed to an audience, the natural phenomenon of the perceptual experience poses many provocative questions both to the research investigator and the teacher.

Aesthetic perception (attitude) . . . is the attitude we take which determines how we perceive the world. An attitude is a way of directing and controlling our perception. We never see or hear everything in our environment indiscriminately. Rather, we "pay attention" to some things, whereas we apprehend others only dimly or hardly at all. Thus attention is selective . . . once we recognize this, we realize the inadequacy of the old notion that human beings are simply passive receptors for any and all external stimuli.<sup>6</sup>

Therefore, to grasp the principle which governs that act of selection is to have understood one of the profound characters of our experience and in particular of our musical experience.

---

<sup>5</sup>Arthur Schopenhauer, The World as Will and Idea, from the German, by R. B. Haldane and J. Kemp (New York: Scribner's, 1948-1950), p. 231.

<sup>6</sup>Jerome Stolnitz, Aesthetics and Philosophy of Art Criticism (Massachusetts: Riverside Press, 1960), p. 32.

In his discussion of the import of perceived wholeness as the requisite for comprehending things by what our senses tell us about them, Rudolph Arnheim writes:

Concept is split from percept, and thought moves among abstractions. Our eyes are being reduced to instruments by which to measure and identify--hence a dearth of ideas that can be expressed in images and an incapacity to discover meaning in what we see. . . . From its beginnings and throughout its development during the last half century, gestalt psychology has shown a kinship to art. . . . The realization that a whole cannot be attained by adding up isolated parts was not new to the artist. For many centuries scientists had been able to say valuable things about reality without going beyond the relatively simple level of reasoning that excludes the complexities of organization and interaction. But at no time could a work of art have been made or understood by a mind unable to conceive the integrated structure of the whole.<sup>7</sup>

Arnheim's statement identifies the significant relationship of Gestalt psychology to art. The importance of Gestalt Psychology, as propounded by Wertheimer, is in the approach to the study of behavior or consciousness in terms of wholes rather than parts. As an objection to Watson's desire to study behavior in terms of stimuli and responses, (parts) Wertheimer challenged the traditional psychology of perception as an aggregation of parts leading to the whole. Wertheimer asserted that our thoughts and experiences are whole meaningful

---

<sup>7</sup> Rudolph Arnheim, Art and Visual Perception a Psychology of the Creative Eye (Los Angeles, Calif.: University of California Press, 1969), pp. v, vi, vii.

perceptions. To this study of dynamic or perceptual wholes, the German word Gestalt (form, pattern, or configuration) was applied.

Rudolph Arnheim's declaration " . . . at no time could a work of art have been made or understood by a mind unable to conceive the integrated structure of the whole . . . ," establishes the foundation of this study. Man's sensory experience occurs in terms of the Gestalt theory of perceptual wholes. Similarly, works of art are conceived and come to fruition as created Gestalten.

#### Limitations of the Study

At this juncture, it would be useful to delimit the specific emphasis of this study in regard to musical perception. In order to maintain a clear focus, the study will not attempt to discuss the significance of art historically, socially, or in its function as a moral agent. Also, the analysis will avoid use of the terms, "the artistic," "the aesthetic," or "the beautiful." Although the former areas of scholarly interest, and others not mentioned, are indeed important and in the end necessary in the elucidation of the aesthetic domain, this study will simply assume the concrete phenomenon of musical experience and the intrinsic value thereof. From the assumption of the concrete phenomenon of musical experience, an attempt will be made to explore

the meaning of the perception of what shall be called "generating forms." To restrict our consideration to the generating Gestalten in music (and in art generally) is not to deny that these forms are sometimes committed to ulterior uses, as in the playing of an anthem or the celebrating of a rite. These uses of music and of art are demonstrable and important, but are for this occasion removed from the task at hand.

### Justification for the Study

Successful teaching strategy is the manifestation of theory put into action. Each educational process reflects a basic set of beliefs and convictions, regarding the solution of the teacher's problems as he endeavors to establish appropriate goals and objectives for his students. Teaching strategies evolve from a philosophical foundation because philosophy is necessary to developing a systematic body of principles and assumptions supporting a specific domain of experience (e.g. science, education, art, music, history, law, religion, mathematics, etc.).

If we consider music education as aesthetic education, the essence of any aspect of musical experience, if pursued far enough, will eventually expose problems of a philosophic nature. Abraham A. Schwadron writes:



Even a  cursory  examination of the various contemporary philosophies of music will point up the consistency in regarding music as aesthetic expression. If the nature and meaning of music are inherently bound in aesthetic elements, should not the music educator formulate his philosophy and comprehensive ideas concerning values in music education from such a spring-board? Indeed, is it not necessary for the music educator to probe deeply into the theoretical components of aesthetics?<sup>8</sup>

Music education has always been a notable part of general education. As such, one may assume that music is a significant aspect of all men's experience. Harry Broudy suggests:

Formal education tries to guide the behavior of learners into specific routes of value realization. . . . Principles of choice become standards. If there are no defensible objective standards of musical quality, then music education is an indefensible imposition of the teacher's taste upon the pupil, and such terms as "good," "better," and "best" are deceptions, for they sound as if they were describing the music whereas they are only describing our reactions to the music. . . . These are some of the topics and issues that belong in a philosophy of music education. Any serious attempt to defend one set of basic concepts in this area as against another will lead into general philosophy. This is so because to describe the musical experience is, in part at least, a problem in aesthetics; to define the role of musical experience in life as a whole is a problem of ethics and value theory; to test the relation of music to cosmic and human nature is a problem of metaphysics, and the entire discussion should be respectful of the rules of logic.<sup>9</sup>

---

<sup>8</sup> Abraham A. Schwadron, "Aesthetic Values and Music Education," in Perspectives in Music Education Source Book, III (Washington, D.C.: Music Educators National Conference, 1966), p. 186.

<sup>9</sup> Harry S. Broudy, "A Realistic Philosophy of Music Education," Basic Concepts in Music Education, 57th Yearbook of the NSSE (Chicago: University of Chicago Press, 1958), pp. 62-63.

All educators share one common responsibility. Each must be capable of formulating teaching methodologies which carefully order the activities and experiences in their classrooms. For the music educator, any serious discussion of inherent musical values, of musical style and taste, or the justification of music as a viable educational function in the public schools, will inevitably lead to philosophical inquiry and examination.

From the premise that man perceives behaviorally and aesthetically in terms of organized wholes, will come one approach which hopefully will be a useful basis for the teaching of music. Abraham A. Schwadron writes regarding the process of music education:

The goal in all this is the sensitive development of cognitive and emotive perception so that the student can habitually hear and understand musical relations that previously he could not. In this manner, aesthetic habits become operational for active continuing experience. . . . We seek a manner of teaching music that is consistent with the nature of the art. Aesthetic education suggests a valid approach to music education that makes peace with the musical arts.<sup>10</sup>

### Survey of Extant Literature

The significant factor for research potential was generated from the increased awareness that music educators have exhibited in regarding music education

---

<sup>10</sup>Abraham A. Schwadron, "Some Thoughts on Aesthetic Education," Music Educators Journal 56 (October 1969): 88.

as ultimately aesthetic education. The following statements reflect the growing body of available commentary addressed to this issue.

The great fundamental question facing the profession is this: What kind of musical society is desirable? The answer lies in the breakdown of socio-musical limitations by means of a high-powered, effective scheme of education. Grounded on meaningful philosophical and aesthetic principles, concerned with ends as well as means, contemporary music education can occupy a proper and most deserving station.<sup>11</sup>

Donald Arnstine in an article entitled, "The Aesthetic as a Content for General Education," has suggested that

. . . Aesthetic refers to a level of experience which often is created, not only by works of art, but by any kind of object. . . . Aesthetic awareness may best be achieved through repeated exposure to popular and accepted works of art because of their intrinsic interest. If cognitive and affective inquiry is to be stimulated regarding works of art, then an understanding of and an opportunity for some aesthetic experience is necessary.<sup>12</sup>

James Mursell alludes to the perceived whole of musical sound as an aesthetic occasion when he writes:

. . . the whole art of music depends upon the existence in human nature of a mental function to which has been attached the convenient term "musicality." Musicality may be defined as responsiveness to the tonal and rhythmic patterns which are the substance of the art of music . . . musicality itself appears to be universal

---

<sup>11</sup>Abraham A. Schwadron, "Aesthetic Values and Music Education," in Perspectives in Music Education Source Book, III (Washington, D.C.: Music Educators National Conference, 1966), p. 194.

<sup>12</sup>Donald Arnstine, "The Aesthetic as a Context for General Education," Studies in Art Ed 8 (Autumn 1966): 13-22.

and to be one of the fundamental ways in which man responds to the dynamics of his environment. . . . This, then, is the function with which we have to deal in all the teaching of music. From the developmental point of view, the purpose of all music teaching must be to bring about the evolution of musical responsiveness or musicality.<sup>13</sup>

In an article entitled, "The Nature of Aesthetic Education," Gerard L. Knieter writes:

Programs of music education become aesthetic education programs when they focus upon the artistic content of music. . . .

Programs of music education conceived as aesthetic education stress the sensitive, intelligent, and creative development of musicality through the fundamental avenues of expression: creativity, performance, and response. This means developing a program for all of the students.<sup>14</sup>

In 1909, Charles Farnsworth was alluding to music education as aesthetic education when he wrote:

We must not forget, however, that the act of appreciation itself is one that feels the beauty of all the parts as related to a complete whole; it is a synthetic and not an analytic act. Whenever we study a piece of music we are only preparing ourselves for appreciation.<sup>15</sup>

Bennett Reimer concludes that the purpose of aesthetic education is in fact the awakening of aesthetic

<sup>13</sup>James Mursell, "Growth Process in Music Education," Basic Concepts in Music Education, 57th Yearbook of the NSSE (Chicago: University of Chicago Press, 1958), p. 146.

<sup>14</sup>Gerard L. Knieter, "The Nature of Aesthetic Education," in Toward An Aesthetic Education (Washington, D.C.: Music Educators National Conference, 1970), pp. 18-19.

<sup>15</sup>Charles H. Farnsworth, Education Through Music (New York: American Book Co., 1909), p. 40.

sensitivity depended upon the ability to apprehend systems of interrelationships.

Until the entire structure of aesthetic education is re-examined and overhauled, beginning with the preparation of junior high school teachers of art and music, the public schools will continue to do far less than they can realistically be expected to do in the important task of developing a citizenry with a high level of respect for, appreciation of, and sensitivity to the arts . . . the aesthetic experience consists of the feelingful apprehension of the artistic content of the artwork, this content being the interactions and interrelationships among the aesthetic events as they were created by the artist.<sup>16</sup>

Will Earhart writes:

In the first place it is important that we recognize the complete correspondence, the unitary nature, of form and aesthetic effect. It may seem strange that anyone could possibly overlook so obvious a fact; but students of music are, on the one hand so accustomed to regard musical form and forms from a wholly objective standpoint, as matters of technical study, and so on the other so often take their own aesthetic responses for granted, as some vague natural result of being musical, that just as they overlook the effect of tone, so they fail to discern the effects of form; and they thus continue aesthetically sensitive while they remain aesthetically unseeing.<sup>17</sup>

In a study designed to discover whether musically unsophisticated seventh grade pupils could be taught to keep track of the unfolding forms of unfamiliar minuets, movements, and the extent to which successful tracking

---

<sup>16</sup> Bennett Reimer, "The Development of Aesthetic Sensitivity," Music Educators' Journal 51 (January 1965): 34-36.

<sup>17</sup> Will Earhart, Meaning and Teaching of Music (New York: Witmark Educational Publications, 1935), p. 68.

is related to the observation of briefer musical elements, Alan Smith suggests several fundamentals and conclusions.

- a. Musicians, music educators, and aestheticians agree that the perception of formal relationships is cognitively and aesthetically of a higher order than the perception of musical elements.
- b. Musically unsophisticated seventh grade students can be taught to keep track of the unfolding forms of minuets and sonata-allegro movements.
- c. The teaching of tracking can be accomplished directly with only a minimal initiation to the intricacies of music theory.
- d. The listener experiences--to use the terminology of Gestalt-field learning theory--a succession of sonorous life spaces, each with its unique combination of present sounds, memories of sounds, and expectations of sounds. . . . Through perception, memory, and expectation the entire work is encompassed in the mind of the efficient listener. . . . Therefore, the goal of form-oriented listening should not be a question of experiencing a work as a static whole but rather of experiencing its becoming whole.<sup>18</sup>

Abraham Schwadron writes:

If children were guided at various levels of maturity to become qualitatively aware of time and tone, to create music problems and solutions, and thus to understand the nature of communication through music in their own attempts, in the works of masters, and in world music, their perception of music and their responses to it would be enhanced. In education of this nature, children would not only learn to feel, but also come to understand aesthetically why and what it is they feel and value.<sup>19</sup>

---

<sup>18</sup> Alan Smith, "Feasibility of Tracking Musical Form as a Cognitive Listening Object," Journal of Research in Music Education 2 (Fall 1973): 200-13.

<sup>19</sup> Abraham A. Schwadron, "Are We Ready for Aesthetic Education?" Music Educators' Journal 60 (October 1973): 89.

Bennett Reimer suggests that there are seven aesthetic behavior categories which may be used to formulate a foundation for aesthetic education in the arts.

The seven behaviors are perceiving, reacting, producing, conceptualizing, analyzing, evaluating, and valuing. Two of these behaviors--perceiving and reacting--can be called "ends behaviors." They are the ends toward which all of aesthetic education moves. Four of the behaviors--producing, conceptualizing, analyzing, and evaluating--are called "means behaviors." They are the major means of movement toward heightened aesthetic perceiving and reacting. The final behavior--valuing--is an "outcome behavior." It occurs as an outcome of effective involvement in the other six. The notion of ends, means, and outcomes is crucial in understanding these behaviors and in using them appropriately to help music education become aesthetic education.<sup>20</sup>

The introduction to the Silver Burdett Music program text states:

The Silver Burdett Music program is aesthetic education in action. Its major goal is to increase the sensitivity of all children to the power of music as an art--to develop their abilities to perceive the art of music keenly and respond to it deeply. . . .

Musical aesthetic experience, the primary outcome of this program, consists of the following:

1. Perceiving the expressive qualities in a piece of music.
2. Responding to those qualities in a feelingful way. . . .

Each lesson includes both perceptual problems to be grappled with and musical experiences to be enjoyed. One reinforces the other. As perception deepens, enjoyment deepens. As children are moved by the power of music, their ability and desire

---

<sup>20</sup>Bennett Reimer, "Aesthetic Behaviors in Music," in Toward an Aesthetic Education (Washington, D.C.: Music Educators National Conference, 1970), pp. 76-77.

to perceive increase. Thinking and feeling become inseparable as both are exercised in the experience of music.<sup>21</sup>

The Silver Burdett author's suggestion that " . . . thinking and feeling become inseparable as both are exercised in the experience of music . . . " recognizes the increasing interest that music educators have given to the examination of the cognitive and the affective domain as applied to developing and clarifying aesthetic educational objectives. Richard Colwell declares:

The fact that cognition is a legitimate part of the affective response to music helps simplify the problems of measuring affective response. . . . The responsibility of the school program is then to teach the substance upon which understanding is based and to expect students to form their own values and to experience the aesthetic response as a result of what they know and what they hear in the music.<sup>22</sup>

Krathwohl, Bloom, and Masia propose an affective continuum which orders and connects varying kinds of affective behavior.

. . . it is clear that we must first provide a level at which the stimulus is attended to so it can enter the organism's life and be perceived. This would cover the less complex aspects of interest and appreciation objectives.

---

<sup>21</sup>Elizabeth Crook, Bennett Reimer, and David S. Walker, Silver Burdett Music (Morristown, N.J.: Silver Burdett General Learning Corporation, 1974), pp. vi-vii.

<sup>22</sup>Richard Colwell, The Evaluation of Music Teaching and Learning (Contemporary Perspectives in Music Education Series, Prentice-Hall, 1970), p. 129.



Similarly, we must provide a range of levels describing the extent to which the individual interacts with the phenomenon and the basis on which he does it: does he do it only when the situation presses on him so that some behavior is evoked, or does he go out of his way to display this interaction? This would provide for some of the behaviors implied in the objectives calling for development of interests and appreciation and the less complex attitudes.

Provision must be made at some point in the continuum for the first appearance of the emotional quality which is an important distinguishing feature of the appreciation, attitude, value, and adjustment objectives in the affective domain. . . .

From the description of attitudes, values, and adjustment, it is clear that the continuum must provide for the organization and interrelation of values and attitudes and for whatever steps accompany or are prerequisite to such organization.

Finally, the range of behaviors to be encompassed and the way these are organized into value systems and philosophies of life suggest that the continuum should provide for various levels of organization to be delineated.<sup>23</sup>

Stanley and Hopkins, writing about the assessment of the affective domain, declare:

Cognitive measures attempt to assess maximum performance (what a person can do); affective measures attempt to reflect typical performance (what a person does do or feel). The objective for almost any course will include statements pertaining to attitudes, appreciations, and interests as well as knowledge and proficiencies.<sup>24</sup>

---

<sup>23</sup>David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook II: Affective Domain (New York: David McKay Co., Inc., 1964), p. 26.

<sup>24</sup>Julian C. Stanley and Kenneth D. Hopkins, Educational and Psychological Measurement and Evaluation (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1972), p. 282.

In discussing the structuring of a new curriculum for arts education, Jerome J. Hausman states:

The content of aesthetic education derives from the variety of people identified as artists as well as the objects and events that might be called "artistic." In its broadest context, it deals with those images, sounds, movements, and circumstances that can be experienced for their aesthetic dimensions. It focuses upon the sources and cues from which to generate forms--events, myths, technical possibilities and controls; upon the ways that artists interpret and produce qualitative forms; upon the means for critically evaluating works of art.<sup>25</sup>

It has already been suggested that meaningful and successful teaching strategies are the result of a harmonious blending of theory and practice. Therefore, the analysis and consideration of man's behavioral and aesthetic perceptions hold great import for the establishment of a philosophical foundation which views music education as aesthetic education.

Some practical value from the study of the psychology of beauty may be derived by those who instruct the young in art or seek to develop their appreciation of beauty. An understanding, for example, of what kind of things in pictures, music or poetry appeal most to children and of the usual lines of development from a child's attitude towards the various forms of beauty to the attitudes adopted by mature adults experienced in the particular art, should be of value to the educator.<sup>26</sup>

---

<sup>25</sup>Jerome J. Hausman, "A Contemporary Aesthetics Curriculum," in Toward an Aesthetic Education (Washington, D.C.: Music Educators National Conference, 1970), pp. 52-53.

<sup>26</sup>Charles Wilfred Valentine, The Experimental Psychology of Beauty (London: Methuen & Co., Ltd., 1962), pp. 1-2.

Writing in the American Journal of Psychology, Margaret Otis reported the results of an experiment to determine the perceptual organization of the human mind based upon a visual stimulus.

The purpose at hand is to study the process involved in the act of the mind by which a number of elements are unified into a whole, to ascertain what conditions favor and what hinder the formation of units, to investigate the power of various factors involved and to test their relative importance.<sup>27</sup>

Except for the works of Rudolph Arnheim, only short commentaries have been found which combine the psychological and philosophical premise of perceived wholes. Other references have only alluded to matters secondary to the issue at hand (e.g. the meaning of beauty as defined by the psychologist or philosopher, beauty and pleasure, general psychological remarks on aesthetic experience, differences of taste, and the unconscious influence of sex upon the appreciation of beauty and the creation of art).

Although psychologists and artists have generally been unresponsive to each others' area of interest, Rudolph Arnheim has proposed a common meeting ground upon which the two may discover a common purpose. In his two books, Toward a Psychology of Art and Art and

---

<sup>27</sup> Margaret Otis, "Aesthetic Unity an Investigation into the Conditions that Favor the Apperception of a Manifold as a Unit," American Journal of Psychology (Albany, N.Y.; Worcester, Mass.: Florence Chandler Publisher, 1918), 291-315.

Visual Perception, Professor Arnheim develops careful comparisons between the scientific examination of human perceptual behavior and the recognition of works of art as a manifestation of the mentality of a particular culture, social class, or creative artist.

Art historians and theorists have to refer constantly to principles of perception and motivation, but in many cases a lack of familiarity with the development of psychology makes them take for granted statements that were considered true in the days of Helmholtz. . . . Thus, more intimate contact between art and psychology is the first prerequisite for progress. Once the wall between the two departments is pulled down, the student of art can expect to obtain from psychology a more solid foundation for the generalizations that play such an important role in all studio practice and particularly in the teaching of art. Similarly, the psychologist will find in works of art, as well as in informal observations recorded by artists, a wealth of information, which will serve not only this special field of study but will enhance the understanding of the human mind in general.<sup>28</sup>

### Hypothesis

The hypothesis that will control the approach and direction of this study is that man's perception occurs in terms of experienced wholes--of "organic unity, an inward principle which reveals itself in the form of an outward whole";<sup>29</sup> and that this fact bears demonstrable consequences for the teaching of music.

---

<sup>28</sup>Rudolph Arnheim, Toward a Psychology of Art (London: Faber and Faber, 1966), p. 19.

<sup>29</sup>Samuel Henry Butcher, Aristotle's Theory of Poetry and Fine Art (New York: Dover, 1951), pp. 275-76.

## CHAPTER II

### GENERATING FORM--THE DYNAMIC ILLUSION

. . . in an experience, flow is from something to something . . . because of continuous merging, there are no holes, mechanical junctions and dead centers. . . . In a work of art, different acts, episodes, occurrences melt and fuse into unity, and yet do not disappear and lose their own character . . . an experience has a unity that gives it its name, that meal, that storm, that rupture of friendship.<sup>1</sup>

John Dewey's concept of "an experience" implies a dynamic relationship of elements. What is intended by the word "dynamic"? Simply, an illusion of movement within the elements of a sensory field, which creates the perceived experience of a unified whole. Works of art are dynamically conceived by the artist, dynamically perceived by the appreciator. Objects of our perception, either in nature or in art, manifest some sort of intelligible shape or form. What are the processes involved through which the perceptual act finds meaning in artistic forms?

---

<sup>1</sup>John Dewey, Art as Experience (New York: Capricorn Books, 1958), p. 37.

### Dynamic Sensory Organization

If two points of light are flashed in quick sequence at different locations in a darkened room, an individual will perceive visual movement. The first point of light will be interpreted as having moved to the second location, rather than as a second stimulus separately perceived.

Why is it that the two points of light are not experienced independently? For this reason, that experience occurs always in terms of patterns, never merely in terms of elements.

Rather than reacting to local and unrelated events, the organism responds to the pattern of stimuli with which it comes in contact. This response is a unifying function, a response to a related whole, which is experienced as a sensory landscape instead of a patchwork of diverse sensations. We experience landscapes not blades of grass; vases not potsherds.

Sensory experience tends to be an ordering process. It apprehends the elements of a sensory field in terms of the simplest organizing forms that will enable it to grasp the whole. The Gestalt psychologist would describe the phenomenon of vision in the following manner. When we see an object we do not see it in isolation; we see it in relation to other objects in our visual field. All objects of our perception are

discriminated by means of their formal characteristics. Those objects most clearly defined take precedence in our perception. Clearly defined objects become figures; the rest become ground.

In sensory organization, the segregation and unification which occur will separate areas of different degrees of internal articulation, and according to our law, the more highly articulated ones will become figures, the rest fusing together to form the ground. Look at any landscape photograph. You see the shape of things, the mountains, and trees and buildings, but not of the sky. The second factor, equally important is that of good continuation and good shape. The things which we see have a better shape, are bounded by better contours, than the wholes we might see but do not. Therefore, when in exceptional circumstances those conditions are reversed, we see the hole and not the things, as the shape of a gap between two projecting rocks with sharp profiles, which may look like a face, an animal or some other object while the shape of the rock disappears.<sup>2</sup>

The felt movement of the flashes of light is an experienced illusion. Such illusory movement is the foundation for a dynamic explanation of sensory occurrences. The organism is the interpreter of unified sensory patterns. If twelve observers listen each to one tone of a melody of twelve tones, the sum of their experience will not be the same as an experience of the melody. Just so, when we experience a sequence of tones, each tone is not independent from the others, but is perceived as part of a dynamic flow, as an element of an overarching rhythmic pattern.

---

<sup>2</sup>Kurt Koffka, Principles of Gestalt Psychology (New York: Harcourt and Brace, 1935), pp. 208-09.

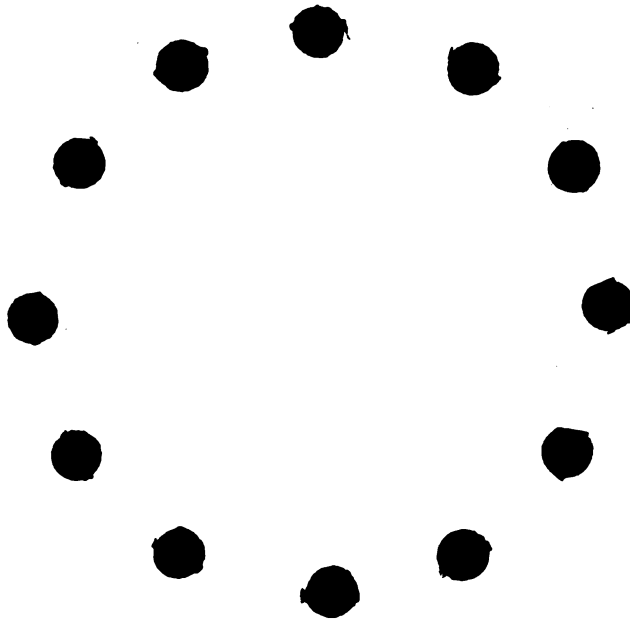
In 1915 Margaret Otis anticipated the findings of Gestalt psychology by investigating the apperception of visual fields in terms of felt units.<sup>3</sup> Consider the following illustration. Figure 1 is a "visual manifold," an array of twelve elements distributed on an ideal circle. The perceiver was asked to report what he perceived in Figure 1--twelve round dots or an implicit "unit." According to atomistic psychology, the twelve individual dots are separate stimuli which the eye surveys in a scattered array. As a point of fact, however, the patterning of the twelve dots inexorably creates the "felt" or experienced awareness of an implicit circle. In essence, our perception responds to the ideal form, simplifies in terms of it. The illusory qualities are the product of the dynamic stimulus.

Dynamic illusion may be described in terms of forces constituting a constant design of stress. In any manifold (a stimulus comprised of several entities) dynamic balance is achieved when all patterns of stress reach a point of equilibrium. Specifically, what is perceived visually or aurally is the result of a distribution of

---

<sup>3</sup>Margaret Otis, "Aesthetic Unity--An Investigation into the Conditions that Favor the Apperception of a Manifold as a Unit," American Journal of Psychology 29 (1918): 291-315.





**Fig. 1.--Visual Manifold: An Ideal Circle**



**a**



**b**

**Fig. 2.--Visual Manifold: An Ideal Straight Line,  
An Ideal Isosceles Triangle**

forces.<sup>4</sup> Perception is in fact an orderly arrangement of these underlying processes. Thus, if in Figure 2, change occurs in the stimulus field, the resulting activity will be towards the establishment of balance once again. The three dots in Figure 2a are apprehended as following an ideal straight line. If the central dot be raised above the other two, as in Figure 2b, the manifold is at once interpreted as distributed on an ideal isosceles triangle.

### The Apprehension of Patterns

Dynamic distributions should be envisioned as functional wholes.

In . . . systems, there is at a given time a certain resulting force at each point. All these resultant forces together constitute a continuous pattern of stress. For the system as a whole, the immediate effect can have only one direction; all local changes must be such that, when considered in their totality, they bring the system nearer the balance of forces.<sup>5</sup>

The sense of sight will be initially explored as the means of gaining the primary perspective of dynamic perception. We shall find, however, that the developed notion of dynamic Gestalten, or mutually balanced patterns of change, is directly applicable to the processes

---

<sup>4</sup>Wertheimer, "Untersuchungen zur Lehre von der Gestalt, II," Psychologische Forschung 4 (1923).

<sup>5</sup>Wolfgang Kohler, Gestalt Psychology (New York: Liveright Publishing Corp., 1947), pp. 131-32.

involved in aural experience, and upon this circumstance an advance in teaching music may be grounded.

There exists, however, a certain primitive intellectual basis upon which certain requirements rest in their turn, the fulfillment of which naturally cannot fully assure the aesthetic value of a musical work, yet whose omission is followed by negative results.

When for instance a succession of sound impressions is produced by a delicate acoustic instrument--produced at accurately equal intervals of time, and of exactly equal strength and quality of sound--a certain systematic plan will be felt . . . if the interim between the impressions is too great, it is impossible to set them properly into mutual relationship.<sup>6</sup>

In any moment of visual experience, our perception encompasses several entities at a time. For example, the kitchen counter may be covered with utensils, pans or food substances. The complex manifestation of these visual objects is seen as a figure and a ground. The objects that appear in the foreground are more arresting than the undiscriminated background against which they appear. In the dynamic process of our perception, this is the normal occurrence.

Our problem, then, is to determine the conditions under which some objects in the field achieve the status of dominant foreground (Figure 3). Why is it that in Figure 3 we recognize against the ground of the page, two groups of three patches each? Why not six individual

---

<sup>6</sup>Knud Jeppesen, The Style of Palestrina and the Dissonance (New York: Dover Publications, 1970), pp. 18-19.

patches or three groups of two units each? For this reason, that the patches are discriminated in terms of what shall be called their affinity, an affinity in this instance grounded on their relative nearness to each other. Proximity establishes a stronger affinity among the more nearly related elements than among the more remote. If these elements were dispersed serially at equal intervals, the dominant affinity of some of the elements over others would be negated (Figure 4). In any moment of perception the mind always responds to the simplest pattern of affinities (a) that are available among the actual relations of the elements presented, and (b) that enable the more clearly related elements to be grasped. The elements that are then perceived in terms of real affinities are what we intend by "dominant" foreground.



Fig. 3.--Proximity: A Principle of Formal Affinity



Fig. 4.--Proximity: Negated

When three piano tones are sounded with very small time lapses between them and then a fourth note is struck after a more prolonged interval, as music the three equal-interval sounds are grouped together as opposed to the isolation of the fourth. The nervous system dynamically creates an order of time in the auditory stimulus, due to the temporal relationship of the three equi-distant tones. Objects or stimuli that occupy close space tend to be perceived as related elements which create dynamic flow.

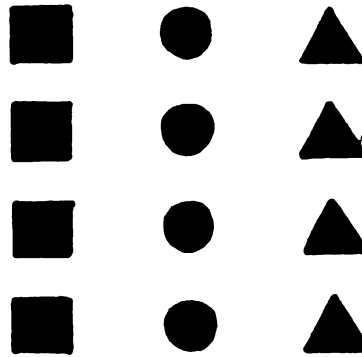
Our perceptions may be described as a spontaneous grouping of elements. The elements which we group into patterns are not merely static. They mutually repel or attract each other. In Figure 3, two groups of three elements each were formed, because among the six patches some space intervals were less than others. The patches which were separated by shorter distances formed group-units. The formation of sensory fields is governed by particular rules of organization. Proximity is, then, one example of formal affinity. What other illustrations may be brought forward?

Affinity through grouping is illustrated in Figures 5 and 6. As we apprehend Figure 5, our eyes are drawn to the vertical columns of elements, rather than the horizontal rows. Grouping occurs due to an experienced relationship between the elements of the pattern. Squares have an affinity with squares, circles with circles, and triangles with triangles. Hence, the vertical affinity of four similar elements takes precedence in our perception over the horizontal relationship of three dissimilars.

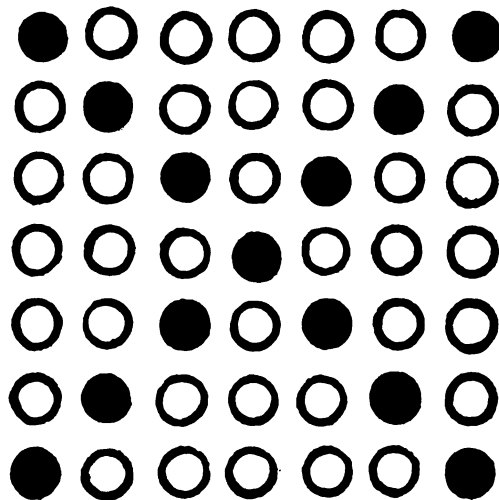
Figure 6 exhibits grouping in terms of contrasts. The foreground is a field of circles. But upon this field the dark dots gravitate together so as to form a secondary figure within the first. The affinity of the shaded dots creates an "X": their similarity with each other in point of color preponderates over their similarity with the other dots in point of shape.

Thus in a fugue, the continual reaffirmation of the subject establishes a dynamic affinity. In the exposition the statement becomes the dominant foreground. As the fugue develops, the re-entry of the tones comprising the subject are aurally grouped. Therefore, the subject fulfills a dynamic unifying function.

While Bach did not invent a single new type he made of the fugue what it stands for today; a contrapuntal



**Fig. 5.--Vertical Similars Preponderating Over Horizontal Dissimilars**



**Fig. 6. Dark Circles Preponderating Over White Circles**

form of the highest concentration in which a single characteristic subject in continuous expansion pervades a thoroughly unified whole.<sup>7</sup>

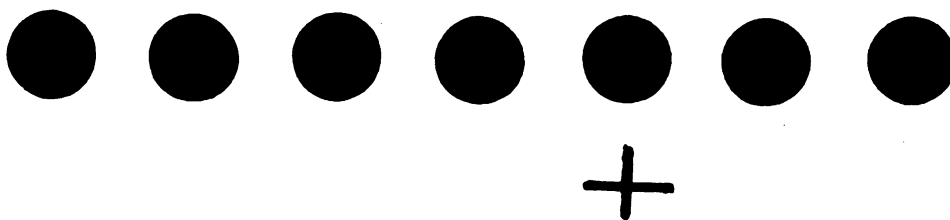
Hertz conducted an experiment with several species of birds in order to further demonstrate the nature of grouping as an elementary sensory fact.<sup>8</sup> Several small flower pots were put on the ground upside down. One bird was allowed to see how food was placed under one of the pots. Presently, the bird would lift the pot and retrieve the food. Of particular significance was the means by which the correct pot was selected. The bird encountered no problems when there was one pot only. When several pots were present, the selection of the correct one depended entirely upon the specifically characterized quality of the pot as a member of the totality. If put in a straight line with the others, the correct selection was a matter of chance (Figure 7). When the food pot was segregated from the totality, the bird encountered no difficulties (Figure 8). In Figure 9, a different means of achieving grouping still enabled the correct pot to be readily distinguished as a single entity. In each of the preceding figures, the grouping which is made manifest in the pattern as a whole determined the bird's selective responses.

---

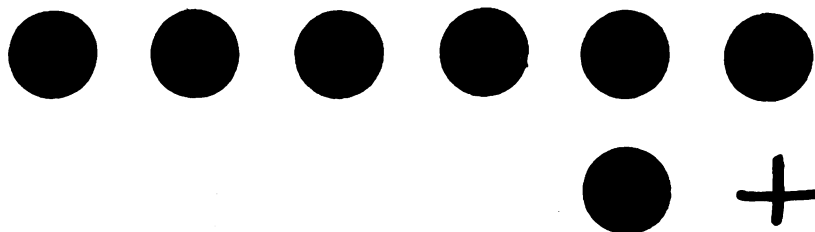
<sup>7</sup>Manfred F. Bukofzer, Music in the Baroque Era (New York: W. W. Norton, 1947), pp. 286-87.

<sup>8</sup>Paul Hertz, "Zeitschrift fur vergleichende," Physiologie 7 (1928).





**Fig. 7.--Grouping: A Matter of Chance**



**Fig. 8.--Grouping: Segregation from the Totality**



**Fig. 9.--Grouping: Segregation from the Totality**

Perceived time has similar characteristics with perceived space. Temporal "dots" form temporal groups just as simultaneously presented visual dots seem to form groups in space. In Figure 10, the triplet pattern of Ravel's Bolero is experienced as a group in time.

Suppose that I knock three times at short intervals on my table, and then after waiting for a second I repeat the performance, and so forth. People who hear this sequence of sounds experience groups in time. . . . The groups as actually heard are therefore instances of psychological . . . and physiological organization. If the intervals between sounds are made equal, groups will again be formed as soon as differences of intensity or quality are introduced in the series, especially if they occur in regular repetition. Thus, equality plays the same role in the organization of temporal sequences as it does in a stationary visual field.<sup>9</sup>

John F. A. Taylor writes:

Every apprehension of pattern is grounded on the affinity of forms. Visual forms are never neutral; they are never merely juxtaposed. They stand to each other in varying degrees of affinity. . . . Where there is no affinity, there can be no pattern. Where affinity is not seen, no pattern can be seen.<sup>10</sup>

Professor Taylor illustrates his statement by examining the forms suitably dispersed within a lozenge (Figure 11). Elements confined within a field will be perceived in the simplest shape which is in keeping with the dynamic ordering of them. When viewing the lozenge, why is it

---

<sup>9</sup>Wolfgang Kohler, Gestalt Psychology (New York: Liveright Publishing Corp., 1947), p. 151.

<sup>10</sup>John F. A. Taylor, Design and Expression in the Visual Arts (New York: Dover Publications, Inc., 1964), p. 74.



Fig. 10.--Ravel, Bolero

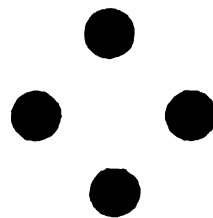


Fig. 11.--Lozenge

that the perceived forms therein do not have their centers placed on a circle (Figure 12)? An ideal circle affords no definitive selection among its own diameters. Even if one were to mark a distinction between the vertical and the horizontal diameters, the circle does not declare any precedence among its own diameters. As a simplifying form, the circle is not conclusive as a pattern which can be focused upon and adhered to. Instinctively the lozenge is chosen, because the simplest form presented is that one whose axes will order the location of the dots in relation to each other.

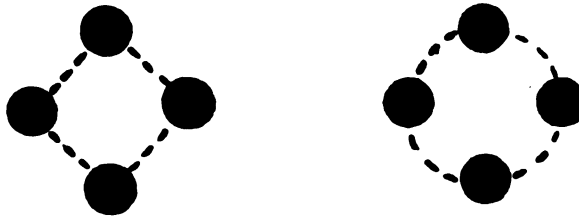


Fig. 12.--Lozenge: Predominance Over the Circle

An additional illustration of formal affinity is closure. The perceiver will at times create wholes where there are none. The act accomplished is none other than "closing in" gaps in sensory data. A momentarily exposed curved line suggesting the shape of a circle, with one small portion of the line omitted, will, nevertheless, be perceived as a circle. It was stated previously that simple forms are more easily perceptible

than complex ones. The independence of the act of closure may be demonstrated by setting it in opposition to the phenomenon of proximity. Professor Koffka illustrates this phenomenon in Figure 13.<sup>11</sup> The form of the groups is established not by the vertical lines, though they are in closer proximity, but rather by those lines which enclose space. Specifically, the distance between the lines which enclose space is three times as great as that of the nearer vertical proximities. Only the distance between the ends of the short oblique lines is similar to the space separating the closer vertical lines.

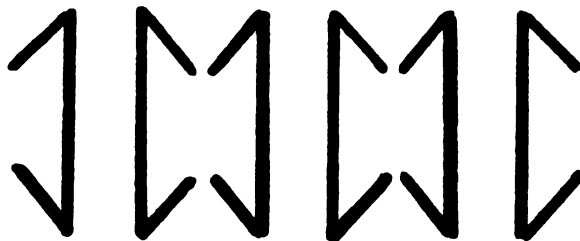


Fig. 13.--Closure

Closure is an essential element in musical cadences. Where the ear anticipates the finality of tonal melodic-harmonic movement, the tonic chord is forthcoming. Occasionally, cadence closure may be

---

<sup>11</sup>Kurt Koffka, Principles of Gestalt Psychology (New York: Harcourt, Brace and Company, 1935), p. 168.

interrupted or postponed. If the tonic chord would be replaced by the submediant harmony, then the thrust for closure results in a deception. Similarly, cadence finality may be suspended with the use of a half cadence. In this instance the dominant harmony is employed.

This chapter opened with the statement, works of art are dynamically conceived by the artist, dynamically perceived by the appreciator. The discussion thus far has suggested the imperative significance of dynamic flow and function. Forms are not only generated in terms of their mutual dynamic affinities, but similarly the perceiving mind decisively responds to those dynamic patterns of stimuli with which it comes in contact.

When viewing the polka-dot pattern, the arrangement of the dots establishes the principle of simple repetition. The immediate perception of the observed field is experienced as an organization of space. Through the repetition of the motive, order and measure can be grasped and held.

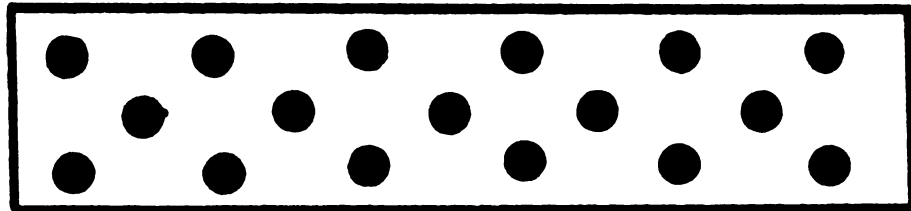


Fig. 14.--Polka-dot Pattern

In general, for our perception, what is seen as measurable is more easily grasped than what is not. Stand in the midst of a field of wheat, so that the surface of the wheat-ears extends uninterruptedly in all directions from your waist-height: all distances will lose their definiteness . . . stand beside the fence that hedges a field on any of its sides: the fence-posts, themselves of equal height and spaced at equal intervals, enable the distances to be grasped, and grasped visually, in a single act . . . both expanses are in fact measurable; only the one is seen as measurable. The latter alone affords, as a visual appearance, the scale necessary to make distances appreciable.<sup>12</sup>

A natural complementarity of elements is perceived as a living, unified whole.

Aural experience does not capture the whole of a musical composition in any given moment of attentive apprehension. We may view the whole of a painting, however, in many isolated moments of perception. Music requires the spinning out of tones in a time continuum. If the perfect articulation of temporal form requires the maintenance of a unified aural whole, then the composer must rely upon dynamic motives. Only then will the bond of complementarity hold the whole work in the dominant foreground of our memory. The restatement of material in the recapitulation of Sonata form, comes to the ear not as a startling return of forgotten themes, but as the recognition of an anticipated fulfillment of balance.

It is scarcely necessary for us to say more about the technique of recapitulation, nor of its aesthetics, save to draw attention to Tovey's remarks

---

<sup>12</sup>Taylor, Design and Expression, pp. 71-72.

as to the deceptiveness of supposing it to be a mechanical method of achieving symmetry. On the contrary, it has the function fundamental to any highly organized work of art, of unifying that which was diverse.<sup>13</sup>

Professor Taylor writes:

The parts of that whole stand to each other in a relation of complementarity. They form not merely an aggregate, but an organization, in which the several members are mutually implicated in each other. All are necessary, none is dispensable, for the meaning of each is seen to reside in the relations which bind it to those others. That complementarity of parts is what men understand when they speak of the "inevitableness" of a work of art: to take from it any part or to add to it any part is to destroy the distinctive kind of equilibrium which it has.<sup>14</sup>

#### Musical Time--A Dynamic Illusion

The essence of musical experience is the ordering of time. Temporal forms are manifested in terms of their flow.

The purpose of all musical labor, in thought or in physical activity, is to create and develop the illusion of flowing time in its passage, an audible (felt) passage filled with motion that is just as illusory as the time it is measuring. Music is an art of time. . . .<sup>15</sup>

How may aural experience be explained in terms of a dynamic phenomenon?

---

<sup>13</sup>Cedric Thorpe Davie, Musical Structure and Design (New York: Dover, 1966), p. 83.

<sup>14</sup>Taylor, Design and Expression, p. 5.

<sup>15</sup>Susanne K. Langer, Feeling and Form (New York: Charles Scribner's Sons, 1953), p. 120.



If we would listen to a rhythm tapped on a drum, or a melody rendered either vocally or instrumentally, each beat or tone becomes an occurrence in our behavioral environment. In any rhythmic pattern each beat is not isolated as a separate stimulus, but rather we perceive it as being dependent upon the preceding beat (Figure 15). The louder beats in the rhythmic pattern of Figure 15 become recognized as "accents" due to the nature of the softer beats before them. No matter how we would alter the location or the intensity of the accented pulses, those pulses would be aurally identified because of their relation to the other softer beats.



Fig. 15.--Accents

Similarly, one and the same tone will have a different musical "meaning" according to the tones which precede it. For example, in one melody c may be the tonic, in another the dominant, in a third the "leading tone," and so on; moreover, different tones may have identical meanings--be practically indistinguishable from each other if they occur at the same place in a melody. Thus what g is in a tune played in c major, c is in the "same" tune if played in f major, and f sharp if it is played in b. . . . In all our cases we have perceptual experiences produced by auditory stimuli, and in each of them the effect of stimulation at one moment depends upon the effects of preceding stimulations. If these prior effects had disappeared completely with the cessation of the stimuli, we could hear neither rhythm nor melodies, to say nothing of speech.<sup>16</sup>

---

<sup>16</sup>Koffka, Gestalt Psychology, p. 432.

Stout's Theory of Primary Retentiveness has established the premise that aural experience is an organization of continuous time. The Theory of Primary Retentiveness suggests that aural stimuli are cumulatively held within the perceiver's mind. Although each moment of immediate perceptual experience is responded to individually, every sensation is felt to be a member of a larger continuity in our memory.

The last note of a melody may be the only note of which we are aware at the moment it strikes the ear. Yet in it the entire melody is in a sense present. It comes before consciousness as part of a quite specific whole and derives a specific character from its place in that whole. The cumulative disposition generated by the ordered sequence of previous notes co-operates with the new stimulus to the organ of hearing, and the ensuing state of consciousness is the joint product of both factors mutually modifying each other.<sup>17</sup>

The design of a musical motive is heard to begin at one point and end at another. This motive may be repeated or another may follow. In no instance are balanced musical structures a mere extension from the first tone of the first motive to the third or fourth tone of the next motive. Aural experience, as Professor Koffka suggests, is "a self-determination of temporal organizations."

---

<sup>17</sup>George Frederick Stout, Analytic Psychology (London; New York: S. Sonnenschein and Co., Limited; Macmillan and Co., 1896), 2 vols, p. 181.

A melody is a whole, organized in time. That its later members depend upon its earlier ones is the exact counterpart of the fact that the right upper quadrant of a seen circle depends upon the left lower one. The difference between the two cases is only this, that in the latter we are dealing with a stationary distribution, in the former with a process which changes in time.<sup>18</sup>

Visual Gestalten are formed through the dynamic character of seen forms. Aural Gestalten are formed through the dynamic character of temporal patterns. If each member of a temporal pattern depends upon its existence within an established aural field, as well as a stimulus in its own right, then Professor Langer's notion of "flowing time" becomes meaningful.

The difference between perceiving clearly and understanding distinctly, is not the great difference we are sometimes led to think it . . . for elements not natively ordered by a relation of some sort will not make structures for us at all, nor will intrinsically related elements make structures for us unless we have become aware of the kinds of relation involved. You cannot make a spatial whole except with elements the very nature and being of which is spatial extension. You cannot make melodic structure except out of elements which are natively ordered by an intrinsic relation in pitch from which they cannot be removed. . . . The elements must lie in an order grasped by us as constituted by a relation. We call structures intelligible . . . in so far as we find them capable of analysis into such elements so related.<sup>19</sup>

What is the illusory motion of dynamic temporal elements? The ever-flowing movements we hear, be they

---

<sup>18</sup> Koffka, Gestalt Psychology, p. 437.

<sup>19</sup> David Prall, Aesthetic Analysis (New York: Thomas Crowell Co., 1964), p. 39.

responded to as fast or slow, rising or falling, or beginning and concluding, are not in themselves actually moving. The experience of movement is an illusion. For example, when we view the ascending and descending scale in Figure 16, the tones progress upward to D, and downward to D. In no instance do the tones physically move, but rather the integral relationship of tones "felt" to ascend and to descend to the tonic creates an experience of flow.

Another significant illusory aspect of musical perception may be illustrated in the grasping of silence as having impact equal to that of the presence of sound. Moments of musical stillness are felt to be suffused with the ever-present pulsation of the beat. In the Second movement of Haydn's "Surprise" Symphony, the unexpected fortissimo of the tutti orchestra is poignantly set apart by the crucial pause of silence before its articulation (Figure 17).

Musical dynamic movement establishes for the appreciator the consciousness of ideal time, rather than real time. Speaking of the duration of ideal musical time, Professor Langer turns to an essay written by Basil de Selincourt:

Music . . . demands the absorption of the whole of our time-consciousness; our own continuity must be lost in that of the sound to which we listen. Music uses time as an element of expression;

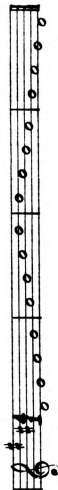


Fig. 16.--Scale: Ascending and Descending

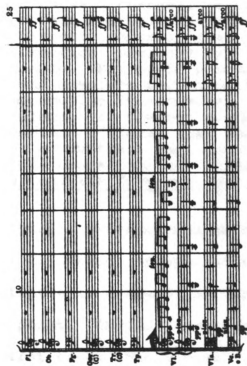


Fig. 17.--Haydn, "Surprise" Symphony, 2nd Movement

duration is its essence. The beginning and the end of a musical composition are only one if the music has possessed itself of the interval between them and wholly filled it.<sup>20</sup>

Dr. Langer further describes musical duration as "lived" or experienced time.

The semblance of this vital, experiential time is the primary illusion of music. All music creates an order of virtual time, in which its sonorous forms move in relation to each other--always and only to each other, for nothing else exists there. . . . Inward tensions and outward changes, heartbeats and clocks, daylight and routines and weariness furnish various incoherent temporal data, which we coordinate for practical purposes by letting the clock predominate. But music spreads out time for our direct and complete apprehension, by letting our hearing monopolize it--organize, fill, and shape it, all alone. It creates an image of time measured by the motion of forms that seem to give it substance, yet a substance that consists entirely of sound, so it is transitoriness itself. Music makes time audible, and its form and continuity sensible.<sup>21</sup>

In Figure 18, the rhythmic pattern creates experienced movement that is felt to extend through several measures. The pattern culminates in a moment of finality as would occur at a cadence point. Rhythmic movement may be felt exceeding the first arrow (the motive), continuing on to measure two, and finally climaxing at measure three.

---

<sup>20</sup>Langer, Feeling and Form, pp. 110-11.

<sup>21</sup>Ibid., pp. 109-10.

Allegro (♩ = 120)



Fig. 18.--Rhythmic Pattern: The Illusion of Experienced Movement

Similarly the tonal elements of music, melody and harmony, may also exhibit the tendency to create illusory flow. An ascending melodic line may not only establish dynamic tension, but may also strongly indicate the inevitable resolution to the tonic or some other kind of cadence formula. Harmonic progression occurs in terms of "normal" chordal sequence. For example, harmony texts frequently refer to the ability of diatonic triads to maintain a tonal center. " . . . the whole mass of tones and the connection of harmonies must stand in a close and always distinctly perceptible relationship to some arbitrarily selected tonic, and the mass of tone which forms the whole composition, must be developed from this tonic, and must finally return to it."<sup>22</sup> Triads of the third and fourth classifications (i.e. the submediant and the mediant triads) are weakest in their ability to sustain strong tonality. Normal progression implies the movement of these triads to harmonies of the second classification (supertonic and subdominant), then establishing key center through the strongest triads (leading tone, dominant, and tonic).<sup>23</sup>

---

<sup>22</sup>Herman Helmholtz, On the Sensations of Tone as a Physiological Basis for the Theory of Music (London: Longmans, Green, and Co., 1875), p. 249.

<sup>23</sup>Allen Irvine McHose, Basic Principles of the Technique of 18th and 19th Century Composition (New York: Appleton-Century-Crofts, Inc., 1951); Allen Irvine McHose, The Contrapuntal Harmonic Technique of the 18th Century (New York: Appleton-Century-Crofts, Inc., 1947).



It has already been stated that in sensory organization individuals experience always in terms of patterns, never in terms of mosaics.

Musical time has form and organization. Melodies are formed because of a unifying tonal function. Rhythmic flow is generated through the devices of repetition, variation and contrast. Together the musical elements create a complementarity out of which a dynamic form emerges. Musical perception apperceives the form as a unified relationship. Music is the art of sound. Roger Sessions suggests that of the five senses, only hearing is decisively associated with our sense of time.<sup>24</sup> As an art of time music is active rather than static. Unfolding musical impressions must sustain the dynamic illusion of movement. Monroe Beardsley writes: "Music, then, is no symbol of time or process, mental or physical, Newtonian or Bergsonian; it is process."<sup>25</sup>

The function of all musical activity is focused about the creation of illusory flowing time. As the dissonance of the suspension requires an interpreted resolution into consonance, so the musical image suggests dynamic continuity and affinity in its apprehension.

---

<sup>24</sup>Roger Sessions, The Musical Experience of Composer, Performer, Listener (New York: Atheneum, 1965).

<sup>25</sup>Monroe Beardsley, Aesthetics (New York: Harcourt, Brace and Co., 1958), p. 338.

Themes and motives are explored until an emerging structure appears. Only when the whole of the anticipated musical Gestalt is achieved in the mind of the composer are frustration and anxiety relieved. The emergence of the total Gestalt gives itself to the awareness of the composer. However the Gestalt becomes known, the composer seizes upon it as the fundamental form of the work. The musical impulse becomes dynamically conceived.

A musician may sit at the keyboard, putting all sorts of themes and figures together in a loose fantasy, until one idea takes over and a structure emerges from the wandering sounds; or he may hear, all at once, without the distinction of any physical tones, perhaps even without exact tone color as yet, the whole musical apparition. But however the total Gestalt presents itself to him, he recognizes it as the fundamental form of the piece; and henceforth his mind is no longer free to wander irresponsibly from theme to theme, key to key, and mood to mood. This form is the "composition" which he feels called upon to develop.<sup>26</sup>

Roger Sessions writes:

The gestures which music embodies are, after all, invisible gestures; one may almost define them as consisting of movement in the abstract, movement which exists in time but not in space, movement, in fact, which gives time its meaning and its significance for us. If this is true, then sound is its predestined vehicle. For what we apprehend through the eye is for us static, monumental. Even movement seen is bounded by our range of vision; we never can closely follow it off into space unless we ourselves move. Sound, at least in our experience, is never static, but invariably impermanent; it either ceases or changes. By its very nature it embodies for us movement in time, and as such imposes no inherent limits.

---

<sup>26</sup>Langer, Feeling and Form, p. 121.



**Fig. 19.--Beethoven, Symphony No. 5, 1st Movement**

To sum up: the experience of music is essentially indivisible, whether it is embodied in the impulse to produce, or in the response, through re-production, actual as by the performer or imaginary as by the listener, of the musical experience embodied in music already produced.<sup>27</sup>

The essence of music is not the tones upon the page, but the apprehension of illusory time. " . . . too little stress is as a rule laid upon the fact that music is an art which includes time; in other words, that it exists not on paper to be looked at, but in the time element to be listened to. . . . "<sup>28</sup>

Experienced forms in time are not moulds into which composers have poured their music. Musical forms are the result of a generating stimulus, out of which comes a work which is alive and replete with its individual integrity. It is form discovered, not made.

---

<sup>27</sup> Roger Sessions, The Musical Experience of Composer, Performer, Listener (New York: Atheneum, 1965), p. 19.

<sup>28</sup> Davie, Musical Structure, p. 11.

CHAPTER III

GENERATING FORM AND THE  
MUSICAL PERSPECTIVE

For the composer, the fulfilling moment of his creative task is in the temporal realization of a musical idea. Music makes manifest, through aural perception, the essence of the creative musical sense of each composer.

Each composer has striven to bring to reality the music which is most truly music for him. The task of every composer is to give coherent shape to his musical ideas; or, as Artur Schnabel has so finely put it: "The process of artistic creation is always the same--from inwardness to lucidity."<sup>1</sup>

The generating musical idea is the germ from which the composer senses the Gestalt of his composition. Musical ideas may provide the necessary impetus for a movement, an episode, or as a unifying agent either melodically, harmonically, or rhythmically. Stewart Macpherson, addressing the need for the study of form, writes:

---

<sup>1</sup>Sessions, The Musical Experience, p. 43.

The nature and temper of an idea, or set of ideas, used in an oratorio need not of necessity differ widely from the nature and temper of an idea, or set of ideas, used in a symphony. . . . Hence it is evident that if we are to be able to estimate, with any regard to correctness of judgment, any work we may be called upon to hear or study, we must take some account, at least, of these important elements of design and of structure, without which a work of art would be a shapeless mass of incoherence unable to tell its own tale through neglect of one of the fundamental laws of nature.<sup>2</sup>

When the musical idea gains pre-eminence in the mind of the composer, the result is what Susanne Langer has termed the commanding form of the work.<sup>3</sup> The commanding form of a composition establishes a generating principle. Through ornamentation, repetition, variation or contrast, the commanding form compels the composer to develop his idea within an orderly framework. At this juncture some would question the desirability of the composer's responsibility to the rule of his idea. The commanding form is not stifling, but rather allows the composer to fully concentrate his creative power in the unfolding possibilities of tonal or rhythmic elements.

The musical idea may emerge in the composer's mind in several ways. Melodic or harmonic motives may establish the Gestalt of the composition. Also, the musical matrix may be brought to fruition in terms of

---

<sup>2</sup>Stewart Macpherson, Form in Music (London: Joseph Williams), p. 4.

<sup>3</sup>Langer, Feeling and Form, chapter eight.

sonorities, rhythmic figures, or perhaps through formal characteristics as evidenced in key or harmonic relationships.<sup>4</sup> For example, the so-called "Tristan" chord which Wagner uses in a specific motive is not always presented in an identical key (Figures 1a, 1b).

One monumental commanding idea is the principal subject of the Art of the Fugue. Bach designed this work as an example of the profound possibilities in fugue writing. Beginning with the unadorned fugue, Bach then systematically inverts the subject, presents the counter-fugue, the double fugue, the triple fugue, the mirror fugue, and finally, the quadruple fugue. The Art of the Fugue combines eighteen fugues and canons. Through thematic transformation, the principal fugal subject provides a generating stimulus which fulfills a unifying function (Figure 2).

In 1950, Elliott Carter completed an interesting composition which explores the sound possibilities of woodwind instruments. Eight Etudes and a Fantasy for Woodwind Quartet specifically focuses on woodwind timbres and techniques (range, fluttertonguing, runs, etc.). Etude No. 7 is a study on one note. Although the generating stimulus is one pitch, Carter manipulates dynamic

---

<sup>4</sup>Susanne Langer defines the musical matrix as "the fundamental movement of melody or harmonic progression, which establishes the greatest rhythm of the piece and dictates its scope . . ." Langer, Feeling and Form, pp. 122-23.

Langsam und schwachend



(1a)

Langsam und schwachend



(1b)

Fig. 1.--Wagner, the "Tristan" Chord



levels and subtly creates tension at the mid-point of the piece through rhythmic diminution. The marriage of dynamic crescendi and diminuendi with a continual shortening of rhythmic values establishes the etude in terms of an Arch form.



Fig. 2.--Bach, Art of the Fugue

Johannes Brahms represents the epitome of classical integrity in the Romantic Era. Brahms opposed the radical innovations of Liszt, Berlioz and Wagner. In response to the new predilection for expanded modulations, and the emphasis for programmatic attachments, Brahms centered his creative effort about the restoration of classical forms.

Of particular interest is the third symphony in F major. Homer Ulrich writes:

The third symphony, in F major, represents a perfect fusion of Brahms' Classical tendencies and his Romantic temperament. Without allowing any deviations from strict musical logic to infect his writing . . . a melodic motive drawn from the first movement casts its shadow over the inner movements as well . . . an element made necessary by his musical purpose.<sup>5</sup>

---

<sup>5</sup>Homer Ulrich, Symphonic Music (New York: Columbia University Press, 1952), pp. 215-16.

The commanding form of this symphony grows from the motivic premise of the opening three measures (Figure 3). In an analysis of the first movement, the principal theme is supported by the F minor harmony found in the motive (Figure 4).

Further developments and transitions in the first movement are directly related to the motive. In the latter portion of the Exposition, a fragment of the motive appears within the concluding theme as the announcement of the codetta--part II (Figure 5).

Similarly, in the second movement an allusion to the motive is evident in measures three and four (Figure 6). In his analysis of the Brahms's Third, Professor Ulrich explains the presence of the "motto" in measures three and four as " . . . an interlude-by-extension of the theme."<sup>6</sup>

The third movement, a Rondo, employs the motive as accompanying ornamental figures. Of particular significance is the manifestation of the motive as it exemplifies a thematic kinship between the movements. In Figure 7 we see the emphasis of the motivic triad relationship in a cascading inter-play among the violins, violas, and celli-bass.

---

<sup>6</sup>Ulrich, Symphonic Music, p. 216.

## Symphonie No 3

## EXPOSITION I

Allegro con brio

Johannes Brahms, Op. 90

1880-1887

PRINCIPAL THEME

Fig. 3.--Brahms, Symphony No. 3, 1st Movement

Kontrafagott

*ff sf sf*

Fig. 4.--Brahms, Symphony No. 3, 1st Movement





Fig. 7.--Brahms, Symphony No. 3, 3rd Movement

The fourth movement brings to the ear the sustained fulfillment of ever-growing strength and vigor, which has gathered momentum through the preceding movements. In the coda, wholeness is complete with the reaffirmation of the motive (F-A-F).

The preceding several examples of generating musical ideas are only a minute representation from the wealth of musical masterpieces. These illustrations have been given in order to aid in the clarification of what we intend by the musical idea. Composing does not become the required completion of binding formal guidelines but becomes, as Roger Sessions describes it, "a living process of growth. . . . a composer's relation to his work is an organic one; that the conception and the composition of a piece of music are not a matter of set

procedure, but a living process of growth."<sup>7</sup> Reiterating his contention for purity in musical composition and expression, Edward Hanslick goes on to say:

The object of every art is to clothe in some material form an idea which has originated in the artist's imagination. In music this idea is an acoustic one; it cannot be expressed in words and subsequently translated into sounds.<sup>8</sup>

In Greek tragedy, Aristotle describes the dénouement as that focalized moment when all that has preceded makes apparent all that is to come. The dénouement emerges out of the plot because of dramatic unity. As the musical composition develops out of organic growth, so the tragedy also grows.

The unity of the tragic action is, again, an organic unity, an inward principle which reveals itself in the form of an outward whole. . . . Within the single and complete action which constitutes the unity of a tragedy, the successive incidents are connected together by an inward and causal bond--by the law of necessary and probable sequence.<sup>9</sup>

It has been stated that music is an art which requires the spinning out of tones in a time continuum.

---

<sup>7</sup>Sessions, The Musical Experience, p. 52.

<sup>8</sup>Edward Hanslick, Vom Musikalisch-Schönen, Ein Beitrag Zur Revision der Aesthetik der Tonkunst (9th ed.; Leipzig: J. A. Barth, 1896), trans. by Gustav Cohen as The Beautiful in Music (7th ed.; London: Novello, 1891), p. 20.

<sup>9</sup>Samuel Henry Butcher, Aristotle's Theory of Poetry and Fine Art, translation (New York: Dover Publications, 1951), pp. 275-76.

Aural perception, as a temporal phenomenon, occurs due to the dynamic qualities of the stimulus object. Once the commanding form has been grasped by the mind of the composer, what is the process through which the piece becomes a meaningful dynamic whole in aural experience?

The foremost elusive aspect of sound is that it contains no physical substance of its own. If a sound be produced, it does not continue indefinitely, rather it fades away into silence. For the musical composition, this reality takes on primary importance in regard to the structure of the musical work. If there were no perception of unity in the apprehension of musical sound, then each tone would disintegrate as a stimulus unto itself. In his Confessions, Book XI, St. Augustine refers to the absence of unity in sound as a void of discontinuity.<sup>10</sup> If memory cannot measure and sustain aural stimuli so that they may be ordered into distinct groups, then the emergence of sonorous form may not be achieved. We will remember that Stout's Theory of Primary Retentiveness suggests that specific aural stimuli may be cumulatively disposed in the consciousness of the perceiver.

The last note of a melody may be the only note of which we are aware at the moment it strikes the ear. Yet in it the entire melody is in a sense

---

<sup>10</sup>Augustine, Confessions, Book XI, trans. by Edward B. Pusey (New York: P. F. Collier and Son, 1909), chapters 27-28.

present. It comes before consciousness as part of a quite specific whole and derives a specific character from its place in that whole.<sup>11</sup>

Unfolding musical tones, then, must be integral members of a unified musical structure. Only then will tones already heard have meaning in terms of tones being heard.

The fluid and successive being of musical substance entails its intellectuality since the work, inasmuch as it forms a whole, requires that it be structured in the memory by the mind. . . . Music is essentially an art of time . . . not only is it an art of time, but an art of the moment, whose existence as art is of the same nature as that of the dance, poetry, the theatre. The unity of these actions is but that of a duration whose elements would fall back into the void of silence as they fade if memory did not forget this unity by endowing these elements with at least a temporary subsistence and a mode of intellectuality.<sup>12</sup>

For the musician, either as composer, performer, or listener, the significance of each tone is in its reaffirmation of sonorous movement. If any thread of the musical fabric causes an interruption of the dynamic whole the composition will sustain a rupture which cancels its unity and destroys its equilibrium.

What, then, is the essence of all composition? Susanne Langer explains, " . . . the essence of all composition--tonal or atonal, vocal or instrumental, even purely percussive, if you will--is the semblance of

---

<sup>11</sup>George Frederick Stout, Analytic Psychology (London: S. Sonnenschein and Co., Limited; New York: Macmillan and Co., 1896), 2 vols., p. 181.

<sup>12</sup>Etienne Gilson, Forms and Substances in the Arts (New York: Charles Scribner's Sons, 1966), pp. 145-46.



organic movement, the illusion of an indivisible whole."<sup>13</sup> Edward Hanslick suggests that the essence of all music is simply, "sounding forms in motion."<sup>14</sup> Monroe Beardsley describes the essence of musical structure in terms of kinetic patterns. "I propose to say that a musical composition has . . . what I shall call a kinetic pattern: it is the pattern of variation in its propulsion, or intensity of movement."<sup>15</sup> Leonard B. Meyer argues that the perceivable kinetic pattern of music is directly related to one's previous encounters with similar musical forms.<sup>16</sup>

From the conception of music as living or organic movement, we may establish a fundamental principle of musical occurrence. The establishment of temporal patterns creates in the mind of the appreciator an expectation of those aural substances not yet heard. As music is an art of change and of becoming, so its manifestation in terms of heard Gestalten makes it an art of time.

---

<sup>13</sup>Langer, Feeling and Form, p. 126.

<sup>14</sup>Hanslick, Vom Musikalisch-Schönen.

<sup>15</sup>Monroe Beardsley, Aesthetics (New York: Harcourt, Brace, and Co., 1958), p. 184.

<sup>16</sup>Leonard Meyer, Emotion and Meaning in Music (Chicago: University of Chicago, 1956), p. 35.

The principle of organic movement implies life or essential organization. In nature, all living processes continue and are sustained through the indispensable motion natural to their function. Where there is essential physical activity, there is rhythm. As rhythm is the necessary principle in living organisms, so music only finds its ability to present ordered time through vital flow. In his text, Harmonics of Aristoxenus, Henry S. Macran discusses the role of Aristoxenus as possibly the first musical humanist in Western civilization.

So busy were the Pythagoreans in establishing the mere physical and mathematical antecedents of sounds in general, that they never saw that the essence of musical sounds lies in their dynamical relation to one another. Thus they missed the true formal notion of music, which is ever present to Aristoxenus, that of a system or organic whole of sounds, each member of which is essentially what it does, and in which a sound cannot become a member because merely there is room for it, but only if there is a function which it can discharge.<sup>17</sup>

We have established the premise that as an art of time, music is such because its generating principle of order is in a prescribed sequence of rhythmic and tonal stimuli. Aural patterns are not mere successions held together by time; rather aural patterns are a complementarity of elements which create unified time. From the

---

<sup>17</sup>The Harmonics of Aristoxenus, ed. and trans. by Henry S. Macran (Oxford, London: The Clarendon Press, 1902), pp. 88-89.

musical idea comes the commanding form of a composition. The commanding form of a musical piece provides organic unity and development.

Forms in music have several traditional and contemporary labels given to their structures. Polyphony implies one means of formal procedure to our minds, whereas the forms of homophonic music suggest something quite different. Although there may be a multiplicity of musical forms, they all share several factors in common.

Stewart Macpherson suggests four criteria which are tangible evidences of form.<sup>18</sup>

- (1) The grouping of pulses or beats, by means of more or less regularly recurring accents, into measures or bars, producing what is known as TIME;
- (2) The grouping of sounds based upon some such time-scheme into musical figures, phrases and sentences, with definite relationships one to another, resulting in RHYTHMIC SHAPE;
- (3) The grouping of such figures, phrases and sentences into larger paragraphs, described as SUBJECTS, EPISODES, etc., each with its special connection with and relation to the others;

---

<sup>18</sup> Macpherson, Form in Music, p. 3.

- (4) The grouping of these larger paragraphs into complete MOVEMENTS.

Through the examination of each evidence, we may hopefully gain a clearer understanding of the musical process--"from inwardness to lucidity."

The Grouping of Pulses or Beats, by Means of More  
or Less Regularly Recurring Accents, into  
Measures or Bars, Producing What Is  
Known as TIME

Rhythmic order is established through the grouping of pulses. Man responds to auditory sensations with the instinctive desire to group these stimuli into larger patterns. In most instances the human mind organizes perceived rhythmic pulsations into groups of two or three. In terms of the accent, the presence of the stressed pulse establishes metrical rhythm. If, in Figure 8a, the intensity is constant and the tones are sounded at a steady rate of flow, each beat will be perceived equally. If we were to accent every other quarter note, the mind immediately orders a grouping of two beats (Figure 8b). "Metre is the relationship between long and short beats: it is a quantitative principle of order. Metre is duple or triple, and therefore duple and triple time are the two basic forms of the musical beat, subject to many different metrical variations."<sup>19</sup>

---

<sup>19</sup> Heinrich Lemacher and Hermann Schroeder, Musical Form, trans. by Robert Kolben (Musikverlage Hans Gerig: Cologne, 1967), p. 9.

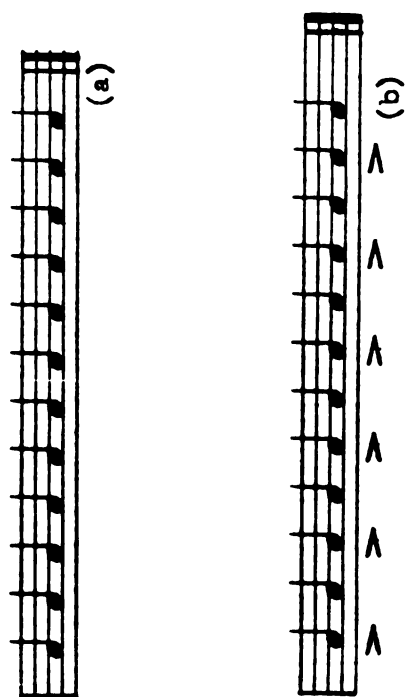


Fig. 8.--(a) Equal Perception of Beat; (b) Grouping of Two Beats

Figures 9 and 10 illustrate the two basic forms of musical time. We feel the pulse in Figure 9 as a repetition of one stressed beat to one unstressed beat. In Figure 10 we feel the pulse as a pattern of heavy light light, and so on. Duple and triple meter offer many avenues for rhythmic variety and interest. Both meters may be explored in terms of simple or compound beat divisions. Regardless of the number of beats in a measure, the fundamental rhythmic pulse will be either duple or triple.



Fig. 9.--Franck, Symphony in D Minor

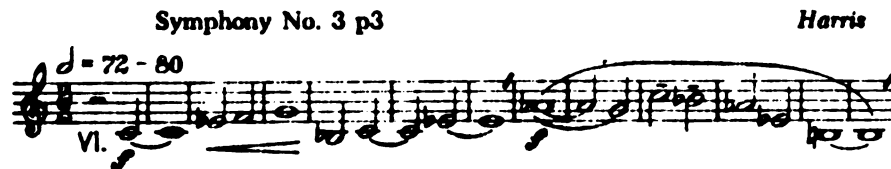
J. S. Bach, Passacaglia in c minor for organ



Fig. 10.--Bach, Passacaglia in C Minor

The notable exception to the preceding statement is the expansion of traditional rhythmic concepts evident in contemporary music. Even though asymmetric divisions may be reduced to combinations of duple or triple meters, some twentieth century techniques endeavor to establish

rhythmic flow through nonmetrical organizations. These practices would remove the continual emphasis in compositions to sustain meters through strong and weak beat patterns. Nonmetrical rhythms remove audible bar lines (Figure 11).<sup>20</sup>



Copyright 1940 by G. Schirmer, Inc. Printed by permission.

Fig. 11.--Harris, Symphony No. 3

For our purpose at hand, the vast majority of pieces listened to and analyzed find their formal characteristics as established in traditional practices prior to the twentieth century.

The Grouping of Sounds Based Upon Some Such Time-Scheme Into Musical Figures, Phrases and Sentences, with Definite Relationships One to Another, Resulting in RHYTHMIC SHAPE

Within the boundaries of meter organization, notes of a composition will often be longer or shorter than the basic beat pulse. Longer notes are inclined to be heard as being "heavier" than shorter notes. The felt distinction between long and short notes creates an impression of flow. As shorter notes are perceived as

---

<sup>20</sup>Leon Dallin, Techniques of Twentieth Century Composition (Dubuque, Iowa: Wm. C. Brown Co., 1964), p. 104.

moving towards longer ones, often times a composer may create unifying rhythmic patterns within the framework of the primary meter. In the second movement of Bartok's Divertimento for Strings, the rhythmic motive employs the combination of the thirty-second note and the double dotted eighth note (Figure 12). The smallest generating idea in music is the motive. Motives are simply self-sustaining fragments within a musical subject. If we analyze measures within a composition, we find that some sounds exhibit similar or identical relationships to other sounds. Motivic replication establishes for the appreciator the import of the composer's musical idea. Second, the re-appearing motive creates the bond of unity, which has been described as "affinity" in Chapter II. Affinity assists any perceiver in the aural retention of the musical whole.

Bartók, Divertimento for Strings, 2nd movement

Molto Adagio

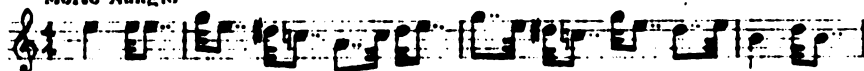


Fig. 12.--Bartók, Divertimento for Strings, 2nd Movement

This is one of the meanings that confirms the scholastic adage: Forma dat esse. Without pushing as far as the metaphysical ground of the formula, manifestly we speak of a being only when we can grasp a plurality in a principle of unity which is precisely its form. This can be the form of a concept, of a mode of reasoning, of a tree, of an animal, or of a man; it can also be that of a work of art. To say that a symphony,



a poem or any book is "formless" is tantamount to denying its existence. This being settled, it remains for us to determine the nature of form in each particular work of art. Strictly speaking, form is proper to each art, and its discernment in the very process of perceiving it is what is called "understanding" a work of art.<sup>21</sup>



Fig. 13. Traditional, "Star Spangled Banner"

As we view the opening measures of the "Star Spangled Banner," the recurring dotted rhythm provides motivic unity and also establishes the dynamic flow of the piece. The arrows indicate the locations where the rhythmic motion seems to pause. Rhythmic design of necessity requires cadence points in order to reinforce the apprehension of balanced cohesive order. We may refer to the sense of a composition in terms of phrases or sentences. In our conversations, we punctuate our words with commas, semicolons, and the like. Punctuation in language makes apprehendable the totality of our spoken meaning. Similarly, a musical piece is a balanced aural Gestalt which achieves its equilibrium through phrases, sentences,

---

<sup>21</sup>Gilson, Forms and Substances, p. 4.

and larger rhythmic periods. Addressing the matter of rhythmic function Gomer Ll. Jones writes:

"Rhythm" in this sense is always at variance with time or meter, precisely as the sense-flows of poetry are at variance with the metrical scheme. Rhythm mitigates the strictness of time, robs it of its squareness and mechanical exactitude. On the other hand, time disciplines rhythm, keeps the flow within due bounds, and permits no "overflow." In the performance of music, that interpreter will be the best who best understands the structural rhythm of the piece, and makes the nicest adjustment between it and the time.<sup>22</sup>

Although musical phrases may be as simple as a unit of two metrical accents, they may be modified in several ways to sustain variety in their unifying role. Motives within the phrase may be altered by sequential variation, augmentation, diminution, or some other kind of development. In Figure 14, the motive is sequentially repeated at varying pitch levels. Rhythmic variation is effectively employed by Brahms, in his Symphony No. 2, the third movement (Figure 15). Figure 16 presents a combination of rhythmic and intervallic alteration. Although Figure 16 demonstrates one motivic technique in the phrase melody, phrase variations may also involve the supporting harmonic voices of any given orchestration.

From the generating rhythmic shape of musical figures, phrases and sentences, comes the inevitable formal organic growth into Subjects and Episodes.

---

<sup>22</sup>Gomer Ll. Jones, An Introduction to Literature and the Fine Arts (Michigan State College Press, 1950), VIII; "Rhythm Tonality and Form in Music," p. 383.



Fig. 14.--Broiles, Study No. 14, "Organ Trumpet"

Brahms. Symphony No. 2, 3rd movement.



Fig. 15.--Brahms, Symphony No. 2, 3rd Movement, (a) Principal Theme--Part I, (b) Trio No. 1 Principal Theme--Part I

Symphony No. 104 3rd movement

Menuetto Allegro

Haydn

Fig. 16.--Haydn, Symphony No. 104, 3rd Movement

Form ought not to be regarded as something external, divorced from the inner organization of the music; structure and texture are functions of the melodic, harmonic, and rhythmic elements, and these in turn assume and exercise different functions in different styles even if their external manifestations be the same. Form, taken in this sense, covers the manifold interrelations of all these aspects, not only the external scheme, but also the principle that governs the inner organization of a particular composition.<sup>23</sup>

The Grouping of Such Figures, Phrases and Sentences Into  
Larger Paragraphs, Described as SUBJECTS, EPISODES,  
Etc., Each With Its Special Connection With  
and Relative to the Others

Subjects are a basic musical entity which may combine several motives. The theme or the subject is often times the specific commanding idea of a musical form (Figure 17). There are instances where the subject may be predicated upon the dissimilar relationship between two integral motives. In the first movement of Mozart's "Jupiter" symphony, the crisp forte of the theme's first motive is in direct contrast to the soft legato flow of the second motive (Figure 18).

Subjects are often created as pure melodies. Although small rhythmic or melodic motives may be present, we are inclined to respond to the whole of the phrase rather than isolate a particular figure (Figures 19-21). Gabriel Fauré clothes the Agnus Dei of the Requiem with a melodic countersubject in the strings as the tenors introduce the cantus firmus (Figure 21).

---

<sup>23</sup> Manfred Bukofzer, Music in the Baroque Era  
(New York: W. W. Norton & Co., 1947), p. 350.

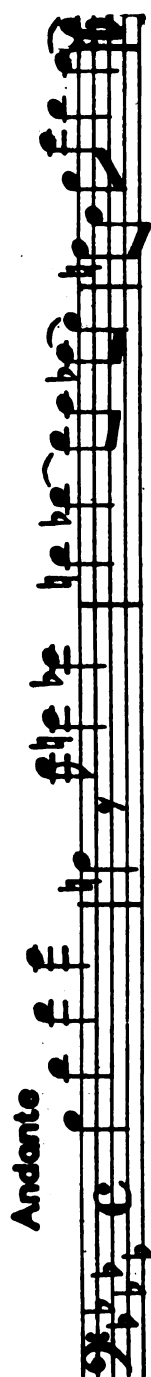


Fig. 17.--Bach, "Ricercar" from the Musical Offering

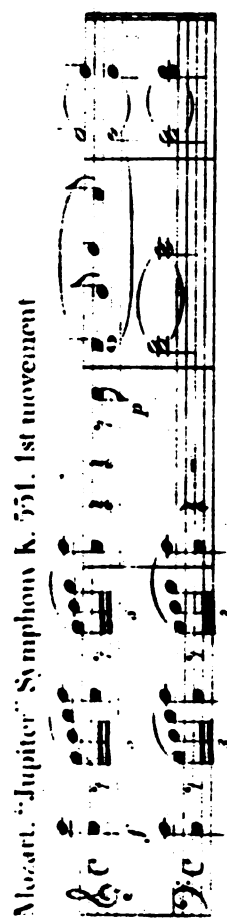


Fig. 18.--Mozart, "Jupiter" Symphony

Mozart, Piano sonata K. 532

Allegro



Fig. 19.--Mozart, Piano "Sonata" K. 332

SARABANDE

Andante espressivo.  $\text{♩} = 76$ .

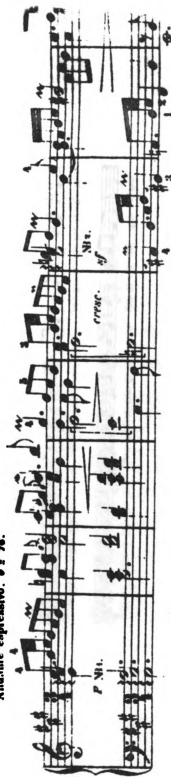


Fig. 20.--Bach, "Sarabande" from English Suite No. 1

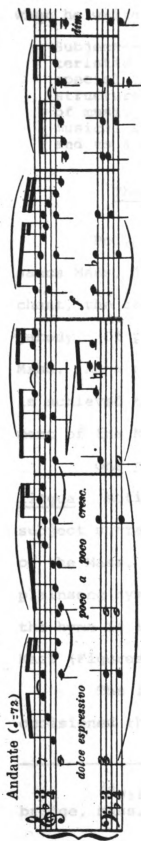


Fig. 21.--Faure, "Agnus Dei" from the Requiem

### Pange lingua Hymn



Fig. 22.--Hymn, "Pange lingua"



Willi Apel affirms the significance of the subject when he writes:

Subject--a melody which, by virtue of its characteristic design, its prominent position, or its special treatment, becomes a basic factor in the structure of the composition. . . . The development of music shows an ever-increasing importance of musical subjects as the staple of the composition and as an element of unification.<sup>24</sup>

The Grouping of These Larger Paragraphs  
Into Complete MOVEMENTS

Polyphony, the formal predicate for the Renaissance Mass, is a generating form in terms of the Plainsong chant, the cantus firmus tenor, and the borrowed chanson parody. Of particular significance is the Cantus-firmus Mass. As a cyclical form, the evolving unity of the Mass is achieved through the commanding subject. Each movement of the Mass is based upon the same melody.

One primary example is Josquin's Missa Pange lingua. Motivic ornamentation and variation of the tenor subject sustain variety and interest through the whole of the Mass. Figure 22 is the liturgical cantus-firmus plainsong hymn, Pange lingua. The unifying function of the hymn is illustrated in several movements from the Mass (Figures 23, 24, 25).

The linear characteristics of polyphonic writing occasioned the use of imitative counterpoint. As early

---

<sup>24</sup>Willi Apel, Harvard Dictionary of Music (Cambridge, Mass.: Harvard University Press, 1944), p. 715.



# CREDO

Superius

Altus

Tenor

Bassus

Patrem

Patrem

Patrem omnipotentem, Pa- trem om- ni- pot- en-

Patrem omnipotentem, Pa- trem om- ni- pot- en-

**Fig. 24.---Josquin, "Credo" from the Missa Pange lingua**



as the Flemish motets of Ockegham and Obrecht, the cantus-firmi were often accompanied by florid lines which were essentially derived from repetitive rhythmic or intervallic motives. The sophistication of Josquin's motet was realized in the emergence of cohesive melodic units called "expositions" or "points."

The most intricate polyphonic form which develops subjects through imitation is the fugue. The fugue is imitative polyphony usually with the ensuing entries answering the subject at the fifth. As a formal structure, the fugue exhibits a tripartite harmonic relationship. After all the voices have initially presented the subject, the tonic foundation may give way to the dominant or relative major key. After an extended modulating section, the final entries re-establish the tonic. Contrast and diversity are achieved through the episodes. One fugue for suggested analysis is the brief but wonderfully precise "Sicut locutus est" from J. S. Bach's Magnificat (Figure 26).

With the advent of the 17th century, the increased presence of instrumental music and the awareness of harmonic entities created an impetus for the innovation of "closed" musical forms. "La seconda pratica," or the free usage of the dissonance, became the pivotal moment when homophony began to take precedence over polyphony.

II. Sicut locutus est

Soprano I

Soprano II

Alto

Tenore

Basso

Continuo

Fig. 26.--Bach, "Sicut locutus est" from the Magnificat

Musical people of that day thoroughly understood that the dissonance is the critical turning point of style. It was therefore not accidental that Monteverdi's dissonance treatment particularly should be sorely and bitterly attacked by Giovanni Artusi, a Canon of Bologna.<sup>25</sup>

Another major factor which contributed to the solidification of the closed form was the metrical ordering of time. Although rhythmic modes provided some sense to polyphonic rhythms, the arbitration of bar-lines and measures demanded consistent movement between the Vertical (harmonic) and the horizontal (melodic) characteristics of the composition.

DeWitt Parker has articulated "six principles of aesthetic form."

---

<sup>25</sup>Knud Jeppesen, The Style of Palestrina and the Dissonance (New York: Dover Publications, Inc., 1970), p. 11.

1. organic unity or unity in variety
2. theme
3. thematic variation
4. balance
5. hierarchy: the principle of subordination
6. evolution: the principle of unified development<sup>26</sup>

The significance of Professor Parker's six principles is one that embodies a generating function. Visual or aural Gestalten are dynamically conceived by the artist and dynamically perceived by the appreciator only when a commanding idea creates cohesion, unity, and a complementarity of elements. Professor Parker concludes:

" . . . each element in a work of art is necessary to its value, that it [the work] contains no elements that are not thus necessary, and that all that are needful are there. . . . Moreover, the value of the work as a whole depends upon the reciprocal relations of its elements: each needs, responds to, demands, every other element."<sup>27</sup>

---

<sup>26</sup>Dewitt Parker, The Analysis of Art (New Haven: Yale University Press, 1926), chap. ii.

<sup>27</sup>*Ibid.*, p. 34.

## CHAPTER IV

### LISTENING--THE BASIS OF ALL MUSICAL ACTIVITY

The basis of all musical advance is more comprehensive hearing. And the one support that every artist must have if he is to go on creating music is a world that listens.<sup>1</sup>

Any individual's experience with music is accomplished through the act of creating, performing, or listening. Many times the innovative musical impulse comes not only from the trained or mature intuitive composer but may occur in the high school theory class, or as improvisation in the junior high jazz ensemble. Some moments of musical endeavor may be given to the performance of composer's works either in the concert hall, the studio, or the home. How often in elementary general music classes are students asked to create spontaneous rhythm patterns which respond to a pattern given by the teacher. Certainly one cannot ignore the endless occasions when individuals from all walks of life may explore their various musical ideas discovered at a

---

<sup>1</sup>Susanne K. Langer, Feeling and Form (New York: Charles Scribner's Sons, 1953), p. 148.



keyboard, through the strumming of a guitar, or in some other creative manner. Apart from the creation and the performance of music, it seems that a vast number of people are primarily listeners. Hardly a day passes that some kind of music does not emanate from one source or another in our environment. Every student in any music class from elementary school through graduate education has heard music. Bennett Reimer writes:

Most persons deal with music only by listening to it, and the special uses of music also stem from listening. All encounters with music must rest on a foundation of listening, for music is made of sound, and sound must be heard to be experienced.<sup>2</sup>

At the present time this writer teaches elementary general music to a student who possesses a hearing deficiency. Even with the aid of two hearing devices and a compact portable amplifier, the student is physically capable of hearing only low-pitched tones and guttural rasps. We would assume, and rightly so, that this child's inability to attend to most of the aural stimuli in the environment would seriously handicap musical perception.

How often, though, do individuals who possess normal hearing acuity merely give recognition to the presence of aural musical stimuli as one sound among many which is received by the ear? Aaron Copland alludes to this occurrence when he writes:

---

<sup>2</sup>Bennett Reimer and Edward Evans, Jr., The Experience of Music (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1972), p. v.

It is insufficient merely to hear music in terms of the separate moments at which it exists. You must be able to relate what you hear at any given moment to what has just happened before and what is about to come afterward.<sup>3</sup>

In any performing situation, each musician involved only renders a "musical" interpretation of the work when he discerns the dynamic affinity among the musical elements.

There are many instances in music appreciation classes when teachers fail to understand their students' inability to "hear" patterns, motives, colors, or form designs.

Charles Leonhard suggests:

Listening is viewed by some as a passive, nonparticipative activity quite discrete from other types of musical experience. Our conception of listening is that it should be an active perceptual process, rewarding in its own right but also integral to all musical activity--playing, singing, and composing. Listening is the basic musical activity and it rightly pervades all others.<sup>4</sup>

It is not enough to simply assume that any person who hears physiologically, naturally responds to or experiences the dynamic relationships in musical pieces. It was established in Chapter I that individuals select and organize those stimuli which have a relevance for

---

<sup>3</sup>Aaron Copland, What To Listen for in Music (New York: McGraw-Hill Book Co., Inc., 1939), p. 6.

<sup>4</sup>Charles Leonhard and Robert W. House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Co., Inc., 1959), p. 118.

their needs. If the initial act of the organism is to order primary input into aural or visual Gestalten, then one's ability to "hear" the vital whole of the musical work depends upon an educational process. Professor Leonhard continues:

Hearing and feeling patterns of intensity and release constitute the first requisite of musical hearing and musical performance. Without this the listener perceives nothing and the performer expresses nothing. The first task of music education must be to develop this sensitivity without any intrusions, intellectual, mathematical, or critical.<sup>5</sup>

James L. Mursell cautions that the significance of hearing as the basis of music education is in fact often overlooked or taken for granted.

. . . music exists for no other purpose than to be heard. . . . Unfortunately this is one of those obvious truths that is all too often overlooked. . . . The education of the musician, all the way from the most elementary to the most advanced level, is apt to place almost its entire emphasis upon the training of the muscles or the training of the eye, and to leave the all-important training of the ear to chance.<sup>6</sup>

If hearing is defended as the basis of all musical experience and learning, the question arises as to aurally, what should individuals be able to apperceive? Having assumed the intrinsic value of musical experience, aural perception should be a discriminating function

---

<sup>5</sup>Ibid., p. 88.

<sup>6</sup>James L. Mursell, Music in American Schools (New York: Silver Burdett Co., 1943), p. 144.

which decisively enables the hearer to respond to the ordered whole of the work.

Whatever the mode being experienced--music, poetry, dance, or sculpture--aesthetic sensitivity consists of the same two behaviors. First, the person must perceive the expressive conditions being presented. Second, he must respond to what he perceives.<sup>7</sup>

Creating, performing, and listening all share one common factor. Each shares a fundamental premise based upon the keen awareness of a temporal Gestalt. The common factor is hearing.

A theory of music education, predicated upon more comprehensive hearing, will be developed through a three-dimensional dynamic morphological model. The significance of the model is in its potential application for establishing a systematic basis for music learning. The model will be executed upon the fundamental factor of hearing common to the separate areas of musical experience (i.e., creating, performing, and listening). In an attempt to articulate a specific philosophical and educational teaching strategy for music, the morphological model may serve as one means of unifying the three factors of musical experience. Creating, performing, and listening are manifested in terms of an individual's ability to hear musical wholes.

---

<sup>7</sup> Bennett Reimer, "Putting Aesthetic Education to Work," Music Educators Journal 59 (September 1972): 30.

### The Morphological Model

The interest in the morphological model stems from the studies of Guilford, whose efforts have been toward the classification and organization of the intellect. Many initial studies into the nature of the learning process have attempted to illuminate the development of the human intellect. These early studies stressed the historical definition of intelligence as:

1. The ability to learn
2. The ability to achieve
3. The ability to do well on an intelligence test
4. The ability to solve problems
5. The ability to remember
6. The ability to attend voluntarily<sup>8</sup>

Even in the effort to compress the definition of intelligence into a single ability, observation and thought regarding the operation of the mental process has left little doubt that the nature and development of the human mind is indeed a complex matter.

The directed outcome of all musical activity is the enlightenment of the learner. A literate musician gives evidence of his skills in terms of intelligent listening, and a competent grasping of musical notation and nomenclature. In the effort to construct teaching strategies which will accomplish the task of increasing musical knowledge, any input regarding the development of

---

<sup>8</sup>Robert G. Sidnell, Compilation and condensation of On Guilford, Part I, Mus. 803, 1971.

the human intellect holds significance for the process of music education.

Early definitions of intelligence as proposed by Binet, Wechsler, Boring, Spearman, and others, stemmed from the notion that all intelligence factors were bonded together by an existing but unprovable G factor. The recognition that several factors of intelligence were identifiable but not empirically related rendered the explanation of "intelligence" almost inoperative.

Spearman, quoting J. S. Mills, writes:

The tendency has always been strong to believe that whatever receives a name [intelligence] must be an entity of being, having an independent existence of its own. And if no real entity answering to the name could be found, men did not for that reason suppose that none existed, but imagined that it was something peculiarly abstruse and mysterious.<sup>9</sup>

Professor Guilford's morphological model is constructed upon the assumption that several seemingly separate factors of the intellect may share parallel properties. Contemporary searches for a unifying factor of intelligence have employed the multivariate factor analysis method. Factor analysis may be defined as a number of different tests given in one subject area (music for example--pitch, rhythm, memory, discrimination, etc.) with the test results then correlated to see if those test results have any significant factor in

---

<sup>9</sup>Charles Spearman, The Abilities of Man (New York: Macmillan, 1927), p. 14.

common. As such, the three-dimensional morphological model endeavors to codify the activities of the intellect as a " . . . cross classification of phenomena in intersecting categories, rather than in categories within categories as in a hierarchial model. . . . " <sup>10</sup>

Guilford labels the three dimensions of the model as Operation, Product, and Content. Each dimension is recognized as being part of the intellect. Within each dimension distinct parallel sub-factors are seen as functioning co-equally. Content is described as what we know. What we know is manifested as verbal (semantic), nonverbal (figural and symbolic), and behavioral. The Operations dimension suggests the activities of the intellect in terms of the "thinking process (i.e. memory, cognition, creative-thinking, divergent production, etc.). The Product dimension " . . . pertains to the way or form in which any information occurs . . . product is seen as a synonym for the term conception, which pertains to ways of knowing or understanding." <sup>11</sup>

Professor Guilford's text, The Nature of Human Intelligence, is an exhaustive presentation which examines some common factors to be found in the functional process

---

<sup>10</sup>Joy Paul Guilford, The Nature of Human Intelligence (New York: McGraw Hill Book Co., Inc., 1967), p. 47.

<sup>11</sup>Ibid.

of the human intellect. These factors are uncovered through the dimensions of Operation, Product, and Content.

For the task at hand, the principle of the Guilford model proves itself to be most useful in laying the dynamic perceptual foundation of all musical experience. The musical activities of creating, performing, and listening share a cross classification of phenomena based upon a common factor which is hearing dynamic Gestalten.

Figure 1 presents the Guilford dimensions and their related sub-factors.

Figure 2 presents the dynamic listening model. The three dimensions and their sub-factors will be defined and developed in terms of the experienced phenomenon of heard musical wholes.

### Creating

Many times, the excitement generated through discovery learning creates an irresistible desire to create again. How often in our own experience, or in the observable experience of students, has the grasping of new knowledge and the attainment of deeper insights given rise to an inner anticipation as new explorations are begun? Apart from the re-creative act of performance, one significant emphasis of music education is to inculcate students in the use of musical symbology.



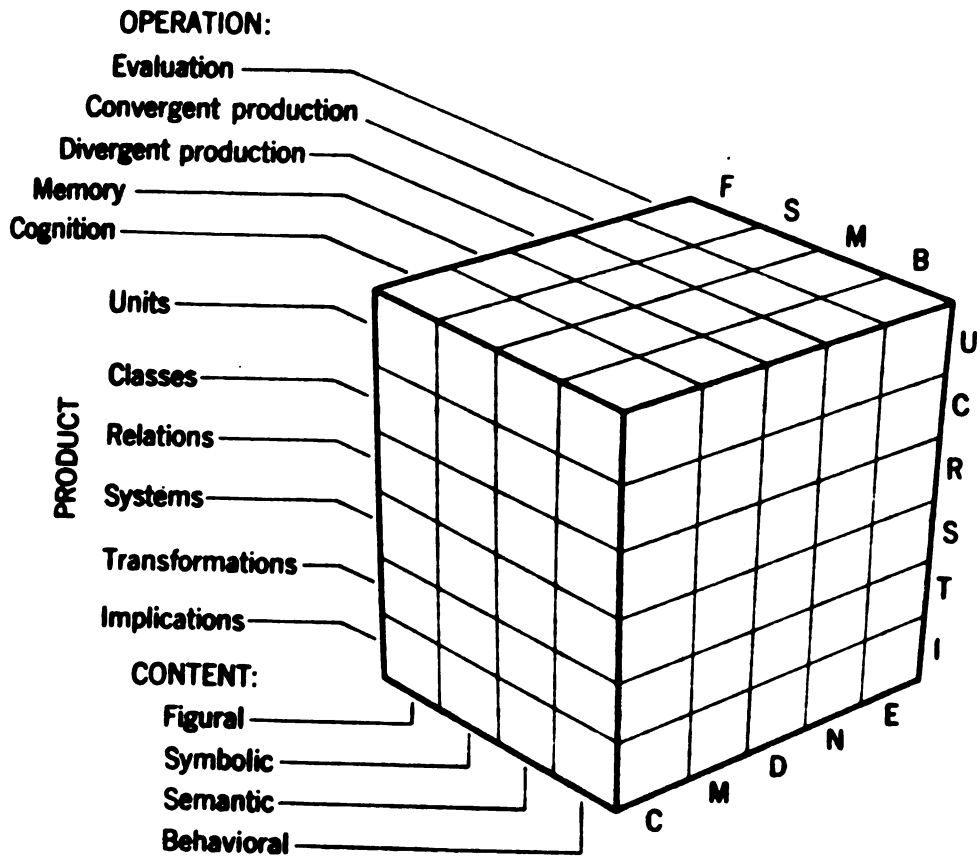


Fig. 1.--Guilford: The Morphological Model<sup>12</sup>

<sup>12</sup>Guilford, Human Intelligence, p. 63.

## DYNAMIC LISTENING MODEL

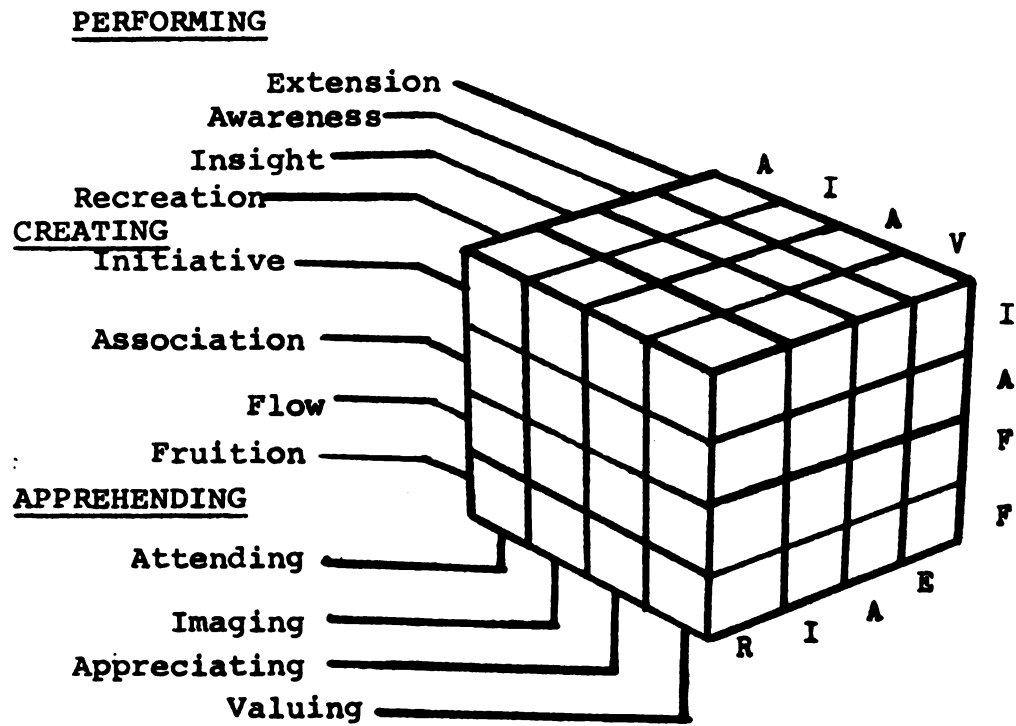


Fig. 2.--The Dynamic Listening Model

The learner must perceive the relationship between his learning experiences and the problem he wants to solve. . . .

In learning music theory the student must be led to see that the skills and understandings he acquires are applicable to the refinement of his musical behavior. Likewise, the student practicing studies and exercises must perceive the relationship between his practice and expressive musical results. If this is not so, both phases of music study inevitably become sterile, routine, and monotonous and have little meaning for the student.<sup>13</sup>

Learning musical theory and nomenclature provides students with the means by which to explore their own conceived tonal and rhythmic patterns. The ability to transcribe inner inspirations into actual sounds satisfies not only the natural creative instinct, but enables each individual to evaluate his "idea" as a stabilizing force which generates dynamic unity. The development of a musical score invites the student to recognize the inherent necessity of order, balance, unity, and variety required within a composition. Discussing the problem of value in music, Leonard B. Meyer writes:

A good piece of music must have consistency of style: that is, it must employ a unified system of expectations and probabilities; it should possess clarity of basic intent; it should have variety, unity, and all the other categories which are so easy to find after the fact.<sup>14</sup>

---

<sup>13</sup>Leonhard and House, Foundations and Principles, pp. 132-33.

<sup>14</sup>Leonard B. Meyer, "Some Remarks on Value and Greatness in Music," in Perspectives in Music Education Source Book III (Washington, D.C.: Music Educators National Conference, 1966), p. 84.

Creating may also characterize the listening process. It has been assumed that the foundation of all musical activity is hearing. Activities focusing about composition or theory may enable students to more clearly apprehend musical structure and design. Listeners who are capable of rendering aural judgments about what they hear are discriminators. Musical discrimination brings with it a sense of knowing what music is great and what is not.

For our purpose at hand, the creating dimension of the morphological listening model will focus about the act of musical composition. The expression of one's intuitive creative impression may only be fully realized when the "heard idea" is actively explored and reshaped. Composing makes clearer for the student the musical "sense" of any piece--the means through which he determines the organic unity which welds all rhythmic and tonal motives.

In the broad scope of the total music education program, musical composition is only one aspect of creative expression. Based upon the listening model, the creative "personality" of each individual is present in the experiences of "creative performing" and "creative listening."

The teacher's responsibility may not be to separate those who are creative from those who are not, but rather to encourage all students to be creative, to enjoy the pursuit of creation, to believe in the

possibilities of achieving the impossible, to believe in themselves, and to express themselves in their own ways to the limits of their own knowledge and abilities at any given time.<sup>15</sup>

1. Initiative--The activities within the music classroom ultimately acquaint the student with the primary musical elements--rhythm, melody, harmony, form, and color. Musical ideas may inevitably be isolated in terms of rhythmic patterns, melodic contours, chord sequences, instrumental and vocal qualities, or potential designs.

Experienced composers can readily ascertain the unifying potential of a musical idea. Similarly, students at all levels of instruction can be guided in recognizing and cultivating their musical ideas.

Spontaneous musical creating may begin with the teacher's preparation of the class in exploring new concepts and terms. For example, the ostinato is a device which may be completely unfamiliar. Within the teaching sequence, the student gains knowledge and experience which may be applied to the use of the ostinato as an accompaniment with a class song, and as a basis for creative expression.

Primary elementary children discover the rhythmic intrigue of contriving and combining various patterns. Simple melodies may be formed through the exploration of

---

<sup>15</sup> Margery M. Vaughan, "Cultivating Creative Behavior," Music Educators Journal 59 (April, 1973): 40.

tonal relationships within scales or in experimentation with prescribed melodic shapes. Initiative is encouraged when we assist minds in the uncovering of the latent generating potential of any musical element.

2. Association--The musical idea is like the architect's blueprint. From the basic design, an actual building process manipulates and fits together the necessary elements which combine to make the finished product.

The musical idea must lend itself to manipulation and variation. The notion of unity in variety suggests that composers seek to sustain the perceiver's interest by continually re-affirming the unifying idea in fresh musical contexts. A contrapuntal melody does not follow a prescribed formal design, but rather through motivic metamorphosis the structural plan unfolds. The motives within a melody provide cohesiveness, but may also lend themselves to several useful variation techniques. Transformations of the original motives in terms of augmentation, diminution, transposition, and melodic expansion and contraction, are just several means of developing perceivable unity with provocative variety.

As the creator labors with his piece, his fundamental idea is constantly called upon to maintain dynamic equilibrium. Because of a structure of tonal and rhythmic relationships the composition achieves a rule of order.

3. Flow--refers to the possibility of the musical idea as being perceived in the mind of the composer in terms of providing the matrix--"the fundamental movement of melody or harmonic progression."<sup>16</sup>

Macpherson's second evidence of form was defined as:

- ii The grouping of sounds based upon some such time-scheme into musical figures, phrases and sentences, with definite relationships one to another, resulting in Rhythmic shape;<sup>17</sup>

From rhythmic shape came the evolvement of subjects, Episodes, and finally movements. Professor Langer describes the musical matrix or flow as that melodic or harmonic progression " . . . which establishes the greatest rhythm of the piece and dictates its scope."<sup>18</sup>

In terms of mixing the various musical elements (i.e., rhythms, colors, melodic or harmonic motives) as to obtain a complementarity of repetitions and contrasts, a flow results which inevitably provides the form of the work.

4. Fruition--A composer knows when his work is completed. At this occasion of figuratively standing back

<sup>16</sup>Langer, Feeling and Form, chapter eight--"The Musical Matrix."

<sup>17</sup>Macpherson, Form in Music, p. 3.

<sup>18</sup>Langer, Feeling and Form, pp. 122-23.

and reflecting upon what is done, the creator senses a quietness of spirit knowing that nothing need be added or taken away.

Many textbooks dealing with the history of music often relate the anecdotes of Beethoven's sketchbooks. The sketchbooks reveal a composer who constantly re-wrote melodic themes and rhythmic motives.

In the shaping of the musical idea, the composer constantly reworks and reviews the vital unifying elements of his piece. It would seem that the successful composer is the one who can consciously determine in his work the establishment of dynamic wholeness. In order that wholeness be achieved, each composer must intuitively discern the power of any musical idea in generating a fundamental form.

Fruition fulfills the obligation of the composer to the listener. Fruition brings about the uninterrupted illusion of passing time which never completely satisfies the curiosity of the listener. Each composition should offer to the listener a continuing potential for the discovery of new insights. This is the composer's task.

### Performing

The performer makes aurally manifest the patterns of tones and rhythms which the composer has symbolically communicated. Once the musical work has been brought





to fruition, it is given to the world to be re-created by many different artists in diverse circumstances.

Variations of technical skills, coupled with relative degrees of perceptual sensitivity, may cause some performances to be erratic or disjunct. James Mursell writes:

In thinking about expression in music education the fundamental thing to see is that we are not dealing with something that is arbitrarily imposed upon music at the whim of the performer,--something that can be put in or left out just as we like. Expression is demanded by the structure of the music, and every expressive nuance aims merely at liberating the beauty and meaning of the musical structure.<sup>19</sup>

Performance does not exist where there is no technique. Each musical instrument, including the voice, demands some technical or manipulative skill. It stands to reason that an individual cannot fully satisfy the composer's ultimate musical demands when fingering, breathing, or reading skills are not at accomplished levels. Technical skills are necessary for re-creation, but should only be considered as a means to achieving that purpose. Bennett Reimer concludes:

Craftsmanship is necessary if a person is to be an artist-performer, but it is not sufficient. Technical mastery is a means, not an end. The end is aesthetic re-creation; for this end to be attained, craftsmanship must be transformed into artistry by the performer's sensitivity and imagination.<sup>20</sup>

---

<sup>19</sup>James L. Mursell, School Music Teaching (New York: Silver, Burdett and Co., 1931), p. 255.

<sup>20</sup>Reimer and Evans, The Experience of Music, p. 27.

In terms of what the composer hears in his mind as intuitive impulse and the real listening experience of the appreciator in the concert hall, two specific aural acts have occurred. In each instance that a work is presented, its primary movement is renewed. Through musical notation and indications, the composer has outlined the essential musical contours of the work. The artist's task is twofold.

- (1) To develop a necessary sensitivity to organic relationships of motives, phrases, periods, sections, and movements. In other words, the performer senses the Gestalt or the commanding form of the composition as if he were the creator:
- (2) Through a process of re-creation, the performer gives life to the work. The generating idea conceived in the mind of the composer is given physical reality. Although the re-creative effort must maintain an integral faithfulness, with the commanding form of the piece, the individuality of each interpreter vitalizes the actual moment of physical presentation.

Performance is the completion of a musical work, a logical continuation of the composition, carrying the creation through from thought to physical expression. Obviously, then, the thought must be entirely grasped, if it is to be carried on. Composition and performance are not neatly separable at the stage

marked by the finishing of the score; for both spring from the commanding form and are governed throughout by its demands and enticements.<sup>21</sup>

Roger Sessions discusses the role of the performer in terms of imaginative re-creation. "It is his [the performer's] task, and I believe his whole task, to apply his imagination to discovering the musical gestures inherent in the composer's text, and then to reproducing them . . . with fullest participation on his own part."<sup>22</sup>

Performance, viewed either as an inseparable element in the total classroom musical scheme, or as a specialized activity for the dilettante and professional, requires the apprehension of inevitable movement.

The sub-factors in the Performing dimension will be developed as the means through which comprehensive hearing may be enriched and expanded as applied to either individual or group instrumental-vocal participation.

1. Extension--The first requisite of instrumental or vocal performance would seem to be the extension of "heard" primary tonal and rhythmic musical elements through an expressive medium (e.g., voice, trumpet, violin, etc.). Very often, the absence of "expression,"

---

<sup>21</sup>Langer, Feeling and Form, p. 138.

<sup>22</sup>Roger Sessions, The Musical Experience of Composer, Performer, Listener (New York: Atheneum, 1965), p. 74.

or "musicality," in many adolescent and adult performances may be directly related to a more fundamental neglect-- the inability to sense tonal or rhythmic entities as part of an overarching structure. Instruments of definite pitch most often require that the player or singer respond to the tonal boundaries of the key, the scale, or the harmonic context. Instruments of indefinite pitch require recurring precision in relation to the beat and other rhythmic patterns.

Figure 3 may fulfill three necessities for the young trumpet player. First, the student is given an opportunity to learn the correct fingering for G (open). More important, he is asked to perceive and feel the flow of the pulse. Of greatest significance, however, is the aural acuity which may be advanced if the individual plays the four G's in tune, one with another.



Fig. 3.--Extension: The Development of Intonation

Vocal sight-reading is often a disastrous occurrence because chorus members cannot hear the specific pitches of their voice lines, either intervallically related one to another, or in relation to a key center.

For the percussionist, basic aural discrimination may be the recognition of a tonal pattern correctly or incorrectly played upon a xylophone or marimba. Also, the technique of the paradiddle is not an end in physical coordination, but should be valued as a means in establishing the necessary regularity of repeated rhythmic groups.

Extension is the directed outcome of fundamental musical perception. To perceive aesthetically in the musical sense is to understand the dynamic expressive essence of sound. This may be begun through the discovery of time, tempo, pitch direction, either upward or downward, melodic flow upward or downward, tone color, rhythm patterns, and so on. Any student who can begin to conceptualize primary rhythmic and tonal properties has completed the initial task of becoming not only a discerning listener, but in this instance a sensitive performer.

The Michigan Department of Education's Minimal Performance Objectives for Music Education at the elementary level states:

Performance is a means of making concrete some kind of abstract musical concept. . . . One can easily describe an ascending stepwise melody, but until one has sung or possibly played one he is unaware of what this concept really is. Performance brings aural and verbal concepts to life.<sup>23</sup>

2. Awareness--Simply describes the discernment of the composer's essential musical idea in terms of given guidelines. For example, pitch, relative note values, or specific rhythmic articulations are generally presented in the score. Before any performer can renew the living aural whole, he must be able to interpret the musical score.

Reading a score involves meter discriminations, usually of twos or threes, based upon the identification of strong and weak beats. Performance may necessitate an understanding of the formation of measures as related to a given beat note.

Another aspect of interpreting the musical score is one's response to dynamic variations. Louds and softs, crescendi and diminuendi, are often used by a composer to establish moments of tension and relaxation. Dynamics may also be used to set apart an instrumental or vocal color for contrast, or perhaps to highlight the return of a unifying motive.

---

<sup>23</sup>Minimal Performance Objectives for Music Education (Elementary), Michigan Department of Education, Revised 1973.

Interpreting the score correctly is an obligatory responsibility to the composer. In writing a musical score, the composer has set into symbols the essence of his musical idea. The establishment of the musical score provides for the performer the essential factors of tempo and dynamics which are necessary to presenting the basic design of the piece.

Roger Sessions writes: The musical text is obviously the link between composer and performer. . . . By means of it the composer sets down as clearly as possible the substance of his musical thought in order to indicate to the performer as exactly as he can what is to be done to reproduce this thought in sound.<sup>24</sup>

3. Insight--The moment when individuals sense and respond to the dynamic order of the composition. The threshold of insight provides for the performer that occasion of fulfillment or resolution which was initially experienced by the composer when he discovered the fundamental Gestalt of the piece.

Beyond the relative constancy of tonal systems, rhythmic values, and tempo suggestions, insight brings meaning to the intangible musical qualities of dynamic shading and the awareness of phrase inflections and cadences. Very often conductors and teachers refer to the "life" or the "breathing" of the music. Ascending melodic passages are felt to "grow" or to slightly

---

<sup>24</sup>Sessions, The Musical Experience, p. 68.



crescendo as tones move through tones. The anticipation of a cadencial pause may bring with it an implied ritardando, even though it might not be directly given in the score.

The uncovering of the composer's intentions in terms of the commanding form of the work is not the final task of the performer, but rather only the beginning. The discovery of any potential unifying, musical idea presents to the performer the impending mutual relationships among the musical elements.

In order to deepen one's insight into a composer's work, the performer's acquaintance with style and form would be most useful. As a part of history, music has endured change. A knowledge of style characteristics enables each performer to adhere to the intent of the composer's work in terms of instrumentation, color, and indicated or lack of indicated musical directions.

Through the study of form, each student may gain insight into the structure of music by the identification of recurring themes, motives, or any other musical occurrence. The recognition of the unifying order of any piece which creates unity and variety is the piece's "form."

Simply stated, insight is the inward hearing of the aural whole. At this moment the work of the composer begins to become fused with the "personality" of the performer.

Aaron Copland writes:

For a composition is, after all, an organism. It is a living, not a static, thing. That is why it is capable of being seen in a different light and from different angles by various interpreters or even by the same interpreter at different times. . . . Every piece has an essential quality which the interpretation must not betray. . . . In other words, every composition has its own style which the interpreter must be faithful to. But every interpreter has his own personality, too, so that we hear the style of a piece as refracted by the personality of the interpreter.<sup>25</sup>

4. Re-Creation--The performer brings to life the musical work. As a catalytic agent, the artist gives actual being to the musical idea. The moment of re-creation completes the hope of the composer. That which is heard in the mind of the creator may now be heard in the mind of the appreciator.

It has been assumed that music is movement in time. The unifying idea which springs from the mind of the composer is given concrete form by the performer. That performer who cannot establish the necessary balance between the composer's directions and his own personality will hinder the renewal of the work's dynamic flow.

In any instrumental or vocal circumstance, teachers should ultimately base their adjudications, suggestions, and goals in terms of advancing their students' awareness of the heard musical whole. The

---

<sup>25</sup> Copland, What To Listen For, pp. 247-48.

spontaneous and enduring thrill encountered in a band, orchestra, choral, or solo performance is one that comes from keen listening. For the music educator, the significance of any re-creative experience may only be realized when any student's perception of a musical whole becomes manifest through performance.

In stating six outcomes that a foundational music curriculum should offer in terms of performance, James Mursell provides two outcomes which speak directly to the matter of the re-creative performer.

1. It should seek to develop an awareness of and response to the living structure of music. . . . What is involved is the ability in listening and to convey in performance the phrase design, the melodic pattern, the harmonic structure, and the larger architecture of music.
2. . . . this foundational curriculum should be designed to develop awareness of and response to the basic elements of musical expression and interpretation-dynamics, tempo, and tone quality. . . . Expressive treatment is not added to music after its objective structure has been mastered. It grows out of and serves to clarify that structure; and in this sense it must be apprehended.<sup>26</sup>

### Listening

It has been determined so far that the activities of performing and creating unquestionably rely upon an individual's ability to sense the impending Gestalt of a musical idea.

---

<sup>26</sup> Mursell, Music in American Schools, pp. 260-65.



The work which is created and then interpreted by a performer should lead to a decisive conclusion--it is heard by an appreciator. It would seem that the majority of individuals who are involved with music are listeners. With the advent of record players, tape cassettes, and a constant presence of some kind of musical stimulus, the contemporary listening musical public has grown to staggering proportions. All about us we see people who are involved with country and western, blues, acid rock, pop, gospel, and so on. Public school and college students discuss, with an ample portion of fluency, their musical perceptions of Elton John and Harry Chapin. Many secondary and university courses have been constructed which endeavor to enlighten the perceiver in terms of "appreciation," or "intelligent listening."

Our efforts as music educators need not be substantially directed toward the motivation of individuals to hear music--for that interest is already there--but rather in the directing of aural discrimination and the cultivation of aesthetic awareness. Bennett Reimer states that the primary purpose of public school music education is:

. . . to develop every child's potential to understand and appreciate the art of music, and thereby to gain access to the richness and beauty which high quality aesthetic experience provides. The

goal of musical instruction, therefore, is not simple pleasure or transitory enjoyment, but lasting appreciation and deep understanding of musical art.<sup>27</sup>

Professor Leonhard has identified two principles of musical learning which are established upon the notion that listening is vital to musical growth.

Principle #4. Learning depends upon impressions received by the senses. In musical learning, hearing, sight, and kinesthetic feel are all involved. It appears obvious that hearing merits primary emphasis, but much musical learning is carried on without sufficient attention to musical hearing. Aural awareness is the key to all musical learning, and the music-learning situation should be constantly focused on ear training. Sight and kinesthetic feel are important but properly come into play only after aural concepts are well established.

Principle #7. Musical learning has a sequence of synthesis-analysis-synthesis. Efficient musical learning is always directed at a musically intelligible whole, not towards the bits and pieces of musical structure, musical technique, or musical experience. Once a concept of the whole has been established, there begins the analysis phase during which the parts are differentiated in relation to the whole. This, in turn, leads to a re-organization or restructuring of the whole, their parts, and the interrelationships among them are clarified.<sup>28</sup>

Chapter I presented the need for exploring the principle which governs the act of sensory selection as paramount to understanding one of the profound characters of our experience, and in particular of our

---

<sup>27</sup>Bennett Reimer, "The Curriculum Reform Explosion and the Problem of Secondary General Music," Music Educator's Journal 52 (January 1966): 38.

<sup>28</sup>Leonhard and House, Foundations and Principles, pp. 134-35.



musical experience. The perception of the mutually related integral elements of art objects, and specifically in music the grasping of the aural dynamic whole, fulfills the requirements of music education as aesthetic education.

Comprehensive hearing may be achieved through the development of a refined aural perceptual attitude. A psychological dictionary defines "attitude" as " . . . a more or less stable set or disposition of opinion, interest or purpose, involving expectancy of a certain kind of experience, and readiness with an appropriate response."<sup>29</sup>

In aural perception, the illusion of moving time creates a musical whole in the mind of the appreciator. The unifying characteristics of the musical idea are discerned with the foreknowledge that they generate the dynamic integrity and equilibrium of the piece. Edwin John Stringham writes:

Of course, any aural synthesis comparable to the composer's intuition and skills of craftsmanship should not be demanded of the average listener. Yet--and here is the nub of the thing--creation and appreciation are supplementary and necessarily interdependent, in a sense, for the ultimate realization of any musical work of art. No matter how perfect the skills, the architectonic structures, or the artistic ideas that embody them, they are

---

<sup>29</sup>James Drever, A Dictionary of Psychology, Revised by Harvey Wallerstein (Baltimore: Penguin Books, 1964).



for nought if the effects do not arouse due aesthetic contemplation and enjoyment in the listener, and thus bring to life what was, up to this point, a mere "blue-print" for music.<sup>30</sup>

The ultimate goal of music education should be the awakening of keen aural perceptive responses. The aesthetic experience only occurs, or is enhanced, when individuals are attuned to the expected sensory qualities of any art.

Throughout the whole range of sensations, perceptions, and emotions which we do not class as aesthetic, the states of consciousness serve simply as aids and stimuli to guidance and action. They are transitory, or if they persist in consciousness sometime, they do not monopolize the attention: that which monopolizes the attention is something ulterior, to the effecting of which they are instrumental. But in the states of mind we class as aesthetic, the opposite attitude is maintained towards the sensations, perceptions, and emotions. These are no longer links in the chain of states which prompt and guide conduct. Instead of being allowed to disappear with merely passing recognitions, they are kept in consciousness and dwelt upon.<sup>31</sup>

Through the sub-factors of the Listening dimension, the perceiver may consciously expand his ability to hold the whole of a composition within his mind.

1. Attending--The power of music to touch the human body and mind is inescapable. The driving repetition of

---

<sup>30</sup> John Edwin Stringham, Listening to Music Creatively (Englewood Cliffs, N.J.: Prentice-Hall, 1959), p. 5.

<sup>31</sup> Herbert Spencer, The Principles of Psychology, Vol. II (New York: D. Appleton and Co., 1871-76), pp. 646-47.

the beat, engaging rhythmic patterns, melodic shapes, harmonic textures, or color combinations constantly attract the attention of the ear. Individuals may unconsciously strum their fingers or tap their feet as a response to received rhythmic stimuli. For example, the observable response to hard rock tunes is often in terms of total body movement.

Perceptive musical hearing must begin with one's ability to voluntarily attend to any musical stimulus. Simple attention gives meaning to those moments of musical experience which have been found to be absorbing or interesting. Attending is the fundamental ingredient necessary to apprehending the flow of any composition.

Primary rhythmic focus brings to the awareness of the student that music does indeed move. The cadence of the beat may be grasped by young and old alike. Elementary school children begin to expect the regular occurrence of the pulse regardless of the tempo. Rhythmic attention establishes the significance of music as an art of time rather than space.

Fundamental aural discrimination may be further developed in terms of sensing melodic configuration or direction. Not everyone immediately discerns an ascending pattern of tones as becoming higher in pitch, or a descending pattern of tones as becoming lower. Musical attending may also be sharpened through experience with

harmony, color, or form. Triad distinctions in terms of major, minor, diminished, or augmented qualities are acquired aural skills. Beat divisions, instrumental or vocal colors, form designs, dynamic comparisons, tonal centers, and a host of other rhythmic-tonal variations all demand of the listener the ability to be perceived by their separate distinguishing characteristics.

Attending is the voluntary aural scrutiny of any musical stimulus. From this beginning, the careful listener may begin to respond to the "felt" relationships among the sounds he has heard.

2. Imaging--From the foundation of attending, the perceiver must begin to sense the connections that musical sounds have one with another. Each listener must hear beyond the isolated moments of a musical performance which at random surprise the ear. For example, themes or striking features in a score are not ultimately important in being responded to as separate entities, but rather in their context of musical continuity.

Imaging is inner hearing. Beyond the physiological act of the hearing process, the perceiver begins to create in his mind the anticipated succession of sounds as they seem to lead one to another. Melodic awareness certainly is more than the recognition of a series of tones, one following the other. Melodies must be heard

as part of an organic unity--each tone sharing a relationship with the tone before it and after it.

The flow of a melody is the sensation of movement. Announcing phrases may create a feeling of expectancy, responsive phrases provide resolution.

The notion of harmonic progression must focus beyond specific chord quality or placement. In terms of our traditional harmonic heritage, the dominant chord leads to the tonic. In major and minor scale patterns ti demands do.

Colors are combined and set against one another to suggest unity in variety. Form structures are heard to provide a unifying bond for the musical elements so that balance is maintained.

In any musical work, the vital elements--melody, rhythm, harmony, color, form--are co-equally joined together by the composer. Each element shares an intimate relationship with the other. Through imaging, the listener initially responds to the totality of the piece.

3. Appreciating--Professor Leonhard defines appreciation as:

. . . the apprehension and enjoyment of the aesthetic import of music. Appreciation includes feelingful responsiveness to all the expressive elements of music such as rhythm, harmony, melody, texture, timbre, tonality, form, and phrase line. To

appreciate music is to perceive its embodied meaning, to become immersed in the unfolding and development of the musical idea.<sup>32</sup>

In appreciating, the composer's generating musical idea is fully grasped by the listener. Here the perceiver not only responds to the musical flow, but instinctively anticipates the unfolding musical matrix. The listener awaits the composer's manipulation and exploration of basic motives and themes.

The appreciative listener has become acutely sensitive to all of the delicate nuances employed by the composer. The "deep mine of musical resource" opened by the commanding form is foreseen in his mind. Rhythmic or tonal motives achieve significance as unifying devices which will return in some subsequent or altered manner.

For the discriminating appreciator, each composition brings the anticipation of expectations and probabilities. How the composer manipulates patterns, creates unity in variety, or generates any kind of musical curiosity, is eagerly sought by the listener.

The mind of the perceiver is constantly creating, simultaneously, with the music he is hearing. The listener perceives in the work the generating form originally

---

<sup>32</sup>Leonhard and House, Foundations and Principles, p. 114.

experienced in the mind of the composer. Discussing the aesthetic merit of a musical composition, Julius Portnoy writes:

. . . a musical composition depends on two things: first, on how well the composer can convey his feelings and moods, either directly to us or through an interpreter; secondly, on the worth of those feelings and moods which are conveyed. . . . A proper aesthetic reaction depends on whether the listener can recapture the spirit of the original mood. . . . In the wake of this emotive experience the recipient must then be able to form a discerning judgment on the worth of those feelings and moods. . . . He can do this only through the hearing and intellect.<sup>33</sup>

4. Valuing--A good listener is one who is able to make discriminating judgments concerning the music he hears. The sensitive musical ear learns to isolate the salient qualities of any piece. Those impressions retained in the mind are subsequently catalogued as being musically desirable and interesting. As one's ability to grasp the whole grows, so the expectation of vital experience with the work also increases.

Music educators would agree that all students should be exposed to worthy or great pieces of music. There are surely instances when teachers tacitly justify a particular listening lesson or specific historical unit because the composition is acknowledged as a masterpiece. The characteristics of the specific

---

<sup>33</sup> Julius Portnoy, The Philosopher and Music (New York: The Humanities Press, 1954), p. 243.

style period also have enduring meaning for the contemporary listener. The crux of the matter is, however, that certain musical works have achieved lasting greatness due to the fact that they are held high in our musical regard. Compositions that we desire to hear again and again continually affirm their dynamic unity, but never dull the anticipation of the ear. Roger Sessions writes:

The question, once more, is what we demand of the composer. Do we demand always what is easiest, music that is primarily and invariably entertainment, or do we seriously want from him the best that he has to give? In the latter case, are we willing to come to meet him, to make whatever effort is demanded of us as listeners, in order to get from his music what it has to give us?<sup>34</sup>

Hopefully, one primary task of music education is to guide listeners into discovering for themselves the vital aesthetic qualities inherent in each composition. The hearing of all kinds of music should become a personally desired experience, rather than a prejudiced occasion directed only by one's "likes" or "dislikes."

R. D. Darrell refers to the listening experience as an active participation with the musical whole.

Instead of concentrating on tunes, or even melodic principles, focus your sharpest attention on their dynamic qualities, not only the basic beat, but also

---

<sup>34</sup>Sessions, The Musical Experience, p. 100.

the counter-rhythms, the fast-slow and loud-soft contrasts, the ways in which a sense of momentum is built up, sustained, and finally brought to a conclusive step.<sup>35</sup>

A good listener values any piece of music that fulfills his expectation of organic movement existing in time.

Hence, valuing represents a fundamental musical advance--more incisive hearing.

---

<sup>35</sup>Robert D. Darrell, Good Listening (New York: Alfred A. Knopf, 1953), p. 29.



## CHAPTER V

### THE PRACTICAL APPLICATION

The logical sequence from the presentation of the theoretical Dynamic Listening Model is the establishment of several practical classroom applications. The model will be used as the foundation for the structuring of a creative lesson at the elementary school level, a performing experience at the junior high school level, and finally a listening module for senior high school students.

#### Elementary--Creative

One vital area of creative musical experience may be found in the development of instrumental accompaniments for class songs. Accompaniments not only promote student interest, but more importantly lend themselves in aiding the grasping of musical concepts.

It has been stated that as individuals begin to hear the whole of a musical piece, the recognition of the unifying characteristics of tonal and rhythmic patterns becomes of primary importance. This elementary lesson is designed to afford third grade children the opportunity of creating rhythmic patterns, employing

percussion instruments of indefinite pitch. Each pattern should extend through two metrical accents. The given rhythmic parameters of the lesson specify the written and performed use of proportional notation (i.e., half notes, quarter notes, and eighth notes). Each child should be able to notate correctly his created pattern on a staff, with an appropriate meter signature and the proper placement of bar lines. This pattern will then be played with several other patterns providing an accompaniment with the piece.

As one lesson extracted from many in the course of a year's work, the success of this endeavor should be founded upon the students' awareness of several basic musical factors:

1. Recognition of the pulse;
2. The ability to group pulses into two's, three's, or four's;
3. A working knowledge of proportional rhythmic values and their uses;
4. A working knowledge of meter signatures;
5. The necessity of notating upon a staff;
6. The function of bar lines;
7. A thorough familiarity with the song (musical and ethnic implications);

8. An awareness of one unifying device in rhythmic writing (e.g., diminution);
9. The ability to discern color characteristics among the several indefinite-pitched percussion instruments found in most elementary music classrooms (e.g., cymbals, castenets, maracas, many different drums, rhythm sticks, cow bells, and some Orff instruments).

The song that has been selected is the Mexican folk song Don Gato. This writer has found that most third grade elementary children readily respond not only to the musical aspects of the piece, but also to the text (Figure 1).

Through the creating sub-factors of Initiative, Association, Flow, and Fruition, will hopefully come not only the stimulation of each child's creative impulse, but also the practical reinforcement of the aforementioned basic musical factors.

1. Initiative.--has been defined as the ability of the individual to discriminate the generating potential of any musical element.

The pervading musical notion of this experience is one of movement. Proportional notation indeed suggests varying durations of time. Each child's

# Don Gato

English Words by Margaret Marks    Mexican Folk Song <sup>1</sup>

This is a story told in song. It is called a *ballad*. Take turns singing a verse of the story.

The musical score for "Don Gato" is written on a single staff in 2/4 time. The melody is in D minor, indicated by a key signature of one flat (B-flat) and a common time signature of 2/4. The score consists of six lines of music, each with a corresponding line of lyrics. The lyrics are written in a simple, clear font. The musical notation includes notes, rests, and accidentals. The lyrics are as follows:

1. Oh, Se - ñor    Don Ga - to    was a cat, \_\_\_\_\_  
 2. "I a - dore    you!" wrote    the la - dy cat, \_\_\_\_\_

On a high, red roof    Don Ga - to sat. \_\_\_\_\_  
 Who was fluff - y, white, and nice and fat. \_\_\_\_\_

He went there to read a let - ter,    meow, meow, meow,  
 There was not a sweet - er kit - ty, \_\_\_\_\_

Where the read - ing light was bet - ter,    meow, meow, meow,  
 In the coun - try or the cit - y, \_\_\_\_\_

'Twas a love note for Don Ga - tol \_\_\_\_\_  
 And she said she'd wed Don Ga - tol \_\_\_\_\_

Fig. 1.--Mexican Folk Song, Don Gato

<sup>1</sup>Beatrice Landeck; Elizabeth Crook; Harold C. Younberg; and Otto Luening, Making Music Your Own, Book 4 (Morristown, N.J.: Silver Burdett Company, 1965), "Don Gato," p. 174.

initial act should be one of discovering the latent rhythmic potential that various patterns may provide (Figures 2 and 3).

As the children experiment with their rhythmic patterns, three necessary fundamentals should be stressed. First, a pattern is because of repetition. Second, the rhythm values used must be properly placed in measures as determined by the appropriate meter signature. Third, the selection of a pattern in terms of how each student "hears" or "feels" that it seems right. The distinctive rhythmic quality of Don Gato, as generated by its ethnic heritage, may subconsciously provide some clues in which the student may pursue his pattern experimentation.

When teaching the principle of the pattern, examples of repetition may be easily illustrated. Through the student's observation of each other's attire, many pattern designs may be seen. Todd's shirt may be a series of red dots upon a white background, or Anita's dress may present an orderly arrangement of green cubes residing upon a backdrop of solid yellow. Each observed pattern will present to the students' eyes the equal measurement of space. If the repeated dots or cubes declare specific order visually, then the connection to the aural ordering of time, through repeated beats or rhythmic motives, may be accomplished.

Some children's first rhythmic efforts may be rather limited in terms of employed notation. Once



Fig. 2.--Initiative: Pattern for Wood Block



Fig. 3.--Initiative: Pattern for Castanets

beginning with a half note or a quarter note, the necessity of adding eights or of mixing the rhythms becomes frightening. The teacher should encourage each child to explore all the specified proportional values indicated in the parameters of the lesson. From this point, many children become rather critical of their own work. In some instances, children will rework their accompaniments until satisfaction is achieved. The quest for satisfaction may be evidenced in terms of how each student accepts his accompaniment as being musically and personally interesting.

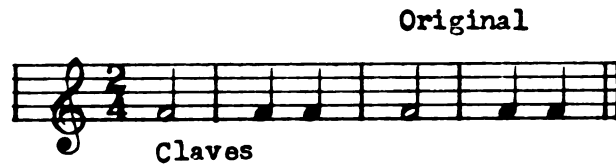
The fulfillment of the Initiative sub-factor is achieved when each student has developed a rhythmic pattern which meets the requirements of the rhythmic parameters, reflects the principle of repetition necessary to a pattern, and is perceived inwardly as being a useful accompaniment.

2. Association.--has been defined as the reaffirmation of the unifying musical idea in fresh musical contexts--the notion of unity in variety.

In terms of repeated aural patterns unity may be readily perceived. One rhythmic variation such as diminution may be explored with the idea of presenting contrast to the established pattern (Figures 4 and 5).

Through the use of imagination, many elementary school children have little difficulty in comprehending

the meaning of boredom. Everyday examples of a preponderance of color or particular taste are quickly decided upon as making life dull and uneventful. Similarly, the recognition of variety is seen to provide interest and contrast.





by the original pattern as altered through diminution (Figure 7). Verses five and six would then be joined by the repetition of the original pattern.



the movement of any rhythmic pattern in its relationship to the song.

Having assumed that the children are thoroughly acquainted with the piece, the teacher should now play the song at the piano and ask the children to read silently their rhythmic creations. As the melodic and harmonic progression of the piece unfolds, each child will hopefully begin to evaluate the relationship between the musical stimuli from the keyboard and his own rhythmic accompaniment.

In a very basic sense the children may initially experience the relationship of one created musical element and its integral partnership with the resulting whole of several other musical elements. Any third grader's awareness of the entirety of his rhythmic creation, in terms of its unity and variety joined with the presentation of Don Gato, fulfills the sub-factor of flow.

4. Fruition.--Fruition terminates the obligation of the composer to the listener, therefore bringing about the uninterrupted illusion of passing time which never completely satisfies the curiosity of the listener.

For the elementary creative lesson, the simple essence of Fruition is the moment when students combine their created rhythmic patterns and indeed do accompany

Don Gato. Because this creative occasion involves the participation of relatively inexperienced minds and ears, it would be most useful if the teacher were to join together those patterns which offer the greatest degree of contrapuntal movement. The rhythmic interplay, resulting from the coupled patterns, would provide an adequate example of illusory time continually arresting the attention of the ear. In terms of reaffirming the given musical factors necessary to the foundation of this creative experience, Fruition provides for the following events:

1. Each student's playing of his accompaniment requires that he perceive the pulse. The accompaniment must proceed within the tempo boundary established by the teacher. Also, the pulse must be experienced within its specific occurrence with any other performing member (i.e. the teacher playing the piano, and several other percussion players).
2. Accurate meter perception necessitates the grasping of pulse groups. In Don Gato, a pulse grouping of two may be established through the ordering of one accented pulse moving to one unaccented pulse.

3. A working knowledge of proportional rhythmic values may be viewed through the student's ability to correctly play his accompaniment--the recognition of rhythmic symbols as specifying varying units of time.
4. Through a working knowledge of meter signatures, each student understands the meaning of 2/4 time. The quarter note is the established pulse, and two pulse units are given to each measure. From the foundation of the given pulse, any written notation in the accompaniment finds a direct relationship to that pulse.
5. The performed accompaniment may be accurately symbolically communicated because of the use of a staff, bar lines, and the presence of a meter signature.
6. Because of any student's familiarity with the song, the impending addition of each accompaniment is anticipated in the mind. Each student senses his accompaniment as part of the ensuing musical whole.

Either performed individually or collectively, each rhythmic accompaniment becomes musically successful when it seems to generate to the perceiver dynamic wholeness.

### Junior High--Performing

The performer makes aurally manifest the patterns of tones and rhythms which the composer has symbolically communicated. One example of the Performing dimension, as the basis for a teaching sequence, is in its application to the private instrumental lesson. The piece that has been selected for the individual lesson experience is Choral Melody No. 19, by J. S. Bach, as arranged for solo trumpet courtesy of Leonard B. Smith and published by Belwin Mills (Figure 8).

Apropos of the selection criteria for the creating and listening examples, this junior high teaching sequence reflects one among several skill and achievement levels that may be or have been attained by the students. In this instance, the performance level is rated by the publisher (Belwin Mills) as first division band material.

It has been this writer's experience that the choral melody arrangement in terms of range, tessitura, fingerings, and embouchure-breath control presents a most valuable musical experience for the intermediate junior high trumpet student.

In many situations, students possessing lesser or greater ability would better profit from another musical choice. No matter how elementary or advanced any performer's ability is, each will enhance his practice effort if a conscious attempt to perceive

B♭ Cornet

Chorale Melody No. 19<sup>2</sup>

J. S. BACH

Arr. by LEONARD B. SMITH

Very slowly

mf

f

p

mf

p

f

mf

f

p

f

p

f

rall.

pp

Fig. 8.--Bach, Chorale Melody No. 19

<sup>2</sup>J. S. Bach, Chorale Melody No. 19, Arranged by Leonard B. Smith (Melville, N.Y.: Belwin-Mills Publishing Corp., 1973).

the created musical whole is pursued. To this end, Chorale Melody No. 19 will be examined through the performing sub-factors of Extension, Awareness, Insight, and Re-Creation.

1. Extension.--has been defined as the directed outcome of fundamental musical perception--the understanding of the dynamic expressive essence of sound through the discovery of time, tempo, pitch, color, melodic flow, and rhythm patterns. Through the sub-factor of extension, each performer may begin to conceptualize primary rhythmic and tonal properties as found to be inherent in any composition.

The initial step in this teaching sequence is to focus the student's aural attention. It would seem most useful for the teacher to play the composition, thus providing a model. The teacher's performance should be prefaced with several suggestions concerning the student's perception of specific musical qualities as generated by the piece. For example, what may be heard in terms of tempo, dynamics, phrasing, tonality, articulations, and repeated musical ideas.

After the first hearing is completed, some students might respond as follows:

1. The piece is slow moving;
2. A continual recurrence of pauses;


- 3a. The illusion of tension and relaxation created dynamically;
- 3b. A decreasing dynamic level occurring at the cadences (except for measure sixteen);
4. Tonguing devoid of staccatos or accents;
5. The awareness of alternating minor and major tonalities;
6. If the score is studied while the teacher performs, the recognition of low D as requiring the lengthening of the third valve slide in order to improve intonation;
7. The melodic and rhythmic importance of the repeated eighth-two sixteenth note pattern. The pattern ascends melodically, and returns in the phrases until the cadence occurring in measure twelve--hence, repeated cadencial similarity may be viewed as a unifying element.
8. Cadencial finality emphasized by the rallentando beginning in measure nineteen.

For Chorale Melody No. 19, the process of extension is complete when any student hears the salient musical qualities contained therein, and begins to anticipate his own performance through the expressive medium of the trumpet.





2. Awareness.--Is the ability of any performer to interpret the musical score. If the essence of any composer's musical idea is to be grasped by a performer, then that performer must be able to discern the function of each musical symbol.

The second step in the teaching sequence is a careful analysis of the score. A necessary dialogue between teacher and student should emphasize the following points:

1. A suggested metronome indication to reflect the arranger's notation of "very slowly" (e.g. Largo  = 50);

2. All dynamic symbols should be understood



*mf* , *f* , *p* , *pp* ,  , 

3. The use of the (breath)  , and the (fermata) 

4. The purpose and correct articulation of the slur

 .

5. The meaning of rallentando (rall.)

6. The accurate execution of elongated and grouped rhythms as related to the counting of the pulse (e.g.  = one beat,  = one and one half beats--the dot carries the sound of the quarter through the next expected regular pulse.

7. A careful examination of all accidentals in relation to correct fingerings, and their implied continuation throughout an entire measure;
8. A simple explanation of a chorale--its historical, liturgical, and musical significance;
9. Some comment regarding the contributions and greatness of J. S. Bach;
10. In lieu of any specific tonguing suggestions, the teacher might offer for consideration legato or connected articulations.

At this juncture, the student and teacher may find it advantageous to play those particular measures which seem to pose potential technical or musical problems. For example:

1. Some students may have difficulty sensing the relationship of the initial eighth-two sixteenth anacrusis pattern with beat four.
2. From measure four to measure five, the preparatory and actual lengthening of the third valve slide when D1 is played.
3. In measure fourteen, the ear and the embouchure must carefully anticipate the diminished seventh leap between F# and E<sup>b</sup>.

4. Some students may give evidence of coordination difficulty in measure sixteen--the alternating fingering between A and G#.
  5. The ascending melodic line, moving from measure eighteen through measure nineteen, requires great concentration in terms of necessary breath support and embouchure control in order to adequately support the dynamic level at  $G^2$ .
  6. As the piece concludes in measure twenty, the integrity of the phrase must be maintained as breath control sustains the forte in measure nineteen, the ensuing rallentando, and the decrescendo to pianissimo.
3. Insight.--is that moment when individuals sense and respond to the dynamic order of the composition. At this moment the work of the composer begins to become fused with the "personality" of the performer. Through insight, the performer begins to sense the musical implications of the composer's communicated symbols. Insight brings meaning to dynamic shading, phrase inflections and cadences, "growing"--ascending melodic lines, or in essence, the "life" of the music.
- In terms of Chorale Melody No. 19, insight brings to reality the student's visual perception of arbitrary

score symbols, transformed into an inner expectation of the musical sense and flow they represent.

Insight is the foundation for the "musical" quality of each performing occasion. Most teacher adjudications of the chorale melody would be suggestions relating to the essential musical directives presented in the score. Student insight would become apparent if dynamic and rhythmic inflections were felt to be instinctively necessary. Hence, some crescendo markings, fermati, and loud-soft indications might not be necessary in the score to insure the students' awareness of phrasing and general musical direction.

One point for consideration is the presence of many musical indications in the score as given by the arranger. In terms of assisting the student in the uncovering of the musical whole, it might be advantageous to cover the indications as the student plays through the chorale. As the teaching sequence unfolds, the process of insight should be an initiatory act, rather than a learned response. When the junior high trumpet player begins to anticipate the mutual relationship among the elements, then a "musical" performance of the piece is rendered. At this moment, the presence or absence of arbitrary score symbols becomes of secondary importance. A performer's insight brings about the discernment of the dynamic order of any composition.

4. Re-Creation.--completes the hope of the composer. That which is heard in the mind of the creator may now be heard in the mind of the appreciator.

Re-Creation is the culminating point of the teaching sequence. At this moment, the student has accomplished two tasks.

1. The mastery of all technical and musical factors which are necessary to the physical playing of the piece (i.e., fingerings, breath-embouchure control, and the correct interpretation of given musical symbols presented by the composer).
2. Is cognizant of the musical whole (i.e., phrases, rhythmic and melodic patterns, in essence the commanding form of the work).

In the act of re-creation, the student is ready to perform the piece as a free agent--free from any comment by the teacher and endeavoring to interpret the piece faithfully. What originated in the mind of the composer, as a generating musical idea, is now intimately experienced and presented by the performer.

The chorale melody comes with a piano orchestration. An appropriate climax for the teaching sequence is the student solo accompanied by the teacher.

Re-Creation provides any individual with the expanded ability to hear a musical whole in terms of

performance. Re-Creation is an evidence of musical growth. Each performing occasion becomes more significant when the individuals who participate are capable of renewing, in actuality, any composer's inspiration free from intrusion and diversion.

#### High School--Listening

In many instances, the high school curriculum provides lecture classes for those individuals interested in music: appreciation, theory, and composition classes usually offer an in-depth survey of style and structure beyond that information generally received in band, orchestra, or chorus rehearsals.

Within the selective environment of the special music class, many students are first exposed to the experience of making aural judgments concerning pieces of music. Teacher comments referring to various historical eras and style characteristics very often are illustrated with recorded excerpts.

It has been stated that any composer's ultimate responsibility is to his listening audience. If the composer's task is to evolve a musical whole, then any eventual perceiver of that whole is one who can readily discern the dynamic relationship among the musical elements. Teaching intelligent listening is a process which assists any individual, as he consciously

expands his ability, to hold the whole of a composition within his mind.

To think of selecting one example of a generating musical idea from the abundance that exists is a rather awesome task. Also, the idea as a developed musical whole should lend itself to being grasped from the experiential and cognitive musical levels of most high school students.

The piece that has been selected for analysis is selection No. 46, Vol. II., Increasing-Diminishing, from The Mikrokosmos, composed by Béla Bartók (Figure 9). Mary H. Wennerstrom writes:

In his pedagogical collections of music, Bartók presented contemporary materials and techniques in a systematic manner. His larger works have a tightness of construction and an exciting and convincing melodic and rhythmic development; these works place Bartók among the great composers of the first half of the twentieth century.<sup>3</sup>

As a master of compositional devices, Bartók is an epitome of the composer whose works are generating forms, resulting from the perfect order of unity and variety.

The Wennerstrom text suggests two areas of analysis.

---

<sup>3</sup>Mary H. Wennerstrom, Anthology of Twentieth Century Music (New York: Appleton-Century-Crofts, 1969), p. 1.

NO. 46, INCREASING—DIMINISHING <sup>4</sup>

Moderato,  $\text{♩} = 120$

46

*legato*

*pp*

*p*

*mf*

5

10

15

20

25

*p*

*pp*

*p*

*pp*

[58 sec.]

Fig. 9.--Bartók, Increasing-Diminishing

<sup>4</sup>Béla Bartók, Mikrokosmos, No. 46, "Increasing-Diminishing," in Anthology of Twentieth Century Music, ed. Mary H. Wennerstrom (New York: Appleton-Century Crofts, 1969), p. 1.



1. List all the elements which are "increasing and diminishing." How do they contribute to form?
2. Discuss the pitch material of this piece (scale basis, tonal center).<sup>5</sup>

Through the sub-factors of Attending, Imaging, Appreciating, and Valuing, the Wennerstrom analysis directions will be incorporated as to present one example of advancing any perceiver's hearing of the musical whole.

1. Attending.--has been described as the voluntary aural scrutiny of any musical stimulus. Voluntary attending might include triad quality distinctions, form designs, dynamic comparisons, and many other rhythmic-tonal variations.

Assuming that several rhythmic-tonal variations can be distinguished by the students, the first area of inquiry would be the isolation of "heard" musical qualities. After two or three presentations of Increasing-Diminishing, each student should endeavor to write down those salient musical stimuli which seem to strike his ear. For example, some students would respond to the increase and decrease in dynamic levels e.g. (pp, p, mf, f, mf, p, pp). Others might indicate the pattern of rhythmic values moving from long to short and back to long again:




---

<sup>5</sup>Ibid.

Several remaining observations might include the expansion and contraction of intervallic leaps, canonic imitation in contrary motion which is particularly evident beginning at measure nine, the moderately moving tempo (♩ = 120), the color quality of the performing instrument (piano), and the phrygian modality centered on E (measures 1-14) coupled with the transposition to the phrygian mode centered on F, which emphasizes the diminished fifth interval of B falling to F (measures 15-28).

Simply stated the attending sub factor, as applied to the hearing of Increasing-Diminishing, is the initial response of the student to the piece in terms of distinct perceivable musical criteria--dynamics, rhythms, color, modality, intervals, and a contrapuntal device.

2. Imaging.--has been defined as inner hearing--that occasion when any perceiver begins to sense the integral flow and relationship among the musical elements of any piece. Through imaging, the listener responds to the totality of the work.

One aural manifestation which should occur in the Imaging sub-factor is the recognition of generating form structures as providing a unifying bond for the musical elements. The first analysis suggestion of the Wennerstrom text asks for a list of the elements which are " . . . increasing and diminishing. How do they contribute to form?"

Imaging could be made clearer to the students through the manipulation of the reproducing stereo channels. Because of multi-track equipment, the mechanical isolation of each voice line would serve to focus the students' contrapuntal awareness towards the increasing and decreasing elements. Because the specific increasing and diminishing elements have been identified in the Attending sub-factor, it would now become crucial that each student identify in his mind the collective similarity of all the elements increasing and diminishing together (i.e., dynamics, note values, and interval range).

The collective effect of the combined musical stimuli might be diagrammed in the following manner.

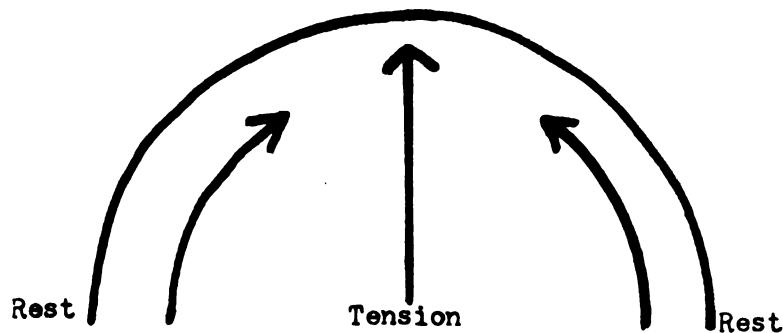


Fig. 10.--Increasing-Diminishing: An Arch Form

The increasing and diminishing of the musical elements seems to generate to the ear an arch structure. Very simply, the arch structure may be perceived as a flow which is manifested in terms of rest building to tension, and then subsiding again to rest. Although Bartok's larger works show great diversity in their formal designs, the third, fourth, and fifth string quartets are in five movements which may be analyzed as arch structures.

As stated previously, through imaging, the listener begins to sense the whole of the piece. The arch form of Increasing-Diminishing is an aural unity which incorporates canonic imitation and modal change for added variety.

3. Appreciating.--the composer's generating musical idea is fully grasped by the listener. Here the perceiver not only responds to the musical flow but instinctively anticipates the unfolding primary movement of melodic or harmonic progression.

The sub-factor of appreciating is not one so much of discovery, but rather of expectancy and reflection. When the perceiver begins to expect of the composer the development of themes and motives into a unified whole of passing time, then the mind of the perceiver senses, as did the composer's, the potential generating impetus of any musical idea.

Appreciating is a time of synthesis. Having assumed the presentation of the composition throughout the entire teaching sequence, enlightened ears are prepared to hear the composition from a new perspective. The implication of the title, coupled with the impending sense of the elements creating a feeling of increase and decrease, will sharpen the anticipation of an ordered musical statement.

Although Increasing-Diminishing is a rather simple example of a generating idea, its fundamental process of development and completion may at later stages enable students to discern the import of musical ideas in evolving phrases, movements, concerti, and symphonies.

4. Valuing.--has been described as the ability of any listener to make discriminating judgments concerning the music he hears. Compositions of lasting greatness or interest continually renew their dynamic unity, but also never discourage the anticipation of the ear.

The value of Bartók's Increasing-Diminishing is that in its suggested performing time of 58 seconds, an organic musical entity has been created. For the neophyte high school listener, the piece can fulfill his expectation of unified flow existing in time. Any

student's awakened or increased sensitivity to a dynamic musical whole is valuable because it represents a fundamental musical achievement.

### Conclusion

If music education should be aesthetic education, then every music educator must have a thorough grasp of the dynamic principle of order necessary in aesthetic objects, and as specifically applied to music. Of equal importance, is the recognition that each activity in any music learning situation be directed towards the continual awakening or refinement of the instinctive sensory perceptual act--the aural discernment of created, performed, and listened to musical wholes.

As a viable part of the educational process, music education must provide a fundamental rationale from which definitive goals and objectives may evolve. The curriculum is constantly changing. In view of increased demands for accountability and relevancy, the contemporary music educator must be able to evaluate his current teaching practices in the light of a philosophic rationale. When this is accomplished, clear principles and concepts may emerge providing the means by which each teacher may establish some momentum in the solving of his problems. In an article entitled "How Music Concepts Are Developed," Asahel Woodruff

discusses the advancement of music education in terms of affective and conceptual criteria.

The human being is an affective organism. Affect is always present in his behavior, just as the perception of meaning is always present. . . . One cannot form a concept without an affective component, and he cannot have an affective experience without a conceptual component. The result of this duality is that our appreciations and motives are acquired simultaneously with our conceptual patterns. We learn to like those objectives and conditions that are emotionally rewarding to us as we experience them. This implies very clearly what is required of us in the pursuit of goals of appreciation and of taste in music.<sup>6</sup>

From the premise that man perceives behaviorally and aesthetically in terms of dynamic aural Gestalten comes a useful basis for the teaching of music.

---

<sup>6</sup>Asahel D. Woodruff, "How Music Concepts Are Developed," Music Educators Journal, 56 (February 1970): 53-54.

## **SELECTED BIBLIOGRAPHY**



## SELECTED BIBLIOGRAPHY

### Books

- Apel, Willi. Harvard Dictionary of Music. Cambridge, Mass.: Harvard University Press, 1944.
- Arnheim, Rudolph. Art and Visual Perception a Psychology of the Creative Eye. Los Angeles, Calif.: University of California Press, 1969.
- \_\_\_\_\_. Toward a Psychology of Art. London: Faber and Faber, 1966.
- Augustine. Confessions. Book XI. Translated by Edward B. Pusey. New York: P. F. Collier and Son, 1909.
- Beardsley, Monroe. Aesthetics. New York: Harcourt, Brace, and Co., 1958.
- Broudy, Harry S. "A Realistic Philosophy of Music Education." Basic Concepts in Music Education. 57th Yearbook of the NSSE. Chicago: University of Chicago Press, 1958.
- Bukofzer, Manfred F. Music in the Baroque Era. New York: W. W. Norton, 1947.
- Butcher, Samuel Henry. Aristotle's Theory of Poetry and Fine Art. New York: Dover, 1951.
- Colwell, Richard. The Evaluation of Music Teaching and Learning. Contemporary Perspectives in Music Education Series. Englewood Cliffs, N.J.: Prentice-Hall, 1970.
- Copland, Aaron. What To Listen for in Music. New York: McGraw-Hill Book Co., Inc., 1939.
- Dallin, Leon. Techniques of Twentieth Century Composition. Dubuque, Iowa: Wm. C. Brown Co., 1964.

- Darrell, Robert D. Good Listening. New York: Alfred A. Knopf, 1953.
- Davie, Cedric Thorpe. Musical Structure and Design. New York: Dover, 1966.
- Dewey, John. Art as Experience. New York: Capricorn Books, 1958.
- Drever, James. A Dictionary of Psychology. Revised by Harvey Wallerstein. Baltimore: Penguin Books, 1964.
- Earhart, Will. Meaning and Teaching of Music. New York: Witmark Educational Publications, 1935.
- Farnsworth, Charles H. Education Through Music. New York: American Book Co., 1909.
- Gilson, Etienne. Forms and Substances in the Arts. New York: Charles Scribner's Sons, 1966.
- Guilford, Joy Paul. The Nature of Human Intelligence. New York: McGraw Hill Book Co., Inc., 1967.
- Hanslick, Edward. Vom Musikalisch-Schönen. Ein Beitrag zur Revision der Aesthetik der Tonkunst. 9th ed. Leipzig: J. A. Barth, 1896. Translated by Gustav Cohen as The Beautiful in Music. 7th ed. London: Novello, 1891.
- Hausman, Jerome J. "A Contemporary Aesthetics Curriculum." Toward An Aesthetic Education. Washington, D.C.: Music Educators National Conference, 1970.
- Helmholtz, Herman. On the Sensations of Tone as a Physiological Basis for the Theory of Music. London: Longmans, Green, and Co., 1875.
- Jeppesen, Knud. The Style of Palestrina and the Dissonance. New York: Dover Publications, 1970.
- Jones, Gomer Ll. An Introduction to Literature and the Fine Arts. VIII. "Rhythm Tonality and Form in Music." East Lansing, Mich.: Michigan State College Press, 1950.
- Knieter, Gerard L. "The Nature of Aesthetic Education." Toward an Aesthetic Education. Washington, D.C.: Music Educators National Conference, 1970.

- Koffka, Kurt. Principles of Gestalt Psychology. New York: Harcourt and Brace, 1935.
- Kohler, Wolfgang. Gestalt Psychology. New York: Liveright Publishing Corp., 1947.
- Krathwohl, David R.; Bloom, Benjamin S.; and Masia, Bertram B. Taxonomy of Educational Objectives The Classification of Educational Goals. Handbook II: Affective Domain. New York: David McKay Co., Inc., 1964.
- Landeck, Beatrice; Crook, Elizabeth; Younberg, Harold C.; and Luening, Otto. Making Music Your Own, Book 4. Morristown, N.J.: Silver Burdett Company, 1965, "Don Gato," p. 174.
- Langer, Susanne K. Feeling and Form. New York: Charles Scribner's Sons, 1953.
- Lemacher, Heinrich and Schroeder, Hermann. Musical Form. Translated by Robert Kolben. Musikverlage Hans Gerig: Cologne, 1967.
- Leonhard, Charles and House, Robert W. Foundations and Principles of Music Education. New York: McGraw-Hill Book Co., Inc., 1959.
- Macpherson, Stewart. Form in Music. London: Joseph Williams.
- Macran, Henry S., ed. The Harmonics of Aristoxenus. Translated by Henry S. Macran. Oxford, London: The Clarendon Press, 1902.
- McHose, Allen Irvine. Basic Principles of the Technique of 18th and 19th Century Composition. New York: Appleton-Century-Crofts, Inc., 1951.
- \_\_\_\_\_. The Contrapuntal Harmonic Technique of the 18th Century. New York: Appleton-Century-Crofts, Inc., 1947.
- Meyer, Leonard. Emotion and Meaning in Music. Chicago: University of Chicago, 1956.
- \_\_\_\_\_. "Some Remarks on Value and Greatness in Music." Perspectives in Music Education Source Book III. Washington, D.C.: Music Educators National Conference, 1966.

- Mursell, James. "Growth Process in Music Education." Basic Concepts in Music Education. 57th Year-book of the NSSE. Chicago: University of Chicago Press, 1958.
- \_\_\_\_\_. Music in American Schools. New York: Silver Burdett Co., 1943.
- \_\_\_\_\_. School Music Teaching. New York: Silver, Burdett and Co., 1931.
- Parker, Dewitt. The Analysis of Art. New Haven, Conn.: Yale University Press, 1926.
- Portnoy, Julius. The Philosopher and Music. New York: The Humanities Press, 1954.
- Prall, David. Aesthetic Analysis. New York: Thomas Crowell Co., 1964.
- Rader, Melvin. A Modern Book of Esthetics. New York: Holt, Rinehart and Winston, 1966.
- Reimer, Bennett. "Aesthetic Behaviors in Music." Toward an Aesthetic Education. Washington, D.C.: Music Educators National Conference, 1970.
- \_\_\_\_\_. and Evans, Edward Jr. The Experience of Music. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1972.
- Sanford, Fillmore. Psychology, A Scientific Study of Man. Belmont, Calif.: Wadsworth, 1961.
- Schopenhauer, Arthur. The World as Will and Idea. From the German, by R. B. Haldane and J. Kemp. New York: Scribner's, 1948-1950.
- Schwadron, Abraham A. "Aesthetic Values and Music Education." Perspectives in Music Education Source Book. III. Washington, D.C.: Music Educators National Conference, 1966.
- Sessions, Roger. The Musical Experience of Composer, Performer, Listener. New York: Atheneum, 1965.
- Spearman, Charles. The Abilities of Man. New York: Macmillan, 1927.
- Spencer, Herbert. The Principles of Psychology. Vol. II. New York: D. Appleton and Co., 1871-76.

- Stanley, Julian C. and Hopkins, Kenneth D. Educational and Psychological Measurement and Evaluation. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.
- Stolnitz, Jerome. Aesthetics and Philosophy of Art Criticism. Mass.: Riverside Press, 1960.
- Stout, George Frederick. Analytic Psychology. London; New York: S. Sonnenschein and Co., Limited; Macmillan and Co., 1896.
- Stringham, John Edwin. Listening to Music Creatively. Englewood Cliffs, N.J.: Prentice-Hall, 1959.
- Taylor, John F. A. Design and Expression in the Visual Arts. New York: Dover Publications, Inc., 1964.
- Ulrich, Homer. Symphonic Music. New York: Columbia University Press, 1952.
- Valentine, Charles Wilfred. The Experimental Psychology of Beauty. London: Methuen & Co., Ltd., 1962.
- Weitz, Morris. Philosophy of the Arts. Cambridge: Harvard University Press, 1950.

#### Journals

- Arnstine, Donald. "The Aesthetic as a Context for General Education." Studies in Art Ed 8 (Autumn 1966): 13-22.
- Hertz. Zeitschrift für vergleichende. Physiologie 7 (1928).
- Otis, Margaret. "Aesthetic Unity an Investigation Into the Conditions that Favor the Apperception of a Manifold as a Unit." American Journal of Psychology. Albany, N.Y.: Worcester, Mass.: Florence Chandler Publisher, 1918.
- Reimer, Bennett. "The Development of Aesthetic Sensitivity." Music Educators' Journal 51 (January 1965): 34-36.
- \_\_\_\_\_. "The Curriculum Reform Explosion and the Problem of Secondary General Music." Music Educator's Journal 52 (January 1966): 38.

Reimer, Bennett. "Putting Aesthetic Education to Work." Music Educators Journal 59 (September 1972): 30.

Schwadron, Abraham A. "Some Thoughts on Aesthetic Education." Music Educators Journal 56 (October 1969): 88.

\_\_\_\_\_. "Are We Ready for Aesthetic Education." Music Educators Journal 60 (October 1973): 89.

Smith, Alan. "Feasibility of Tracking Musical Form As a Cognitive Listening Object." Journal of Research in Music Education 2 (Fall 1973): 200-13.

Vaughan, Margery M. "Cultivating Creative Behavior." Music Educators Journal 59 (April 1973): 40.

Wertheimer, M. "Untersuchungen zur Lehre von der Gestalt, II." Psychologische Forschung 4 (1923).

Woodruff, Asahel D. "How Music Concepts Are Developed." Music Educators Journal 56 (February 1970).

#### Reports--Published

Minimal Performance Objectives for Music Education (Elementary). Michigan Department of Education, Revised 1973.

#### Music Education Series--Published

Crook, Elizabeth; Reimer, Bennett; and Walker, David S. Silver Burdett Music. Morristown, N.J.: Silver Burdett General Learning Corporation, 1974.

#### Anthology--Published

Wennerstrom, Mary H. Anthology of Twentieth Century Music. New York: Appleton-Century-Crofts, 1969.

#### Compositions--Published

Bach, J. S. Chorale Melody No. 19. Arranged by Leonard B. Smith. Melville, N.Y.: Belwin-Mills Publishing Corp., 1973.

Unpublished Materials

Sidnell, Robert G. "Compilation and Condensation of On  
Guilford." Part I, Mus. 803, 1971.