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AN INSTRUCTIONAL APPROACH TO PIANO STUDY REFERENCED TO SELECTED LEARNING THEORIES.

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GRADUATE COLLEGE

AN INSTRUCTIONAL APPROACH TO PIANO STUDY REFERENCED TO SELECTED LEARNING THEORIES

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

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BY

MAX WAYNE CAMP

Norman, Oklahoma

1977

AN INSTRUCTIONAL APPROACH TO PIANO
STUDY REFERENCED TO SELECTED
LEARNING THEORIES

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Chapter 1

INTRODUCTION

Since the beginning stages of idiomatic writing for the piano in the 1800's, there has been an increasing interest in keyboard instruction. Most writers agree that an increase in the musical complexity of piano literature, changes in musical style, modifications of the instrument, and the influences of piano teachers and artists all have had an effect upon the continual development of methods or approaches to keyboard study. Artists and pedagogues have explored the many capabilities of the instrument and through their writings have identified many different methods.[1]

S. B. Matthews, in 1892, authored one of the first courses of piano study to be printed in America. During the past fifty years, numerous courses of study have appeared on the educational market. The authors designate the materials as teaching methods. Chronister questions whether these courses of study are teaching methods or teaching materials ". . . the way they are taught is the method."[2] Further

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[1]John Love Norman, "A Historical Study of the Changes in Attitudes Toward the Teaching of Piano Technique from 1800 to the Present Time" (unpublished Doctoral dissertation, Michigan State University, 1968), pp. 1-2.

[2]Richard Chronister, "Piano Teaching--Past, Present, Future," Keyboard Arts (Winter, 1977), p. 3.

commenting, Chronister states that, unfortunately, more progress has been made during the past fifty years in piano teaching materials than in instructional approaches or methods.[1]

The objective of piano instruction is to provide effective guidance and optimum conditions for the musical growth and development of individual performance capacities. In view of this, the writer has long questioned the efficacy of existing teaching materials. An assessment of piano method books discloses an emphasis on the progression of notational complexities and the development of competencies in separate pianistic skills rather than an integrated instructional approach emphasizing the development of musical comprehension and performance capacities. Piano technique books primarily identify the physiological aspects of piano playing and present methods of developing the process at the advanced level.

Acclaimed twentieth century artists and pedagogues generally believe that the development of pianistic performance capacities is dependent on the growth of musical understanding and the development of a synthesis of aural, rhythmic, and technical controls. The writer believes that musical understanding and this synthesis can best be developed through an instructional approach that guides a student

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[1]Chronister, p. 3.

through musical experiences which promote the continuous broadening and extension of musical concepts in terms of the formal elements or complexities inherent in piano music.

Current research findings illustrate a great need for the development of instructional approaches which are referenced to theories of learning. Boswell states that music educators have had an expanding interest concerning the investigation of learning theories and the conceptualization of music, but there is a corresponding absence of proposed guidelines for implementation.[1] It has been the purpose of this study to attempt to fulfill this need in piano instruction.

Purpose of the Study

The purpose of this study was to delineate and establish program objectives for private piano study. Specifically, the study was concerned with the development of an instructional approach referenced to these program objectives and to existing knowledge of the developmental teaching and learning process as articulated in selected writings of James L. Mursell, Jean Piaget, Jerome S. Bruner, and others.

The study was concerned with the formulation of a guiding set of philosophical concepts which would serve as a

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[1]Jacquelyn Boswell, "An Application of Bruner's Theory of Mental Growth to the Teaching of Musical Concepts in Beginning Instrumental Music" (unpublished Doctoral dissertation, University of Illinois, 1969), pp. 5-6, 91.

theoretical framework for the development of effective learning experiences for the piano student. For the purpose of this study, the concepts were applied to selected piano literature from the elementary, intermediate, and advanced levels. These procedures, with appropriate adaptation, may serve as a model for the development of conceptual understanding applicable to any piano literature in addition to the compositions used in the present study. The concepts were designed to be flexible enough to allow for individual differences in learning abilities and comprehension in direct relationship to musicality and level of advancement.

An outcome of the study was the development of a philosophical foundation upon which piano teachers may base systematic pedagogical procedures and students may derive self-learning techniques.

Need for the Study

Recent research studies have cited the need for instrumental teaching methods which provide systematic guidance to the development of understanding of musical complexities. According to Rainbow, very little research is presently being done concerning the problems related to instrumental instruction or the training of teachers in instrumental music.[1] Moreover, Rainbow stresses the need for

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[1]Edward Rainbow, "Instrumental Music: Recent Research and Considerations for Future Investigations," Council of Research in Music Education, XXXIII (Summer, 1973), pp. 8-9.

further research concerning the problems of selecting and organizing musical experiences that facilitate musical learning, including: (1) the development of a theory or systematic approach to instruction; (2) the selection of methodology most efficient for teaching proficiency in instrumental performance related to the complexities of musical understanding; and (3) the investigation of the relationship of various learning theories to the task of learning an instrument.[1]

Zimmerman states that two vital thoughts dominate today's literature on teaching music: (1) structural concepts of music should be taught to children; and (2) music teaching should be based on sound psychological principles of learning. Specifically, in reference to concepts, she notes: "Curriculum reformers stress that the structural elements and unifying concepts of music need to be translated into terms children at various age levels can understand and assimilate."[2] According to Thomas, concepts may be explained in the following manner:

> In elemental terms, concepts are points of understanding while skills are the physical means of implementing these concepts, pulling them to active use.

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[1]Rainbow, pp. 8-20.

[2]Marilyn Pflederer Zimmerman, "Percept and Concept: Implications of Piaget," Music Educators Journal, LVI (February, 1970), p. 49.

> Concepts may be regarded as those areas of study requiring logic while skills require kinesthetic action.[1]

Although realizing there is a lack of proposed guidelines for implementation, Boswell believes the use of a conceptual approach to music instruction is superior to other approaches. She contends: "It is plausible to assume that a conceptual orientation to the teaching of music is distinctly advantageous. Concepts serve to organize and simplify the complexities of music."[2]

Other writers agree that students can learn to produce convincing interpretations of music through a conceptual approach which stresses the musical comprehension of the formal elements of a composition. With reference to this, Pierson elaborates:

> Internal characteristics of the music, that is, rhythmic, melodic, harmonic, textural, and formal use the composer has made of the materials must first be recognized, then evaluated, and finally skillfully employed in the articulation of the music. Repetition of the piece might gradually disclose some of the information, but such a "hit or miss" process lacks direction, is wasteful, and is subject to incorrect conclusions. The interpreter's efforts lie in the clarification of the formal elements.[3]

Pflederer believes musical comprehension can be

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[1]Ronald B. Thomas, Manhattanville Music Curriculum Program, Interim Report of Cooperative Research Project No. 6-1999 (Purchase, N.Y.: Manhattanville College, 1967), p. 12.

[2]Boswell, pp. 5-6, 91.

[3]Thomas C. Pierson, "Integrate Comprehension/Performance," Clavier, II (September, 1963), pp. 48-49.

developed in the following way:

> Music consists of an organization of tonal patterns within a temporal structure. For music to be apprehended and understood, there are concepts of melody, rhythm, harmony, and form that must be learned. Musical learning begins with perception of the sound structure; from this perception develop those musical concepts which permit one to think about what has been heard.[1]

She concludes:

> The essence of musical intelligence is found in the framework of rhythmic, melodic, harmonic, and formal relationships which has developed through a progressive organization of musical experiences.[2]

The role of the teacher, serving as a facilitator, is to provide an instructional sequence to facilitate the perception and conception of the melodic, harmonic, rhythmic, and formal hierarchic groupings in music. Commenting on this type of approach, Bruner maintains that learning structures designed to produce an understanding of a subject matter have strong potential for "massive general transfer."[3] He relates that under optimum conditions, this kind of process can lead "one to learn how to learn."[4]

Chronister notes that much of today's piano

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[1]Marilyn Pflederer, "Conservation Laws Applied to the Development of Musical Intelligence," Journal of Research in Music Education, XV (Fall, 1967), p. 220.

[2]Pflederer, "Conservation Laws Applied to the Development of Musical Intelligence," p. 221.

[3]Jerome S. Bruner, The Process of Education, Vintage Books (New York: Alfred A. Knopf, Inc., and Random House, Inc., 1963), p. 6.

[4]Bruner, p. 6.

instruction does not stress the conceptualization of the musical elements nor take account of humanistic considerations, such as, learning to play the piano as a means for personal expression and self-actualization. Emphasis is largely directed towards public performance of specific pieces. Discussing this matter, Chronister comments: "Piano teaching is still, by and large, geared to teaching the student to perform pieces on a recital."[1] Other writers concur with this belief. Barnett suggests that the entire present day denotation of musical talent needs redefining. Performance has been construed to mean primarily concert performances, thus alienating a large segment of society. Barnett believes musical talent is widespread and should be utilized to create a large body of players who would be able to read and interpret music as people read books; consequently, playing the piano or any instrument would serve as a means for personal expression and self-actualization.[2]

Conforming with Barnett's thought, Wulsin notes the need for methods of instruction which develop all degrees of performance capacities. This would enable more people to participate in music as performers as well as consumers, thereby serving to expand the avenues for self-realization

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[1]Chronister, p. 3.

[2]David Barnett, The Performance of Music (London: Barrie and Jenkins, 1972), pp. 9-10.

and aesthetic experience.[1] By his very nature, man has an insistent desire and an intrinsic need for aesthetic experiences. Langer comments:

> The ancient ubiquitous character of art contrasts sharply with the prevalent idea that art is a luxury product of civilization, a cultural frill, a piece of social veneer; art is the epitome of human life; the truest record of insight and feeling . . . .[2]

Neuhaus,[3] Whiteside,[4] Mursell,[5] and others agree that an effective instructional approach is needed that would be applicable to all kinds of learners: the average learner, the below average learner as well as the extremely gifted. Neuhaus related the following:

> . . . we are avoiding the most burning problem of all the problems which should be the primary concern of the searcher and teacher. I am convinced that a dialectically designed method and school must encompass all degrees of talent--from the musically deficient (since such, too, must study music, for music is a vehicle of culture just as any other) to the natural genius. If methodological thinking is concentrated on a small segment of reality

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[1]Lucien Wulsin, "The Education of the Performing Musician," An Invitational Forum, Yale School of Music and CMP (CMP, 1973), pp. 9-10.

[2]Suzanne Langer, "The Cultural Importance of the Arts," Aesthetic Form and Education: Symposium Conference on Creative Arts Education (Syracuse: Syracuse University Press, 1958), p. 82.

[3]Heinrich Neuhaus, The Art of Piano Playing (New York: Praeger Publishers, 1973), pp. 8-9.

[4]Abbey Whiteside, Mastering the Chopin Etudes and Other Essays (New York: Charles Scribner's Sons, 1969), p. 3.

[5]James L. Mursell, Developmental Teaching (New York: McGraw-Hill Book Co., 1949), pp. 30-31.

> ("the average") then it is defective, it is impaired, undialectic and consequently not valid.[1]

Galamian maintains that playing an instrument, as in any art, can be formulated from "general principles that are broad enough to cover all cases; yet flexible enough to be applied to any particular case."[2] Moreover, Galamian discloses that learning to play an instrument is achieved through the mastery of the interrelationship among rhythmic control, aural control, and physical control as a sequence of physical response to mental command.[3] Last,[4] Bryant,[5] and Leimer,[6] among others, concur that pianistic potentiality can be brought to the highest state of perfection through this synthesis of aural control, technical control, and rhythmical control.

Many twentieth century pedagogues and artists have expressed the opinion that the development of performance capacities is dependent on an instructional sequence which

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[1]Neuhaus, pp. 8-9.

[2]Ivan Galamian, Principles of Violin Playing and Teaching (Englewood Cliffs: Prentice-Hall, Inc., 1962), p. 1.

[3]Galamian, p. 203.

[4]Joan Last, The Young Pianist (London: Oxford University Press, 1963), p. 33.

[5]Celia Mae Bryant, "Solving Technical Problems thru an Intellectual and Musical Approach," Clavier, III (October, 1964), pp. 44-45.

[6]Karl Leimer and Walter Gieseking, The Shortest Way to Pianistic Perfection (Bryn Mawr: Theodore Presser Co., 1932), p. 5.

encompasses the evolvement of musical understanding and a synthesis of aural, rhythmic, and technical controls. Rather than presenting an integrated method that stresses this sequence, many of today's instructional approaches and method book series emphasize proficiency in separate pianistic skills.

The prevailing view of twentieth century pedagogical writings may be best expressed by Goldreich's analysis of recent research. He strongly advocates the need for an instructional approach that integrates both the musical and technical aspects of piano playing. The approach would need to place importance on the understanding of the following: (1) rhythmic organization; (2) location and significance of focal points; (3) harmonic movement; and (4) the over-all formal structure.[1]

The authors and situations enumerated affirm the need for the formulation of an instructional approach to piano that would provide favorable conditions for continuous development and growth of all individual performance capacities. Moreover, the writers agree that past piano instructional sequences have failed to offer a flexible approach to meet individual needs of a pluralistic society.

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[1]Walter Andrew Goldreich, "Reference to Psycho-Physical Relationships in Piano Technique as Reflected in Twentieth Century Writings about Piano Pedagogy" (unpublished Doctoral dissertation, Indiana University, 1970), pp. 125-38.

Definition of Terms as Used in This Study

Synthesis. The term refers to the interrelationship of the technical, the aural, and the rhythmic controls essential to estimable piano performances. The synthesis is a gestalt which includes the understanding of the elements of a musical composition and the physical manifestation of these elements through the piano, thus including all of the musical and technical/physical aspects.

Technical control. The term refers to the ability to play the desired sound at the correct time with a definitely chosen quantity and quality of tone.[1] Moreover, technical control is having the capacity of controlling mentally and executing physically all of the necessary movements to produce a desired musical intention or interpretation.[2] This control involves physical, intellectual, and musical factors which are integrated and "cannot be treated distinctly or independently when learning to play the piano."[3] Technical control is referred to by different authors in varying terminology,

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[1]Hetty Bolton, How to Practice (London: Elkin and Co., Ltd., [n. d.]), p. 11.

[2]Galamian, p. 4.

[3]Bryant, "Solving Technical Problems thru an Intellectual and Musical Approach," pp. 44-46.

such as, physical continuity,[1] physical processes,[2] and/or technique.[3]

Aural control. This term refers to critical self-listening by an individual to the sounds made by that individual. This involves an individual's inner sound image of pitch, tempo, dynamics, rhythm, and timbre. The function directs both pre-hearing and post-hearing[4] ". . . auditory stimulus (the inwardly heard tones)--anticipation of motor act--motor act resulting in actual sound--auditory perception and evaluation of the achieved sound."[5] The function allows for the close examination of the sound produced and subsequent judgment of its qualities.[6]

Rhythmic control. The term refers to the understanding and execution of the architectonic qualities of the rhythmic structure within the hierarchic groupings in a musical composition at both the primary and intermensural metric levels.[7]

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[1]Whiteside, Mastering the Chopin Etudes and Other Essays, pp. 3-7.

[2]Leon Fleisher, "About Practicing and Making Music," Clavier, II (September, 1963), p. 12; see also, Konrad Wolff, The Teaching of Artur Schnabel (New York: Praeger Publishers, 1972), p. 22.

[3]Goldreich, p. 125.

[4]George Kochevitsky, The Art of Piano Playing: A Scientific Approach (Evanston: Summy-Birchard Co., 1967), p. 30.

[5]Kochevitsky, p. 30. [6]Goldreich, p. 132.

[7]Wallace Berry, Form in Music (Englewood Cliffs: Prentice-Hall, Inc., 1966), pp. 2, 17, 304.

Architectonic qualities apply to the organic process in music where smaller rhythmic units function as integral components of a larger rhythmic structure. The primary level pertains to "the lowest level on which a complete rhythmic grouping is realized--upon which a strong beat and one or more weak beats are grouped together. . . ."[1] The primary or mensural[2] unit includes the pulse-unit note and measure grouping.[3] The intermensural level pertains to the grouping of measures or larger units, thus, "measures and groups of measures--phrases and larger units--have weak-strong organization which is analogous to that of the measure."[4] The grouping of sounds into structured patterns is the "result of the interaction among various aspects of the materials of music: pitch, intensity, timbre, texture, and harmony--as well as duration."[5] The comprehension and execution of the architectonic qualities in rhythmic structure of form depends on the realization of rhythmic-pulsation or "Pulse (the recurrence of time-distances)"[6] and a feeling of a basic body rhythm. Basic body rhythm is a physical experience in response to a

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[1]Grosvenor W. Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: The University of Chicago Press, 1960), p. 2.

[2]Berry, p. 2. [3]Cooper and Meyer, p. 2.

[4]Berry, pp. 2, 17, 304. [5]Cooper and Meyer, p. 1.

[6]Tobias Matthay, Musical Interpretation (Boston: Boston Music Co., 1913), p. 32.

heard or felt stimulus in the form of rhythmic-pulsation.[1] Rhythmic control involves the comprehension of these aspects in application to piano performance.

Estimable piano performance. The term refers to performances described as being admirable, artful, deserving esteem for a given level of advancement.[2]

Concept. The term refers to an organizing device used to categorize stimuli into manageable classes; a general idea or understanding, especially one derived from specific instances or occurrences.[3]

Philosophical concepts. The term refers to fundamental beliefs which have been conceptualized and formulated: basic viewpoints, or principles.[4]

Instruction. The term refers to the process of leading the learner through a sequence of statements and restatements of a problem or body of knowledge that increases the learner's ability to grasp, transform, and transfer what

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[1]Whiteside, Mastering the Chopin Etudes and Other Essays, pp. 4-5; see also, Stanley Fletcher, "Rhythm and Metrical Bookkeeping," Clavier II (March-April, 1963), p. 18.

[2]The American Heritage Dictionary of the English Language, edited by William Morris (Boston: Houghton Mifflin and Co., 1970), p. 449.

[3]The American Heritage Dictionary of the English Language, p. 275.

[4]The American Heritage Dictionary of the English Language, p. 985.

is being learned.[1]

Musical comprehension. The term refers to the understanding of the internal characteristics of piano music, including the rhythmic, melodic, harmonic, and formal elements. The understanding encompasses the recognition, evaluation, clarification, and skillful employment of these elements in the articulation of the music.[2]

Limitations of the Study

The investigation excluded the consideration of (1) innate musical talent; (2) the teaching/learning aspects of technical systems of piano playing; and (3) the relationship between success in learning/performing and piano literature, such as graded method books or style books. Although the study applied a piano instructional approach to different levels of advancement, the fundamentals of beginning piano instruction were excluded.

Individual abilities, such as talent potentiality, affective or emotional response, and attitudes, were excluded. If their influence is inferred, their affirmed qualities were assumed.

Basic Assumptions

The following assumptions were basic to the

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[1]Jerome S. Bruner, Toward a Theory of Instruction (Cambridge: Harvard University Press, 1966), pp. 40-41.

[2]Pierson, "Integrate Comprehension/Performance," pp. 48-49.

investigation:

1. The development of piano performance capacities can best be achieved through an instructional sequence which facilitates the perception and conception of the melodic, harmonic, rhythmic, and formal hierarchic groupings in music. Through the formation of musical concepts, piano students can more easily perceive melodic shape, rhythmic and harmonic movement, and formal structure. As conceptual development progresses, students gradually acquire the capacity to make keener perceptions and form more highly organized concepts. Thus, the concepts are cumulative and ever growing.

2. The role of the teacher is to provide an instructional sequence to help facilitate the perception and conception of the melodic, harmonic, rhythmic, and formal hierarchic groupings in music.

3. Piano students can learn to produce more convincing interpretations of music through a conceptual approach to instruction which stresses the musical comprehension of the formal elements utilized by the composer.

4. An instructional approach referenced to developmental teaching and learning principles can provide optimum conditions and effective guidance for the development of individual performance capacities at all levels of advancement.

5. Piano instruction which provides effective guidance and optimum conditions for the musical growth and

development of individual performance capacities should be based on and in agreement with philosophical concepts of the nature of music and psychological principles of learning.

6. Piano performances, deserving esteem for a given level of advancement, contain a synthesis of technical, aural, and rhythmic controls. This synthesis is a gestalt which includes the understanding of the elements of a musical composition and the physical manifestation of these elements through the piano, including all the musical and technical/physical aspects.

7. An instructional approach referenced to program objectives and knowledge of developmental teaching and the learning process can best provide a philosophical foundation upon which piano teachers may base systematic pedagogical procedures and students may derive self-learning techniques.

Summary

The purpose of the study was to delineate and establish program objectives for private piano study and develop an instructional approach referenced to (1) the program objectives and (2) existing knowledge of developmental teaching and learning process as articulated in the writings of Mursell, Bruner, Piaget, and others. The need for the study was based on (1) the conviction that there is a direct relationship between the development and growth of a learner's performance capacity and the instructional approach used; and (2) a review of research basic to problems related to

instrumental instruction.

Chapter 2

PHILOSOPHICAL INQUIRY INTO THE NATURE OF PIANO INSTRUCTION AS REFLECTED IN PEDAGOGICAL WRITINGS

Early Keyboard Instruction: An Historical Perspective to 1900

One of the earliest recognized clavier methods of instruction, Il Transilvano by Girolamo Diruta, was written in Venice in 1593.[1] Diruta stated:

> . . . The first thing is that the organist should sit with his body exactly before the middle of the keyboard, the second, that he must not make gestures or movements with his body, but hold himself, chest and head, erect and poised. The third thing is to know that the arm leads the hand, and the hand must be held strictly on the same level as the arm, neither higher nor lower. The fourth that the fingers stand all evenly on the keyboard, although slightly arched . . . .[2]

Diruta's remarks were directed to organists as well as harpsichordists.[3] Even in this early stage of keyboard development, attack and fingering were stated as being vitally

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[1]John Love Norman, "A Historical Study of the Changes in Attitudes Toward the Teaching of Piano Technique from 1800 to the Present Time" (unpublished Doctoral dissertation, Michigan State University, 1968), pp. 1-2.

[2]Eta Harich-Schneider, The Harpsichord, An Introduction to Technique, Style and the Historical Source (St. Louis: Concordia Publishing House, 1954), p. 12.

[3]Girolamo Diruta, Il Transilvano (Venice: Appresso Alessandro Vincenti, Part I, 1593; Part II, 1609).

important in the development of clavier players.[1]

Following Diruta's method book, the next recognized clavier books were written in France at the beginning of the eighteenth century: Les Principles du Clavecin, by Michel de Saint Lambert, published in Paris in 1702, and L'Art de Toucher de Clavecin, by François Couperin, published in Paris in 1716.[2] Couperin's treatise on harpsichord is recognized as a major work in the literature of the time. The treatise includes references to hand gymnastics, appearance at the keyboard, and touch. This is the first documented reference to the use of hand gymnastics as a part of technical preparation.[3] In a treatise published in Paris in 1760, Code de Musique Pratique, Jean Philippe Rameau noted a technical system for clavier playing, emphasizing freedom and suppleness.[4]

By 1750, J. S. Bach and his son, Carl Philipp Emanuel, had established a number of principles for keyboard playing which still exist, e.g., use of the thumb in a pivotal

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[1]Norman, pp. 1-2.

[2]Reginald R. Gerig, Famous Pianists and Their Technique (Washington, D.C.: Robert B. Luce, Inc., 1974), pp. 13-14.

[3]François Couperin, The Art of Playing the Harpsichord, ed. by Anna Linde, English translation by Mevanurey Roberts (Wiesbaden: Breitkopf and Härtel, 1933), pp. 8-12.

[4]Jean Philippe Rameau, Code de Musique pratique, ou Methodes pour apprendre la musique (Paris: De l'Impremerie Royale, 1760); see also Eta Harich-Schneider, The Harpsichord, An Introduction to Technique, Style and the Historical Sources (St. Louis: Concordia Publishing House, 1954), p. 15.

capacity in scale and arpeggio fingerings. The treatise, Versuch über die wahre Art das Clavier zu spielen (Essay on the True Art of Playing Keyboard Instruments), by C. P. E. Bach, is perhaps one of the most important studies of the period and the most highly organized. Bach believed that the true art of playing keyboard instruments was dependent on three factors: (1) correct fingering, (2) good embellishments, and (3) good performance. He relates:

> In playing, the fingers should be arched, and the muscles relaxed. The less these two conditions are satisfied, the more attention must be given to them. Stiffness hampers all movement, above all the constantly required rapid extension and contraction of the hands. All stretches, the omission of certain fingers, even the indispensable crossing of the fingers and turning of the thumb demand this elastic ability.[1]

Louis Adam, a keyboard player of the Paris Conservatory, is credited with writing in 1802 the first method book specifically for the pianoforte.[2] Adam's approach to the keyboard centered around the teaching of a variety of touches and the use of the pedal.[3]

Piano instruction during the first hundred years of the piano's existence was dominated by three recognized principles: (1) only fingers should be used, consequently,

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[1]Carl Philipp Emanuel Bach, Essay on the True Art of Playing Keyboard Instruments, trans. and ed. by William J. Mitchell (New York: W. W. Norton and Co., Inc., 1949), pp. 42-43.

[2]Harry Stanton Spangler, "History of Pianoforte Methods" (unpublished Doctoral dissertation, University of North Dakota, 1950), p. 16.

[3]Spangler, p. 16.

the upper parts of the arm should be fixed; (2) technical training is a purely mechanical procedure, requiring many hours of daily practicing; and (3) the teacher is the absolute authority.[1] Referred to as the "finger school," followers of this concept believed that numerous hours of practice were completely fool-proof. "Direct imitation" was the basic instructional approach used. Muzio Clementi, one of the first persons to be designated as a pianist, was an advocate of this approach. He stressed the importance of equally trained fingers and was the creator of the "pedagogical etude as a means of acquiring technique."[2] Carl Czerny also advocated finger development by means of purely mechanical gymnastics and wrote thousands of etudes for all kinds of pianistic problems. Czerny believed endless repetitions would cure any problems a pianist might encounter.[3]

During the early part of the nineteenth century, there were two distinct schools of thought on piano playing: (1) one school placed an emphasis on clarity of texture and fluency of technique, exemplified by Mozart's pupil, Nepomuk Hummel; (2) the other emphasized fullness of tone, extensive dynamic range, orchestral effects, dramatic execution and a great quantity of technical power, exemplified by Beethoven's

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[1]George Kochevitsky, The Art of Piano Playing: A Scientific Approach (Evanston: Summy-Birchard Co., 1967), p. 3.

[2]Kochevitsky, p. 4. [3]Kochevitsky, p. 4.

playing.[1] Hummel represented the culmination of the Viennese school of piano playing and Beethoven represented the first major pianist to oppose the "old finger school" and its harpsichord ancestry.[2]

During the last half of the nineteenth century, a number of progressive ideas on piano instruction emerged as a result of technical changes in the instrument and compositional practices.[3] Teachers began stressing the importance of aural awareness and began maintaining that musical imagination could guide a person in search of technical skill. With the teachings of Ludwig Deppe, the modern era of piano playing began. Coming into prominence during the last third of the nineteenth century, Deppe is acclaimed as the first piano teacher to advocate the combining of arm and finger technique.[4] Gerig describes Deppe as one of the early pioneers who "took into account the advancing instrument and its musical capabilities and physical demands."[5] In observing one of Deppe's students, Fay relates:

> There was a wonderful vitality, elasticity and snap to her chords which impressed me very much, and a unity of effect about her whole performance of any composition which I don't remember to have heard from the pupils of other masters. The position of the hand was exquisite, and all difficulties seemed to melt away like snow or to be surmounted with the greatest ease. I saw at a glance

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[1]Donald Jay Grout, A History of Western Music (New York: W. W. Norton and Co., Inc., 1960), p. 511.

[2]Gerig, pp. 65, 81. [3]Kochevitsky, p. 3.

[4]Kochevitsky, p. 3. [5]Gerig, p. 236.

> that Deppe is a magnificent teacher, and I believe that he has originated a school of his own.[1]

Deppe, in 1885, published articles noting the lack of instruction which helped students avoid strains and tensions. He believed estimable piano playing was achieved through the natural cooperation of arm, wrist, and fingers as one complete piece of machinery, and advocated the training of the ear.[2] Although stressing more of a note-to-note type of listening, Deppe's approach was an advancement over the mechanical approach of Czerny and served as the progenitor of the so-called school of relaxation and weight-playing, thereby revolutionizing piano playing.[3] At approximately the same time Deppe's principles were becoming popular in Berlin, Theodor Leschetizky was developing many world famous pianists in Vienna, including Ignace Jan Paderewski, Artur Schnabel, and Alexander Brailowsky.[4] Although a very successful teacher, Leschetizky constantly stressed that he did not have a teaching method.[5]

Selected Aspects of Pedagogical Thought as Reflected in Early Twentieth Century Writings

Writers of this period reveal increasing concern for

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[1]Amy Fay, Music-Study in Germany, ed. Fay Peirce (1880; rpt. New York: Dover Publications, Inc., 1965), pp. 294-95.

[2]Kochevitsky, p. 3. [3]Kochevitsky, pp. 3-6.

[4]Gerig, p. 271.

[5]Ethel Newcomb, Leschetizky as I Knew Him (New York: Da Capo Press, 1967), p. 194.

the development of piano performance abilities through a synthesis of aural, rhythmic, and technical controls. This synthesis suggests a gestalt which includes the understanding of the elements of a musical composition and the physical manifestation of these elements through the piano. Blind acceptance of nineteenth century teaching approaches began to lessen and new ideas emerged.

In America, pedagogues began to question past instructional approaches and to consider new teaching concepts. William Mason has been recognized as the first original thinker concerning an instructional approach in the United States.[1] The approach centered around one concept: the accentual treatment of notes for the purpose of rhythmically grouping tones in the ear.[2] In addition to Mason, George Foote, Albert Ross Parsons, and William Hall Sherwood were other leading pedagogues in America around 1900.[3] These pedagogues believed that piano instruction in America was ready to stand on its own, no longer needing European models as a reference.[4] Also, around the turn of the century,

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[1]Gerig, Famous Pianists and their Technique, p. 238.

[2]Gerig, pp. 238-39.

[3]Kate S. Chittenden, "Salient Changes in Music Teaching in the Last 50 Years," Proceedings of the Fiftieth Year of the Annual Meetings, Music Teachers National Association (Cincinnati: MTNA Publications, 1926), pp. 23-24.

[4]Chittenden, pp. 23-24.

Americans began publishing courses of study for beginners, thus further reflecting an independence from European models of piano instruction. The published courses included series by Crosby Adams, Angela Diller, and Jessie Gaynor.[1]

As in America, prominent pedagogues in other parts of the world also were questioning nineteenth century instructional approaches to piano study, specifically those which advocated pure mechanical processes. Many of the nineteenth century methods had centered around the belief that many hours of daily mechanical practice, such as technical exercises, was the key to developing performance capacities. Goldreich relates that Friedrich Wilhelm Michael Kalkbrenner, in the 1820's, even advised students to read a newspaper while practicing technical studies.[2] This advocation of mechanical exercises originated from the nineteenth century concept that pure mechanical gymnastics would develop pianistic virtuosity as evidenced in the popular performers of the day. However, in the case of Liszt, the investigation and conclusions of Steinberg's recent research refute this concept.[3] She

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[1]Chittenden, p. 24.

[2]Walter Andrew Goldreich, "Reference to Psycho-Physical Relationships in Piano Technique as Reflected in Twentieth Century Writings about Piano Pedagogy" (unpublished Doctoral dissertation, Indiana University, 1970), p. 1; see also Harold C. Schoenberg, The Great Pianists from Mozart to the Present, Fireside Books (New York: Simon and Schuster, 1963), p. 20.

[3]Anne Jo Steinberg, "Franz Liszt's Approach to Piano Instruction," Dissertation Abstracts International, 32 (1971), 2124A (University of Maryland).

relates that Liszt recognized the importance of technical control, but did not consider it an isolated aspect of piano playing. Steinberg concludes that Liszt considered technical control as "inseparably combined with musical and expressive values, such as consideration of dynamics and some types of rhythmic definition." She explains rhythmic definition as using accentuation of rhythmic patterns (1) for time-keeping, (2) for evenness of passage work, and (3) for expressive purposes.[1]

Hofmann, in 1908, suggested that piano performance capacities could be realized more easily through the development of the auditory image of piano music rather than pure technical practice. He based this concept on the idea that the loss of technical control was due to practice which had developed poor tonal images of the score.[2] Sammord, in 1912, also considered the development of the ear important, but only when coordinated with the eye and mind. Referring to the process of learning to play the piano, he contends: "the eye, the ear, and the brain or mind are an inseparable trinity . . . all must go hand in hand."[3]

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[1]Steinberg, p. 2124A.

[2]Josef Hofmann, Piano Playing and Piano Questions Answered (Philadelphia: Theodore Presser, 1920), pp. 32-40.

[3]Herbert S. Sammord, "Piano Symposium on Present Day Needs in Piano Teaching," Proceedings of the Music Teachers National Association Annual Meeting (Cincinnati: MTNA Publications, 1912), pp. 118-20.

In 1913 Matthay assailed the nineteenth century mechanical approach to piano practice. Warning against gymnastic exercises and drills which turn students into "automatic strumming-machines," he relates:

> To sound the notes of a piece through as a mere physical exercise, is not only useless but positively harmful musically; and this applied as much to the practice of Studies and Techniques as to that of pieces, for in all repetitions, we are always forming or fixing habits--musical ones and technical ones. . . .[1]

Matthay contends that teaching proficiency in separate skills fails (1) to give a student any real insight into what constitutes music in the art of performance; (2) to attract attention to rhythm movement as the basis of all music; and (3) to prevent the student, at any level, from keeping the whole picture in mind as a continuous progression.[2] He concludes that repetitive technical practice is useless as an aid in helping a student discover the "how" musically and the "how" technically for the purpose of understanding the "where" and "what" of the interpretation of a composition.[3]

Josef Lhevinne stated in 1924 that the fundamental principles of musical understanding should be taught to students from the beginning lessons, specifically the

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[1]Tobias Matthay, Musical Interpretation (Boston: Boston Music Co., 1913), p. 5.

[2]Matthay, Musical Interpretation, p. 5.

[3]Tobias Matthay, The Visable and Invisable in Piano Technique (London: Oxford University Press, 1932), pp. 122-23.

comprehension and aural conception of the rhythmic structure of music. He states:

> Nothing puts me in a worse mood than the student who does not play in rhythm; because rhythm is spirit in music, the most human thing in music. Some look upon it as a trifle. It is about as important a trifle in music as are the engines on an ocean liner.[1]

Referring to personal teaching experiences, Lhevinne notes that many students have appeared at lessons with very bravura compositions without any musical understanding of the composer's musical intentions. Commenting on this, Lhevinne notes:

> Study of this kind is not only a great waste of the pupil's time but also a disgusting waste of the time of the advanced teacher, who realizes that he is not training a real musician but a kind of musical parrot whose playing must always be meaningless.[2]

Lhevinne also stresses the importance of developing critical self-listening, thus, "most students hear, but they do not listen. The finest students are those who have learned to listen."[3]

Eisenberg suggested in 1929 that piano teachers must accept the fact that piano study is a very complex subject-area; there are some definitive rules a majority of teachers accept and some ideas that have no universally accepted answers.[4] Since students learn in a very individualistic

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[1]Josef Lhevinne, Basic Principles in Pianoforte Playing (1924; rpt. New York: Dover Publications, Inc., 1972), pp. 6-7.

[2]Lhevinne, p. 9. [3]Lhevinne, p. 11.

[4]Jacob Eisenberg, Natural Techniques in Piano Mastery (New York: Scholarly Publications, 1929), p. 45.

manner, no set-pattern of pure technical exercises will be successful in developing all types of students. He advocates the consideration of an approach which develops musical understanding, the physical manifestation of the understanding, and the coordination of the two.[1]

Ramul remarked in 1931 that modern approaches to piano study must encompass the psycho-physical aspects of each individual student. He believes that the psychical and physical functions are intimately related and "cannot be treated distinctly or independently when learning to play the piano."[2] The physical process pertains to the physical/technical execution of psychical instructions and/or analytic decision. The psychical functions encompass an individual's intellect, will, sensations, and feelings. Ramul,[3] as well as more recent writers, Kochevitsky[4] and Goldreich,[5] agree that the psychical and physical processes are not separate functions and cannot be treated separately in learning to play the piano. These writers base this belief on the following axiom: the mind controls or assists in the execution

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[1]Eisenberg, p. 46.

[2]Peter Ramul, The Psycho-Physical Foundations of Modern Piano Technique (Leipzig: C. F. Kahnt, 1931), pp. 9-11.

[3]Ramul, p. 9.

[4]Kochevitsky, The Art of Piano Playing: A Scientific Approach, pp. 16-30.

[5]Goldreich, p. iii.

of any essentials involved in the cognitive or physical aspects of piano playing.

Ramul notes that the development of a student's musical comprehension, critical self-listening, and rhythmic-pulsation provides an avenue for a closer relationship between a desired musical intention and the actual sound production.[1] Furthermore, he concludes that the cognitive and physical functions have to be intimately related in practice and performance or "all our actions lose their natural organic and systematic connections."[2]

Leimer, agreeing with Ramul's conclusions, affirmed in 1932 the belief that piano instruction must stress the development of a student's ability to listen critically. Learning to listen critically provides one's mind with directions of how to produce a desired musical intention. Concerning critical-listening and rhythmic control, Leimer relates:

> Only trained ears are capable of noticing the inexactitudes and unevennesses, the eliminating of which is necessary to a perfect technique. Also, through a continuous self-hearing the sense for tone-beauty and for finest tone shading can be trained to such a degree that the student will be able to play the piano with a feeling for the sound-beautiful. Really accurate rhythmical playing can be achieved only through severe self-control.[3]

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[1]Ramul, pp. 11-16. [2]Ramul, p. 16.

[3]Karl Leimer and Walter Gieseking, The Shortest Way to Pianistic Perfection (Bryn Mawr: Theodore Presser Co., 1932), p. 5.

Egon Petri suggested in 1939 that the overall development of performance capacities was being hindered by instructional approaches separating the musical and technical aspects of piano playing.[1] He notes: "Since music is a spiritual art, it suffers if sounds are achieved through a purely physical concept; more can be gained by practicing compositions rather than exercises alone."[2] Any technical work should be done for one purpose alone: "as a basis for obtaining control to be able to express the musical content of the piece."[3]

Selected Aspects of Pedagogical Thought as Reflected in Writings Since 1940

The majority of pedagogical writings since the 1940's continue to reflect a philosophy that an instructional sequence for piano study should foster the development and growth of musical understanding, critical self-listening or aural control, rhythmic control, and technical control rather than pure mechanical practice procedures or proficiency in isolated skills. Bryant,[4] Marcus,[5] and Matthay,[6] among

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[1]Egon Petri, "Principles of Piano Practice," Proceedings of the Annual Meetings, Music Teachers National Association (Cincinnati: MTNA Publications, 1939), p. 275.

[2]Petri, p. 277. [3]Petri, p. 277.

[4]Celia Mae Bryant, "Teaching Requires Foresight," Clavier, II (May-June, 1963), p. 41.

[5]Adele Marcus, "Creative Study and Practicing," Clavier, VIII (January, 1969), p. 38.

[6]Matthay, Musical Interpretation, pp. 42-43.

others, comment that an inordinate amount of time can be consumed by students on nothing but repetitive, mechanical practice with no concern for musical clarification. Marcus assails this type of teaching and learning: "Hours of repetition in practice that precedes or omits study often stifles the imagination and frequently dulls the freshness of a genuinely felt musical response[1]. . . one must be careful not to obliterate natural talent, but to underline it."[2] According to Fletcher, "It is appalling the amount of time students can put in just practicing purely gymnastics at a piano, training themselves in musical absentmindedness with the idea that if they keep it up long enough they will eventually be able to play music."[3]

Fleisher questions any piano practice which stresses technique alone as he maintains that a problem worked out just from the technical standpoint will not support the weight of a musical conception.[4] Commenting further on problems in learning to become a pianist, Fleisher cites aural awareness as the greatest problem for any musician. He states:

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[1]Marcus, "Creative Study and Practicing," p. 38.

[2]Adele Marcus, "The Challenge of Teaching," (ed.) R. Sabin, Musical America, LXXXIII (February, 1963), p. 53.

[3]Stanley Fletcher, "Developing the Talents of Extra-Ordinarily Gifted Students," American Music Teacher, IX (November-December, 1959), p. 16.

[4]Leon Fleisher, "About Practicing and Making Music," Clavier, II (September, 1963), p. 12.

> The greatest problem for any musician is to hear himself . . . very often you hear what you want, what you want it to be, what you want to hear, rather than what really comes out. That is a great difficulty. You have to be listening to what you have done and at the same time thinking about what is coming next so that you will be able to infuse it with what you are trying to do. The one part of you is listening to what went, the other part of you is occupied with what is coming; and there is a third part of you occupied with what you are doing so that you can change it or adjust it to get sound that you want. . . . The approach today, unfortunately, seems to be that you first must get an equipment to be able to play and then you think about music.[1]

Believing that this approach is wrong, Fleisher relates that young piano students should be exposed to the understanding of music rather than just developing pure physical technique.[2]

Concurring with Fleisher's thoughts, Kirschbaum notes:

> The excessive use of the studies of Czerny, Clementi, Tausig, Brahms, and others, tends to make the technique the end of all piano lessons. Some young people have a notion that if they went through everything that Czerny wrote, they would have a technique second to none. There is no foundation for such a belief because when technique is divorced from a specific musical problem, it becomes devoid of significance and is meaningless. . . . The concentration on technique has led to a neglect of attention on expression and interpretation.[3]

Bryant agrees that the development of technique depends upon the physical, intellectual, and musical factors which are all closely integrated in the basic foundation of musical artistry. According to Bryant, these three factors cannot be isolated in performance, but may be separated only

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[1]Fleisher, pp. 15-16. [2]Fleisher, p. 16.

[3]Bernard Kirschbaum, "The Place of Technique in Advanced Study," Piano Guild Notes, XXVI (September-October, 1976), p. 21.

for pedagogical discussion.[1] She cites the following qualities as essential to the development of piano technique: musical understanding, critical self-listening, understanding the rhythmic groupings of notes, and the ability to be able to make musical judgments. Bryant states:

> The performer must have an understanding not only of the organized note groupings, but of all the nuances within each phrase. These are the inflections and punctuation of music. Punctuation will condition the dynamics, and dynamics will define the phrasing, giving expression and meaning to the musical design.
>
> The success of the entire phrase will depend upon the nuances or inflections placed upon the delineation of its parts with all the accompanying impulses of tension and relaxation.[2]

She concludes that comprehension of the musical elements of a composition has a surprising influence on technique, and the development of technique is only a means to an end: "to express what the composer intended."[3]

Bolton advises teachers to consider "actual teaching from the psychological point of view."[4] She believes in considering every student's individual performance capacity as a guide to devising an instructional sequence for any

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[1]Celia Mae Bryant, "Solving Technical Problems thru an Intellectual and Musical Approach," Clavier, III (October, 1964), p. 44.

[2]Bryant, "Solving Technical Problems thru an Intellectual and Musical Approach," p. 45.

[3]Bryant, "Solving Technical Problems thru an Intellectual and Musical Approach," p. 45.

[4]Hetty Bolton, On Teaching the Piano (Borough Green: Novello and Company Limited, 1954), p. 23.

student.[1] Bolton notes that the sequence should center around the teaching of musical interpretation. Referring to it as "The Technique of Interpretation," she feels that students can learn to interpret music through understanding the elements, including the rhythmic aspects, phrasing and structure, and tone color.[2] In regard to tone color, Bolton emphasizes the necessity of developing students' aural awareness: "They must be trained to listen to the sounds actually produced. The tendency is to listen with our imagination to what we are putting in to our playing, instead of listening with the ear to what is actually coming out."[3] She concludes that each student must be taught:

(1) To imagine the kind of sound he wants before he makes it;

(2) To choose and consciously control the tone amount and quality of every sound he makes, even in the quickest passages; and

(3) To listen to what is actually produced.[4]

Neuhaus suggests that the art of piano playing should begin with understanding of the content or artistic image of music. He comments:

> . . . work on the artistic image should begin in the very first stage of studying music and learning to play the piano. . . . By this I mean that if a child is able to reproduce some very simple melody, it is essential to make this first "performance" expressive, in other words, that the nature of the performance should correspond to

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[1]Bolton, p. 23. [2]Bolton, pp. 40-46.

[3]Bolton, p. 45. [4]Bolton, p. 45.

the nature (the "content") of the melody.[1]

In developing the art of piano playing, he refers to technique as an all-encompassing aspect which includes the physical manifestation of a student's musical understanding. He points out:

> A few words about technique. The clearer the goal (the content, music, perfection of performance), the clearer the means of attaining it. This is an axiom and does not require proof. . . . The "what" determines the "how," although in the long run the "how" determines the "what" (this is a dialectic law). My method of teaching, briefly, consists of ensuring that the player should as early as possible (after a preliminary acquaintance with the composition and mastering it, if only roughly) grasp what we call "the artistic image," that is: the content, meaning, the poetic substance, the essence of the music. . . . A clear understanding of this goal enables the player to strive for it, to attain it and embody it in his performance; and that is what "technique" is about.[2]

Neuhaus refers to musical performances which lack a "rhythmic core (i.e., of the logic of time and of development in time)" as "musical noise."[3] In addition to rhythmic control, Neuhaus contends that aural control must be mastered if a student's performance capacity is realized. Commenting on aural control, he notes that some players focus attention mostly on

> technique (in the narrow sense) about which I spoke earlier (velocity, evenness, bravura; that dazzle and crash), his ear is insufficiently developed, he lacks

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[1]Heinrich Neuhaus, The Art of Piano Playing (New York: Praeger Publishers, 1973), p. 10.

[2]Neuhaus, p. 2. [3]Neuhaus, p. 31.

> imagination, he is incapable of listening to himself (and of course the music).[1]

He concludes that aural control is especially necessary in the realization of tonal and rhythmic nuances:

> It is impossible to determine the degree of rhythmic freedom of a phrase if the correct nuances have not been found. Tone and rhythm go hand in hand, help each other and only jointly can they solve the problem of ensuring an expressive performance.[2]

Ernst Bacon speaks of learning to play the piano in terms of learning how to practice. He contends:

> Begin with an over-all reading and a formulation of the work's musical qualities, tempos, climaxes, characteristics, and its general plan. Then settle down to a successive mastery of every one of its details--the plumbing, carpentry, masonry, and electrical wiring, so to speak. No need to involve the larger emotions for these lesser tasks, wherein one detail after another is laid away in memory and habit, each needing reassembling into successively larger units, thereafter. Finally play the work in its entirety, being careful not to exceed a tempo allowing for correctness and a realization of all that was intended.[3]

Bacon believes all the elements of technique should be compassed by rhythmic patterns, thus relating:

> This not only realizes a metrical fact, but it encourages the development of an inner pulse, and exploits the driving force of rhythm in promoting dexterity, while encouraging the grace of the hands. . . . Rhythm is a human and not a mechanical thing. It springs from bodily movement, which is never perfectly regular, but the regularity of which is enhanced and humanized through the ever-present need and possibility of slight deviation.[4]

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[1]Neuhaus, pp. 55-56. [2]Neuhaus, p. 53.

[3]Ernst Bacon, Notes on the Piano (Seattle: University of Washington Press, 1963), p. 59.

[4]Bacon, p. 60.

Bacon advocates an instructional approach to piano study that emphasizes the development of the following factors:

1. musical understanding, including phrasing and phrase focal points realized through types of tonal/rhythmic intensifications;[1]
2. aural control, including the use of the pedals, "The ear also pedals";[2]
3. rhythmic control, including the development of an inner pulse and the use of practicing in accented rhythmic patterns;[3] and
4. technical control as the means to producing a musical intention, "The moment you approach technique in the musical spirit, it will begin to yield, and its obstacles will resolve into music, in which spirit they must have been conceived."[4]

Emergence of Rhythm as an Important Aspect in Selected Pedagogical Writings of the Twentieth Century

Whiteside notes that many instructional approaches deal with the physical action of playing, concentrating on articulation--production of separate tones--rather than the physical production of a phrase. She maintains that any instruction in piano playing must consider the continuity of phrase-to-phrase progression achieved through a "basic rhythm."[5] Stressing the importance of this basic rhythm, Whiteside comments:

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[1]Bacon, p. 17. [2]Bacon, p. 61.

[3]Bacon, p. 61. [4]Bacon, p. 62.

[5]Abbey Whiteside, Mastering the Chopin Etudes and Other Essays (New York: Charles Scribner's Sons, 1969), p. 4.

> It is only when the emotional response to the aural image of the music creates in the performer's body a physical response, a basic rhythm, as a counterpart to the rhythmic flow in a composition, that he is enabled to realize to the fullest extent the beauty inherent in the music. Now many great artists do, unconsciously, use such a rhythm. . . . How much more effective would all teaching be if the use of such a basic rhythm were to be consciously and systematically taught![1]

She relates that there are two rhythms in music: rhythm of note values and rhythm of form. Rhythm of form is the compelling force that produces artistic piano playing, because that is what creates the proper equality between a fully coordinated body and an aural image. She enumerates:

> The rhythm of form arises from the work as a whole, the continuous evolution of its pattern and significance, the legato feeling of phrases, and the telling of a coherent story. . . . The rhythm of articulation is the rhythm of separate notes; it is a necessary component of music, but is of no significance unless it is fused into a larger scheme. . . . When physical processes are perfectly coordinated and fused with the emotional expression of the music, . . . ease and freedom comes like a skater-acrobat or jazz player. Jazz players are not taught, but have a tune in their ears and rhythm in their bodies.[2]

Further elaborating on the importance of an all-encompassing basic rhythm, Whiteside concludes:

> An exciting rhythm, a unifying, all-encompassing rhythm is the only possible means by which the entire playing mechanism (which consists of the muscles of the arm, the bony structure of the hand, and the fingers) can be brought into full play. A basic rhythm is the only possible over-all coordinator, for it is not merely the instigator of beautiful musical production, but it is the

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[1]Whiteside, Mastering the Chopin Etudes and Other Essays, pp. 4-5.

[2]Abby Whiteside, "The Physical Sensation Comes First," (ed.) R. Sabin, Musical America, LXXI (December, 1951), pp. 25-26.

> sole factor that can successfully translate the image in the ear and the emotion which must be at the bottom of all beautiful music into a function of the whole body. . . . Rhythm is the most potent of all the forces which influence listening habits. Rhythm channels the emotional surge which the music creates if the piano is beautifully played. Rhythm is the only possible coordinator for expert timing. It is a simple and very adequate tool for developing the feeling for form. Rhythm is also the basis of good sight-reading.[1]

Last doubts the validity of any instructional method or practice procedures that fail to develop a student's ability to listen critically and play in rhythm. Thus, she comments:

> The first thing, then, which a pianist should learn is to LISTEN, and yet, strangely enough, many quite advanced pianists never appear to listen to themselves. They think they do, of course, but their critical faculty has not been developed. . . . Rhythm, in its true sense includes the pulse and swing of the music: its natural accent, which leads to phrasing, tonal variety, climax, and so on. As the pulse in music may be called its life-blood, so variation of rhythmic figure determines the mood, character, and individuality of the whole.[2]

Last discusses the importance of understanding the musical elements of a composition, especially the phrase and its components. Relating phrase-length to nursery rhymes, she believes phrasing is a very natural thing for young students to comprehend because children chant nursery rhymes in phrases. Therefore, young students can be taught to understand and perform music in phrases, providing there is

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[1]Abby Whiteside, Indispensables of Piano Playing (New York: Coleman-Ross Co., 1961), pp. 3-4, 7-8.

[2]Joan Last, Interpretation for the Piano Student (London: Oxford University Press, 1962), p. 60.

effective guidance by the teacher. Further commenting on the significance of phrasing, Last notes:

> Good phrasing implies artistic and intelligent use of legato, staccato, accent, pause, and slur, a sense of balance between varying parts, a feeling for tonal nuance, a sensitive judgement of tempo and rhythmic variation, and an appreciation of the effects of pedalling. All these components are a part of the whole phrase, and on them its musical outline depends.[1]

She identifies rhythm as the musical element which will most effectively guide students in understanding phrasing and its components: "Rhythm, in its true sense, includes the pulse and swing of the music: its natural accent, which leads to phrasing, tonal variety, climax . . . and so on . . . ."[2]

Fletcher notes the significance of developing a fundamental rhythm during the early years of instruction. He contends:

> Rhythm is a physical experience, a sensation that happens in muscles in response to a heard or felt stimulus in the form of pulsation. . . . Music reading is only possible when the notation patterns stimulate and evoke in bodily muscles a sensation of those rhythmic patterns as vivid as the one which sets feet and hands tapping and heads nodding in the concert hall.[3]

He notes the necessity of arousing consciousness of the indispensable pulse as students must learn to retain a sense of the basic pulse to achieve success at all stages of

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[1]Last, Interpretation for the Young Student, p. 113.

[2]Joan Last, The Young Pianist (London: Oxford University Press, 1963), p. 62.

[3]Stanley Fletcher, "Rhythm and Metrical Bookkeeping," Clavier, II (March-April, 1963), p. 18.

pianistic development.[1]

Cone, commenting on the importance of rhythm in music, states that musical form is fundamentally rhythmic, rather than thematic or harmonic. Cone notes:

> . . . valid performance depends primarily on the perception and communication of the rhythmic life of a composition. That is to say, we must first discover the rhythmic shape of a piece--which is what is meant by its form--and then try to make it as clear as possible to our listeners. . . . Certain general rhythmic principles underly common formal units--the phrase, the period, the three-part song-form. . . . The same principles, working on higher levels and more comprehensive formal sections, can ultimately be invoked to explain an entire composition as one all-embracing rhythmic impulse. Such a comprehensive form can be made clear in performance, however, only by virtue of another principle: that the whole is more important than any of its parts. Any conflict of interest must be resolved by suppressing the formal claims of the part in favor of those of the whole.[2]

Berry, agreeing with Cone, relates that the coherence of a musical composition exists upon the sequence of

> regularly spaced beats or impulses, against which the rhythmic patterns play; and in relation to which, as to one another, they enter into coherent form. These pulsations fall into groups (measures), often of the same length throughout a given piece or movement.[3] These pulsation units or impulses compose the mensural level of the metric structure of a composition "and govern its nature."[4]

Berry further states that just as pulsation units group into

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[1]Fletcher, "Rhythm and Metrical Bookkeeping," p. 19.

[2]Edward T. Cone, Musical Form and Musical Performance (New York: W. W. Norton, Co., 1968), pp. 38-39.

[3]Wallace Berry, Form in Music (Englewood Cliffs: Prentice-Hall, Inc., 1966), p. 2.

[4]Berry, p. 2.

measures to form a primary or mensural level of meter, "measures group into larger units to form intermensural meter."[1] Thereby considering mensural meter as the organizing principle within a measure, the beat is the pulse unit. Viewing meter at a higher level, measures or larger units are grouped to form intermensural meter.[2] Berry gives the following example:

> To feel meter at various levels--mensural and intermensural--the reader may try "conducting" a very simple theme, like that of [a] Haydn Symphony . . . equating "beat" with a half-measure--i.e., making one bar of two, then gesturing a full measure per "beat," and finally two measures per "beat," so that the entire period feels like a magnification of the 4-beat measure. It then becomes clear that measures and groups of measures--phrases and larger units--have weak-strong organization which is analogous to that of the measure.[3]

Cooper and Meyer concur that most music is architectonic in its basic organization, thus commenting:

> That is, just as letters are combined into words, words into sentences, sentences into paragraphs, and so on, so in music individual tones become grouped into motives, motives into phrases, phrases into periods, etc. This is a familiar concept in the analysis of harmonic and melodic structure. It is equally important in the analysis of rhythm and meter.[4]

The writers state that as music unfolds, rhythmic structure is perceived as an organic process where smaller rhythmic units function as integral components of a larger rhythmic

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[1]Berry, p. 17.

[2]Berry, p. 17.

[3]Berry, p. 304.

[4]Grosvenor W. Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: The University of Chicago Press, 1960), p. 2.

structure. As these smaller units integrate into larger organizations, music is created.[1] These writers believe there are three modes of temporal organization which can be identified and distinguished:

1. Pulse. Series of regularly recurring, precisely, equivalent stimuli;
2. Meter. Measurement of the number of pulses between more or less regularly occurring accents; and
3. Rhythm. The way in which one or more unaccented beats are grouped in relation to an accented one.[2]

Cooper and Meyer denote that (1) pulse is the key to the recreation of a musical composition; (2) meter is a factor which serves to modify or alter the three modes of temporal organization; (3) rhythm can be realized at different levels because of its architectonic qualities; and (4) rhythmic patterns may act independently or dependently on meter. The writers further illustrate that rhythmic groupings, the organization and placement of strong and weak beats, may be influenced or changed within a composition due to the following single or interactive influences: (1) melody, (2) harmony, (3) stress, (4) duration, (5) ornamentation, (6) meter changes, (7) rhythm ambiguities, and/or (8) different types of rhythmic patterns, such as hemiola, free rhythm, or measured rhythm,[3] thus commenting:

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[1]Cooper and Meyer, pp. 1-12.

[2]Cooper and Meyer, pp. 6, 13-14.

[3]Cooper and Meyer, pp. 12-57.

> . . . rhythmic organization is architectonic, more extensive rhythmic structure--phrases, periods, etc.--as well as shorter, more obviously rhythmic motives exhibit these basic patterns.[1]

Rhythmic groupings may be interpreted differently by individuals as Cooper and Meyer point out:

> Sensitive, well-trained musicians may differ. Indeed, it is this that makes performance an art--that makes different phrasings and different interpretations of a piece of music possible. . . . In brief, the interpretation of music--and this is what analysis should be--is an art requiring experience, understanding, and sensitivity.[2]

Although realizing that no definitive rules apply for computing particular groupings, the writer believes that the comprehension of rhythmic groupings provides an avenue for fostering the development of musical intelligence and aesthetic responsiveness. This would include musical judgment in professional and self-actualization capacities.

Matthay, commenting on rhythm groupings, relates that measure pulse and "rhythm" must be realized by a student before the nature of musical continuity, direction, and shape can be comprehended and executed. He believes few pianists hear and feel pulse and rhythm in a general sense because of faults in early instruction.[3] Matthay interprets rhythm in a "broad all-embracing sense" as "bar-rhythm," "figure rhythm," and "phrase-rhythm" and speaks of pulse as being a rhythmical swing which can be thought of from the narrow

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[1]Cooper and Meyer, p. 6. [2]Cooper and Meyer, p. 9.

[3]Matthay, Musical Interpretation, pp. 28-58.

sense of a measure sub-division to a whole phrase or section.[1] Further commenting on the necessity of having a "medium" upon which to structure musical movement or progression, he comments:

> In Music we choose some particular sequence of beats or pulses, and upon this particular form of extension in space, or Time-spacings, upon this thoroughly tangible time-canvas of Pulse we lay out the progression of our musical picture, whether as composers or players--just as the painter must lay out his work on his canvas. It may strike you at first that all this is "a very waste of words" but I assure you we are here face to face with one of the fundamental laws of our art, and the teaching of it. Yes, even the uncultured members of an audience can quite well feel the effects of rhythm, or its absence. When the Rhythm is strong, they are impressed by the fact that the piece is alive, but when the Rhythm is lax, or Time-continuity is broken up, they feel that it is "as dead as a door nail"; and this, although quite unaware of the cause of their comfort or discomfort. Indeed, so strong is this rhythmical need of the public, that when rhythmical grip is lacking in a performer no other attractions offered by him can save the piece.[2]

Christ and others state that performers, composers, and audiences are all involved with patterns of sound. These writers concur that patterns of musical sound have four properties: pitch, intensity, timbre, and rhythm.[3] The writers list both pitch and rhythm as the distinguishing characteristics of a motive or melody and state: "Either the pitch or the rhythmic structure can be the dominating factor,

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[1]Matthay, Musical Interpretation, p. 31.

[2]Matthay, Musical Interpretation, pp. 32-33.

[3]William Christ et al., Materials and Structure of Music (Englewood Cliffs: Prentice-Hall, Inc., 1966), p. 1.

or both can be combined and equally important."[1]

Berry contends the melodic-rhythmic features of a musical phrase or composition are the elements usually perceived first from both the aural and visual standpoint.[2] According to de Stwolinski, "All of the elements of music create the phrase, but to the listener melody and rhythm are generally the most audible characteristics."[3] Apel relates: "By its very nature melody cannot be separated from rhythm. Each musical sound has two fundamental qualities, pitch and duration, and both of these enter into the successions of pitch-plus-duration values known as melodies."[4] This infers that the understanding and application of rhythmic hierarchic groupings include the comprehension and application of melodic hierarchic groupings as the two are inseparable. Seashore[5] and Pflederer[6] denote that the perception of rhythmic structure is enhanced by groupings. The addition of accents helps to group pitches into distinct strong and weak

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[1]Christ et al., p. 63. [2]Berry, p. 15.

[3]Gail de Stwolinski, Form and Content in Instrumental Music (Dubuque: Wm. C. Brown Company Publishers, 1977), p. 247.

[4]Willi Apel, Harvard Dictionary of Music (Cambridge: The Belknap Press of Harvard University Press, 1969), p. 517.

[5]Carl Seashore, Psychology of Music (New York: McGraw-Hill Book Co., 1938), p. 140.

[6]Marilyn Ruth Pflederer, "Conservation Laws Applied to the Development of Musical Intelligence," Journal of Research in Music Education, XV (Fall, 1967), p. 221.

relationships. This provides an understanding for the student to conserve the meter on groupings of rhythmic-units, although the distribution of note values may change. Pflederer contends that the understanding of metrical groupings may be identified as one of the "conservation type laws" in the development of musical concepts in Piaget's psychology of intelligence.[1] She concludes, "within the context of Piaget's theory, musical intelligence can be assumed to be a superior form of musical organization, represented by an equilibrium of cognitive structuring of musical elements built up through a utilization of the principle of conservation."[2]

Numerous authors cited have acknowledged the importance of comprehending the rhythmic structure of music. The writer believes that the rhythmic structure is the framework upon which all subsequent musical intentions depend. Thus, to understand or execute a convincing performance of a piano composition, the pianist must be able to interpret rhythmic structure. Although subjective in nature, the interpretation of a composition's rhythmic structure is the key to understanding a composer's musical intentions. These factors are the reasons why many pedagogues advocate the comprehension

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[1]Pflederer, "Conservation of Laws Applied to the Development of Musical Intelligence," p. 221.

[2]Pflederer, "Conservation of Laws Applied to the Development of Musical Intelligence," p. 221.

of the rhythmic aspects of music as foremost in the development of performance capacities.

Evolvement of Basic Principles of the Teaching and Learning Process

Chronister, reviewing piano teaching from the past, present, and future, observes that the next fifty years of piano teaching must become more concerned with objectives for fostering growth in understanding all of the elements of music as a means of developing the performance capacities of a pluralistic society. He relates that teaching materials have vastly improved during the last fifty years, but many teachers still lack an approach for teaching the materials.[1] He contends that an approach must teach students to learn the language of music before the great piano masterpieces are studied. As in any field, "Becoming literate in the language of music means, in part, the ability to easily transfer what is on the page into sound--in our case, at the piano."[2] He concludes that the extent of literacy will depend greatly on each student's individual learning and performing capacity.[3]

The writer has found that piano journals and books on the art of piano playing have given minimum attention to objectives upon which piano teachers may base systematic pedagogical procedures and for students to derive self-learning

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[1]Richard Chronister, "Piano Teaching--Past, Present, Future," Keyboard Arts (Winter, 1977), pp. 3-5.

[2]Chronister, p. 3. [3]Chronister, pp. 3-4.

techniques. In addition to Chronister,[1] Raymond[2] and Bryant[3] refer to the difficult task of piano teaching and suggest some objectives to consider.

Raymond describes piano teaching as a formidable task. She contends:

> The vocation of teaching imposes on those who have chosen to follow that profession a responsibility of the highest order, the responsibility and duty of leading the student into the realm of knowledge and performance. No one can teach another to know and to perform. One can only stimulate, elicit, and develop in the mind of another the ability and the will to learn. The teaching of music, more than any other field, is difficult and challenging by reason of its complexity--because of the interplay of the physical, instrumental, and emotional aspects of the learning processes involved. It is therefore necessary to give careful consideration to the choice of approach and methods that may yield the best results, with the greatest satisfaction to both teacher and student.[4]

She considers the main objective of piano instruction to be the teaching of musical comprehension. Concerning this objective, she states:

> The teacher must show the pupil how to work and must explain the melodic, rhythmic, and harmonic outlines in the composition studied. He must stimulate the student to form and adapt his hands to the needs of the score and to negotiate its obstacles in order to recreate the composition himself, thus expressing the intention of the composer.[5]

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[1]Chronister, pp. 3-5.

[2]Rose Raymond, "Essential Principles in Piano Teaching," Music Journal, VIII (March-April, 1950), pp. 44, 50.

[3]Celia Mae Bryant, "Design for Musical Perception," Clavier, II (November-December, 1963), pp. 17-21.

[4]Raymond, p. 44. [5]Raymond, p. 50.

Bryant agrees with Raymond's identification of piano teaching objectives, thus relating: "The purpose is to establish a learning procedure for the understanding and performance of a musical composition."[1] Bryant denotes an instructional approach should include affirmative answers to the following questions:

1. Does the approach include systematic practice procedures which foster retention of what has been studied?

2. Does the material correlate with an understanding of a composer's musical intentions as a basis for an aesthetic interpretation?

3. Does the approach develop an accurate feel of the rhythm which will help a student master the coordination of the cognitive-physical aspects of performance?

4. Does the approach include the use of blocking procedures as a means of helping the student understand the musical score and set-up fingering patterns as "All music can be reduced to chords and scale patterns?"[2]

She concludes that it is very difficult for any pianist to produce convincing interpretations unless there is a perception of the musical structure:

> Without this perception, [the] music will sound restless and even aimless; with it will come the discovery of an inner repose and satisfaction based on understanding of the structure and ability to memorize and play with comprehensive interpretation. The wise teacher, through informative direction, can guide the student down the pathway to Musical Perception.[3]

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[1]Bryant, "Design for Musical Perception," p. 17.

[2]Bryant, "Design for Musical Perception," pp. 17-21.

[3]Bryant, "Design for Musical Perception," p. 21.

Although objectives need to be clearly defined, the writer believes the role of the teacher is a vital component in the teaching and learning process.

Whiteside, discussing the role of the teacher, advises that the teacher must be a diagnostician. She contends teachers must have the ability to listen to a student and decide if there is an absence of a basic rhythm and critical self-listening. She feels some students naturally play in a basic rhythm and listen critically in direct relationship to the degree of individual talent, thus commenting:

> This talent, among other things, implies a pitch perception which is so accurate that a body can move accurately to produce the tones which the ear has imaged and wants to hear. . . .
> Basic rhythm is the illuminating guide to the subtle beauties of great music.[1]

Furthermore, she concludes that failure in the overall process of learning should be blamed on the teacher, not the student:

> If a child of average intelligence, average musical equipment, and an average coordination does not have, after studying for a while, a sense of accomplishment and an interest in music and the piano, it is always the fault of the teacher and never the fault of the child.[2]

Salver identifies the role of the teacher as one of guidance. Efficient guidance, at all levels of learning, is needed to

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[1]Whiteside, Mastering the Chopin Etudes and Other Essays, pp. 26-27.

[2]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 19.

develop individual musical capacities. She relates that guidance can be more effective if the teacher has some knowledge of psychology and learning theories. Although psychologists do not agree on "what happens in the brain and nervous system of an individual when learning takes place, we do know that it has taken place when he reacts differently to a given experience because of what he has learned in the past."[1] According to Salver, the function of the psychologist is to create and test theories of learning, and the role of the teacher is to apply what seems useful to produce gradual musical understanding. She suggests piano study should be referenced to developmental theories of learning as opposed to tenets of associationism: "There is overwhelming psychological evidence that meaningful experiences are remembered, while those things learned through sheer repetition are not."[2] Thus, Salver proclaims a student has a much better chance of performing a composition more expressively if the dynamic markings are executed as a result of understanding gradually the basic elements of musical structure rather than promoting a list of definitions.[3]

Burrows agrees that recent research points out very vividly that there is a need for a more scientific approach to piano teaching. He notes:

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[1]Roberta Salver, "Psychology Aids the Music Teacher," American Music Teacher, I (March-April, 1952), p. 7.

[2]Salver, p. 9.

[3]Salver, p. 9.

> For generations piano teachers have either developed their own teaching technics, or have passed on to their students the teaching of their masters. While it is highly desirable for a teacher to use his own common sense in teaching, and fitting that we should pass on to future players the best traditions of the past, startling improvements are evident when we turn on the light of psychology, and utilize what is now known about the teaching and learning process.[1]

Burrows lists the following reasons for developing a more scientific approach:

1. To meet the individual needs of a pluralistic society rather than "Just the most talented and persevering few;"

2. To provide students with efficient practice procedures which will foster the development and growth of musical understanding as today's students do not respond to hours of non-productive practice, hence, "extended drudgery."[2]

To achieve these goals, Burrows advises teachers to consider a developmental approach to learning. Using tenets of developmental psychology as a philosophical basis, this approach always places technical drills into their proper relationship to the basic application of technique in the performance of musical compositions.[3] Elaborating on the developmental approach to learning, Burrows comments:

> Developmental psychology requires that the teacher see a relationship among all the activities of the student. It is not enough to teach one piece after another in building up a large repertory. If a student learns how to bring out a melodic line in a Chopin

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[1]Raymond Burrows, "Piano Teaching Psychology," American Music Teacher, I (September-October, 1951), p. 2.

[2]Burrows, "Piano Teaching Psychology," p. 2.

[3]Burrows, "Piano Teaching Psychology," pp. 2, 19.

> Nocturne, then he can pursue further development in following the more subtle melodies of a Debussy Prelude. If he understands the counterpoint of a Bach Invention, he can attack some of the passages in Schumann Sonatas where two part counterpoint appears against an accompaniment. When the contour of a harmonic passage in Beethoven is properly realized with an understanding of the relationship between soprano and bass line, then it is time to attack the hierarchy of melodies which made Brahms' music so fascinating and so difficult.[1]

He concludes:

> Modern psychology teaches us that all growth is a continuous interaction between the organism and its environment. . . . The interaction of the organism with its environment does not mean that either the organism or the environment will have complete sway over the other. The organism (our student) will be studied, understood, and guided by the thoughtful teacher. The environment (including music) will be controlled and wisely presented.[2]

Mursell concurs that "every musical activity, endeavour, or learning, throughout the whole gamut of maturity, should involve the same kind of musical experience."[3] This infers that the child, as well as the professional artist, should sing, play, listen, and compose like the master, but each at the level of individual ability. As Werner notes: "The pattern of learning is the same for all stages of instruction . . . the fundamental difference is the

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[1]Burrows, "Piano Teaching Psychology," pp. 17-18.

[2]Burrows, "Piano Teaching Psychology," p. 17.

[3]James L. Mursell, Education for Musical Growth (Boston: Ginn and Co., 1948), p. 57.

degree of detail."[1] Although agreeing that the expert approaches an experience differently from the beginner, Mursell states: "The young beginner has the same kind and quality of experience as the highly developed expert, the only difference being in degree."[2] In amplification of this concept, Mursell notes that learning to play the piano, as with any learning process, may start with a crude and imperfect synthesis and progress by complex and fluctuating processes of analysis to an improved synthesis, like a child learning to walk.[3]

Tellstrom states that Pestalozzi's principles of education aver education as a continual process, going from the most uncomplicated beginnings to the greatest complexity, a process "achieved through man's interaction with external stimuli rather than the memorization of facts."[4] This is further substantiation of the thoughts of Burrows and Mursell. As stated by Tellstrom, William Mason's writing indicates support of Pestalozzi's principles of education: (1) by

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[1]Robert J. Werner, "The Contemporary Music Project: The Development of the Theory of Comprehensive Musicianship," Contemporary Music Project Conference on College Music Curricula (Reston: CMP, 1970), p. 3.

[2]Mursell, Education for Musical Growth, p. 19.

[3]James L. Mursell and Mabelle Glenn, The Psychology of School Music Teaching (New York: Silver Burdett, 1938), p. 49.

[4]Theodore Tellstrom, Music in American Education: Past and Present (New York: Holt, Rinehart and Winston, 1971), p. 28.

advocating the importance of discovering and observing each child's own individual learning capacity and growth sequence, and (2) by fostering the guidance of this growth sequence through directing the child's learning process around the principle of self-activity.[1]

Mirovitch asserts that the primary aim of all education is to foster the growth of the complete man and not to develop specific skills or techniques, accumulate facts, rules, or statistics. Man must be helped to reach a higher degree of accomplishments through the greatest possible development and use of all powers. This is especially true in music as art exists "to portray life, explain it, improve it, and express what otherwise cannot be expressed."[2]

Twentieth Century Theories of Developing Piano Technique

Most of the twentieth century theories of piano instruction have been essentially concerned with teaching piano technique or developing the physiological aspects of the playing mechanism.[3] Boardman divides the development of these theories into three categories and lists exponents of

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[1]Tellstrom, pp. 39-43.

[2]Alfred Mirovitch, "Practice Idealism in the Teaching of Music," The American Music Teacher, V (May-June, 1956), p. 4.

[3]Roger Crager Boardman, "A History of Teaching Piano Technique," Dissertation Abstracts International, 15 (1955), 272-73 (New York University).

each:

(1) finger technique 1753 to 1850
Bach, Clementi, and Czerny

(2) wrist, arm and its weight 1850 to 1900
Kalkbrenner, Leschetizky and Deppe

(3) weight relaxation and the coordination of all parts 1900 to 1953
Breithaupt, Fielden, Ortmann, and Whiteside[1]

Boardman further discloses that twentieth century theories have been mostly concerned with (1) action study of muscle, joints, tendons, and their actions; (2) applications of laws of leverage to the playing mechanism; (3) emphasis on functions of the nervous system and its influence on muscular action; and (4) greater stress on coordination of auditory, visual, kinesthetic sense departments in developing piano playing skills. He concludes:

> . . . the playing of great nineteenth century virtuosi served both as inspiration and instruction to Deppe, Breithaupt and Matthay who, through close observation and keen analysis, developed theories of teaching technic which employed far more than before, the extensive capabilities of the entire body.[2]

Nellons denotes that the majority of articles in piano journals relate to the physical facets of skill development.[3] Wolff supports this and notes that there are literally hundreds of articles devoted to the study of the anatomical

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[1]Boardman, p. 273. [2]Boardman, p. 273.

[3]Charles Edward Nellons, "An Experimental Investigation of the Effect of Blocking on the Memorization of Selected Piano Literature" (unpublished Doctoral dissertation, University of Oklahoma, 1974), p. 2.

aspects of piano technique and its relevant mechanical laws.[1] According to Wolff, the present emphasis on the anatomical side of piano technique has been a deterrent to teaching musicianship and technique as a unified whole or gestalt. He believes piano performance capacities cannot be realized fully unless the training involves the unification of the musical and technical aspects. He states:

> Piano technique, as Schnabel used the term and taught it, is the facility to establish channels between the sound heard inwardly and its realization in all individualized subtlety, or, as one might say, channels between the "soul" and "body" of the interpretation of a score.[2]

He indicates that Schnabel was aware of the problem and "all his teaching showed his effort to bridge this gulf."[3] Wolff thinks the unification fails to develop in piano students because the two aspects are taught, to a large degree, through separate experiences.[4] Bastien agrees and reveals there is a lack of consideration for concepts which unify the development of physical coordination and musical control at the keyboard.[5] Bacon, further commenting on the present anatomical/physical emphasis, states:

> Learned books have been written on the physical aspects of piano playing, notably those of Matthay,

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[1]Konrad Wolff, The Teaching of Artur Schnabel (New York: Praeger Publishers, 1972), p. 23.

[2]Wolff, pp. 22-23. [3]Wolff, p. 22. [4]Wolff, p. 22.

[5]James W. Bastien, How to Teach Piano Successfully (Park Ridge: General Words and Music Co., 1973), pp. 141-42.

> Breithaupt, Ortmann, and Schultz, all of them rewarding to whomsoever is given to probing into the anatomy, physiology, neurology, and the mechanics of the arm and hand, as they affect piano technique. But while they may stimulate and satisfy "scientific" curiosity, they help the student of piano no more than would an analysis of the larynx, the lungs, the diaphragm, and the sinuses, help the singer to sing. . . . Piano playing will never be a science. If it were, it would cease to be an art.[1]

Many noted pedagogues and performers agree that the physiological information has some importance, but strongly question what effect the information has on the development of a pianist's ability to make musical and aesthetic judgments. Steinhausen, in his book on physiological misconceptions, contends that artistic imagination is the stimulus for physical movement, affirming the concept that physical coordination is guided by aesthetic considerations.[2]

Some twentieth century writers have attempted to provide instructional help by suggesting solutions to isolated pianistic problems rather than establish a theory of technique. Newman suggests the following: (1) musicianship can be developed through skills, such as, learning to play by ear and sight-reading;[3] and (2) steps should be outlined to learn a new piece, including "laying the groundwork" through

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[1]Ernst Bacon, Notes on the Piano (Seattle: University of Washington Press, 1973), p. 77.

[2]Friedrich Adolf Steinhausen, Die physiologische Fehler und Umgestaltung der Klaviertechnik (Leipzig: Breitkopf and Hartel, 1905), p. 3.

[3]William S. Newman, The Pianist's Problems (New York: Harper and Row, Publishers, 1974), pp. 5-26.

analysis of the form, slow practice with the metronome and understanding the markings, touches, and fingering.[1]

Assessment of Existing Piano Method Series

An extensive survey and assessment of piano series disclosed that there are many commonalities among the specified objectives of approximately one hundred methods on today's market. Although each course of study attempts to outline unique goals, most method series concentrate on the training of competencies in pianistic skills and notational complexities. Bastien's survey of twenty-six piano method series contends that there is no "blueprint which will automatically produce first-rate pianists."[2] Bastien's guidelines for evaluating a series include the following: (1) basic notational approach; (2) design and format of material; (3) presentation of rhythm, chords and scales, and theory; (4) supplementary material; and (5) length of time required to complete the course.[3] Of the twenty-six series evaluated, he relates that there are strong and weak points in each of the series. According to Bastien, a method series should be evaluated only in terms of its value to the average learner. Since very few students become professional pianists, a series should follow a very "practical path,"

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[1]Newman, p. 167.

[2]Bastien, p. 102.

[3]Bastien, p. 102.

emphasizing training of skills, such as, keyboard harmony, theory, improvisation, and creative work.[1] Neuhaus,[2] Whiteside,[3] Last,[4] and others refute this idea. These writers allege that there should be one fundamental approach to piano instruction for all degrees of performance capacities, including the below average learner, the average learner, and the extremely gifted.

Norman, surveying fifty-nine standard method series, contends that no single series offers a complete integrated course of study for the development of performance capacities. Elaborating on the survey findings, Norman concludes that an instructional approach would have to be formulated by the teacher, using selected literature from different series as a vehicle for learning.[5]

During the last two decades, a number of series have been published. Several of these series contain between forty and fifty separate books which are designated for specific levels of advancement. Each series usually includes a chart explaining which books should be correlated at each level.

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[1]Bastien, p. 104. [2]Neuhaus, p. 9.

[3]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 3.

[4]Joan Last, "The First Year," Clavier, IV (September, 1965), p. 17.

[5]John L. Norman, "Evaluating Beginning Piano Methods," (unpublished paper, University of Oklahoma, 1957), p. 74.

Music Pathways: A Course for Piano Study divides the compositions into the following categories: discovery, activity, performance books for levels one and two; and repertoire, musicianship, technique, ensemble, and something light for levels three, four, and five.[1]

Books from levels one and two contain mainly short compositions, emphasizing an approach to reading. Levels three, four, and five contain compositions from the different style periods. Very little information is given in regard to instructional information. For example, the Performance 1C introduction relates this information:

> Through enjoyable music, the piano student learns and uses concepts of Rhythm, Melody, Harmony, Form, Style and Expressive Elements. This is accomplished through
>
> KNOWING musical facts
> USING musical skills
> FEELING musical expressiveness
>
> The home project DAILY EXERCISE provides drills that reinforce technical achievements and prepare for future demands. As an aural aid, a few key pieces are recorded on a disc included in the DISCOVERY books 1A, 1B and 1C.[2]

The repertoire books are planned for the following purposes:

1. Providing a balanced diet of worthwhile piano literature, tested and proven valuable for musical growth.

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[1]Lynn Freeman Olson, Louise Bianchi, and Marvin Blickenstaff, Music Pathways (New York: Carl Fischer, Inc., 1974).

[2]Olson, Bianchi, and Blickenstaff, Music Pathways, Performance 1C, p. 1.

2. Selecting works that possess broad appeal for keyboard students in a variety of learning situations.
3. Incorporating only those editorial suggestions that comply with the composer's intent and that follow the best original sources.[1]

Formal elements are explained in separate volumes called MUSICIANSHIP.[2] Although the style, rhythm, melody, harmony, form, and expressive elements are defined in the MUSICIANSHIP books, there is a marked absence of outlined procedures in reference to how the teacher or student arrives at an integrated instructional approach to correlate definitions with the compositions. The repertoire books are correlated at the different levels according to notational complexities rather than by the level of musical complexities.

The Bastien series, Music Through the Piano, is correlated in much the same manner. The books are divided into seven levels, but the organized categories have different titles: reading, theory, technique, repertory, and sheet music.[3] There is explicit information in regard to correlating the books as related to the different categories, but instructional guidance is minimal. The method or approach to the use of the teaching materials is left up to the teacher.

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[1]Olson, Bianchi, and Blickenstaff, Music Pathways, Repertoire 3B, p. 2.

[2]Olson, Bianchi, and Blickenstaff, Music Pathways, Musicianship, 3A.

[3]Jane Smisor Bastien and James Bastien, Music Through the Piano (San Diego: Neil A. Kjos, Jr., Publisher, 1968).

The Glover Piano Library series is divided into seven levels and a number of categories with titles as follows: Piano Student, Piano Repertoire, Piano Theory, Piano Technic, Chords and Keys, Piano Arpeggios, Christmas Music, and Piano Duets.[1] Teachers are advised to have students perform artistically from the beginning lessons. Glover notes that this can be achieved more easily if the teaching materials advance in difficulty at a very gradual rate. He notes:

> Artistic piano playing begins with the very first lessons. It is at this time that habits are formed that stay with the student the rest of his life. Rhythm, phrasing, dynamics, rests, and other details cannot wait until a year or two after piano study begins. They must be an integral part of music from the first lesson. It is more important in the development of a musician that the student play simple music well than move into music that is too difficult and played poorly.[2]

Although the author contends the music from the Piano Library will enhance the musical development of students, there is minimal instructional information provided for guidance. Most information is only suggestive in nature rather than instructional. For example, the following suggestions are given: (1) students are recommended to strive for fine performances and are directed to give "special attention to details of expression"; (2) the experiences incurred in the theory books will reinforce the learning of

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[1]David Carr Glover, Piano Library (Rockville Centre, N. Y.: Belwin/Mills Publishing Corp., 1967).

[2]David Carr Glover, Louise Garrow, and Mary Elizabeth Clark, Teacher's Guide for David Carr Glover Piano Library (Rockville Centre, N. Y.: Belwin Inc., 1967), p. 4.

scales, chords, and cadences which are found in the repertoire pieces.[1] The Teacher's Guide presents suggestions for correlating the materials from the different categories and describes the contents of each individual book.[2]

The Creating Music at the Piano series includes six basic books, recital books, and theory books.[3] The authors state that a student's musicality can be developed if the books are presented in a logical manner. The student's musicality will be nurtured by emphasizing the following: (1) the development of a sound concept of rhythm through "dynamic clapping" of note values; (2) the development of the hand by proper preparation for each individual physical task; (3) the analysis of each composition in terms of comparing intervals and rhythmic patterns from the different phrases of a composition; (4) the practice of "silent tapping" of notational patterns; and (5) the transposition of compositions to new positions on the keyboard.[4] Generally, each composition in the series presents one component of music,

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[1]Glover, Garrow, and Clark, p. 32.

[2]Glover, Garrow, and Clark, pp. 7, 13, 22, 32, 40.

[3]Willard A. Palmer and Amanda Vick Lethco, Creating Music at the Piano (Port Washington, N.Y.: Alfred Publishing Co., 1973).

[4]Willard A. Palmer and Amanda Vick Lethco, Creating Music/Teacher's Manual (Port Washington, N.Y.: Alfred Publishing Co., 1973), pp. 4-33; see also Willard A. Palmer and Amanda Vick Lethco, Creating Music/Source Book (Port Washington, N.Y.: Alfred Publishing Co., 1975), p. 3.

such as, a half rest, flat sign,[1] or repeated notes.[2] Each new component is presented in a graphical manner. Other than the presentations of new components, there is very little instructional information included.

The Frances Clark Library for Piano Students is divided into three broad levels: elementary, intermediate, and advanced. These levels are divided into sub-levels: early elementary, elementary, late elementary, early intermediate, intermediate, late intermediate, and early advanced.[3] The early elementary and elementary level books are named The Music Tree.[4] The remaining levels are divided into three basic categories: literature, technic, and theory.

The Music Tree books contain a collection of pieces emphasizing basically one component of music per composition, such as, (1) intervals, (2) note values, (3) beginning a third above or below a given landmark, or (4) crossing finger three over the thumb. There is a distinct absence of instructional information other than the explanation of newly presented components. The books stress "musical growth" through

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[1]Palmer and Lethco, Creating Music at the Piano, Book Two, pp. 18-19.

[2]Palmer and Lethco, Creating Music at the Piano, Book Four, p. 10.

[3]Frances Clark and Louise Goss, Library for Piano Students (Evanston: Summy-Birchard Co., 1965).

[4]Frances Clark and Louise Goss, The Music Tree (Evanston: Summy-Birchard Co., 1973).

the learning of separate components, including daily technical exercises "to prepare for the physical requirements of the music."[1] The collection of books is designed to develop "well-rounded musicians" including the awareness of music as a form of communication. Clark comments: "This 'awareness' includes all the elements we usually refer to when we speak of reading, rhythm, theory, composing, ear training, etc. . . ."[2]

The Mainstreams Piano Method series is divided into four phases rather than levels. Each phase consists of four books: (1) The Pianist, presenting basic information pertinent to the method; (2) The Performer, displaying supplementary material to The Pianist; (3) Projects, exploring creative compositional experiments and technical studies; and (4) Pencil and Paper, serving as a theory workbook which endeavors to explain more explicitly the music fundamentals presented in The Pianist.[3] Recently, the authors have added books in new categories: literature from the classics, improvisation, ensemble playing, and a primer series. Although the Projects books allow for some musical creativity,

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[1]Frances Clark and Louise Goss, Library for Piano Students/Source Book (Evanston: Summy-Brichard Co., 1974), p. 4.

[2]Clark and Goss, Library for Piano Students/Source Book, p. 4.

[3]Walter Noona and Carol Noona, Mainstreams Piano Method (Dayton: The Heritage Music Press, 1973).

the series displays a marked absence of instructional information other than definitions of newly presented symbols and signs.

Although several of the series published during the last two decades illustrate a vast improvement over teaching materials published before 1950, there is an obvious omission of an integrated, outlined instructional sequence which provides effective guidance for teachers to base systematic pedagogical procedures and for students to derive self-learning techniques.

The teaching material in the published series reveals striking commonalities in reading approaches and in selection of compositions from the different style-periods. The series include minimal information concerning an instructional approach to teaching the material. Generally, the included information presents explicit guidelines for correlating the books and stresses the utilization of all the books from a given series. It is common for each series to present an eclectic approach to reading rather than only one, such as, the "middle-c approach" or "black-key approach." As new series have been published, it has become evident to the writer that authors are offering new presentations of already established method formats.

Almost all of the series are divided into specific categories and levels of advancement. The specific categories are generally theory, technic, repertoire, reading, and

ensemble playing. Compositions or exercises from these books usually stress the learning of one separate component, such as a slur, rest, crossing of a finger, or a dynamic level.

Most information included involves the correlation of the books and explanations of newly introduced components. Although the authors stress the "newness" of each published series, the basic differences in the numerous courses of study are three-fold: (1) each series contains some original compositions by the authors; (2) each series divides the compositions into different categories; and (3) each series' material leveling process varies to a degree.

Chronister, evaluating present teaching material, maintains that method series are basically various approaches to learning to read music. He contends many of the series offer "new slants" to already established approaches.[1] These approaches include the "middle-C methods," "black-key approach," "multiple key approach," and "reading which introduces various 5-finger patterns at the beginning." Chronister notes the vast improvement in teaching material during the last fifty years, but asserts that the materials are not instructional methods.[2] The courses of study are teaching materials only. The approach used in teaching the material is the method. He believes materials have improved greatly, but methods of teaching the material are still in question.

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[1]Chronister, p. 3. [2]Chronister, p. 3.

Specifically commenting on this belief, he states: ". . . there can be no doubt that the great amount of fascinating teaching material that has been developed in the past fifty years helps us to be better teachers." He further states:

> If piano teaching fails, we can hardly blame the material, whatever the approach. All these materials are called methods, but they are not methods. They are only the books teachers use--the way they are taught is the method. Unfortunately, there has been more progress in teaching materials than in teaching methods during the past fifty years.[1]

The writer contends that method series should be accepted as teaching material rather than instructional approaches or methods. The basic design of most method series stresses the importance of learning separate components of music rather than an integrated instructional approach which fosters the development of performance capacities. Many esteemed twentieth century writers concur that performance capacities can be realized more easily through the development of musical understanding and a synthesis of aural, rhythmic, and technical control. Specifically, the writers point out the importance of understanding the rhythmic structure of piano compositions. The rationale is that the rhythmic structure is the framework upon which all subsequent musical intentions depend. The writer believes there is a dichotomy between the objectives of piano instructional material and the general philosophy of developing piano

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[1]Chronister, p. 3.

performance capacities as espoused by leading twentieth century artists and pedagogues.

Summary

During the first hundred years of the piano's existence, instruction was dominated by three recognized principles: (1) only fingers should be used with the upper parts of the arm fixed; (2) technical training is purely a mechanical procedure; and (3) the teacher is the absolute authority. There were two distinct schools of thought during the first half of the nineteenth century: (1) emphasis on clarity and fluency of technique and (2) emphasis on fullness of tone, extensive dynamic range, and quantity of technical power. During the last half of the nineteenth century, the old mechanistic instructional approach was questioned. Moreover, a number of progressive ideas began to emerge, including the following: (1) aural awareness should be stressed; (2) technical skill should be guided by musical understanding; and (3) artistic piano performances are achieved through natural coordination of the arm, wrist, and fingers.

An increase in the musical complexity of piano literature, changes in musical style, modifications of the instrument, and the influences of piano teachers and artists all have had an effect upon the continual evolvement of approaches to keyboard study.

The majority of twentieth century pedagogical writings reflect the philosophy that piano instruction should foster a

synthesis of aural, rhythmic, and technical controls essential to estimable piano performances. The synthesis is a gestalt which includes the understanding of the elements of a musical composition and the physical manifestation of these elements through the piano. The writings infer the need for the formulation of an instructional sequence which would provide effective guidance and optimum conditions for the musical growth and development of individual performance capacities in a pluralistic society. Much psychological information has been cited as evidence that approaches to piano study should be referenced to developmental theories of learning. Numerous writers agree that the tenets of developmental theories of learning offer the most conclusive insights into the cognitive/performance process as applied to piano study. The writings suggest the nullification of the nineteenth century axiom that pure mechanical gymnastics or proficiency in separate skills will solve any problems a pianist may encounter.

Twentieth century theories have been essentially concerned with developing the physiological aspects of the playing mechanism. There are hundreds of articles and books on the anatomical aspects of piano technique and its intrinsic mechanical laws. Noted pedagogues acknowledge the importance of this information, but question what effect the information has on the development of a pianist's ability to make aesthetic judgments and produce estimable performances. None

of these writings discusses program objectives for piano study.

A survey of piano method series revealed an emphasis on the training of separate pianistic skills and notational complexities. Method series have been identified primarily as teaching materials rather than methods or approaches to piano instruction. The improvement of teaching materials has been acclaimed, but the present methods of using the materials have been questioned. An extensive survey and assessment of piano method books outline objectives of piano study in terms of separate pianistic skills, such as the development of competencies in improvisation, sight-reading, transposition, and fundamentals of reading music. There is an absence of an integrated, outlined instructional sequence which would provide effective guidance for the development of all performance capacities.

Chapter 3

SELECTED ASPECTS OF DEVELOPMENTAL THEORIES OF LEARNING

Introduction

The twentieth century has seen an overwhelming expansion into the processes of cognition/learning. The evolving sphere of knowledge increasingly has aided our understanding of both the teaching and learning process. These new insights no longer allow music and musical learning to remain in the realms of conjecturable theory. Numerous writers have stressed the need of an instructional approach to piano study referenced to how cognition takes place. The investigator believes the philosophical thoughts of James L. Mursell, Jean Piaget, Jerome S. Bruner, and other proponents of developmental psychology offer the greatest insights into the cognitive process as applied to piano instruction.

The Learning Process

According to Woodruff, the mind is of central importance in the role of man's learning process.[1] From continuous experience and understanding, a person perceives,

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[1]Asahel D. Woodruff, "Concept Teaching," Prospectives in Music Education, Source Book III (Washington, D.C.: Music Educators National Conference, 1966), pp. 219-33.

distills, and retains knowledge. Woodruff believes the mind assimilates the knowledge and controls adjustments, emotions, motor acts, and aesthetic performance.[1] Knowledge consists of concepts which are mental images retained by the mind. The cognitive processes determine which images are received, assimilated, and remembered.[2] Hartshorn maintains that the cognitive processes may be divided into three major classifications: processes which acquire (1) facts, knowledge and concepts; (2) habits and skills; (3) attitudes, ideals, appreciation and judgments of value.[3]

Although concerned with learning and development, instruction refers to the organizing of experiences for the purpose of giving learners an opportunity to grasp, name, clarify, and apply concepts with ever increasing precision and assurance.[4] Theories of learning and of development, being explicatory rather than instructional, refer to what has happened after the fact.[5] Woodruff believes there are

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[1]Woodruff, p. 219. [2]Woodruff, p. 220.

[3]William C. Hartshorn, "The Teaching of Music," Prospectives of Music Education, Source Book III (Washington, D.C.: Music Educators National Conference, 1966), p. 211.

[4]Charles Leonhard and Robert W. House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Co., 1972), p. 146.

[5]Jerome S. Bruner, "Some Theorems on Instruction Illustrated with Reference to Mathematics," Theories of Learning and Instruction, Sixty-third Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1964), p. 304.

four categories of learning involved with the instructional guidance in musical performance:

1. Concepts of harmony, progression, form, etc.
2. Symbols of notes, signatures, rests, technical terms.
3. Motor abilities--muscular performance skills.
4. Feeling--preferences for musical effects and their influence on choice.[1]

In the field of music instruction, there has been a recent emphasis on concept teaching. In this process perception is of vital importance as it leads to the formation of concepts, enabling the learner to categorize his experiences. Leonhard and House comment:

> The formation of concepts depends upon his organizing his experience and making discriminations among the stimuli that strike his senses. Concepts are cognitive organizers of experience.[2]

Regelski discloses that concepts formed through many individual experiences are much better understood and retained longer than fragmentary or unrelated constituents as concepts lead to better understanding of the interrelationships within music.[3] Furthermore, he relates that interrelationships are comprehended by the structuring of learning situations by the teacher.[4] Since concepts are dependent upon prior experience and cognition, every individual's experience and

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[1]Woodruff, p. 220. [2]Leonhard and House, p. 127.

[3]Thomas A. Regelski, "Toward Musical Independence," Music Educators Journal, LV, No. 7 (March, 1969), p. 78.

[4]Regelski, "Toward Musical Independence," p. 78.

mental process are unique.[1]

Snelbecker's research emphasizes the importance of structuring material to be learned where the content can be grouped by a student at a given developmental stage of ability level. He believes the structuring can be accomplished through the following ways:

1. Mode of presentation; such as conceptual representations shown graphically;
2. Economy--sum of information student must comprehend at one time for solving the problem;
3. Effective power-applicability of past and future learning experiences.[2]

James L. Mursell's Learning Theory

For many years there has been broad acceptance that education should be thought of as guided growth.[3] Proponents of the developmental teaching and learning process have advocated that all activities, experiences, and learnings evolve around the fostering and guidance of this growth. In the field of music, James L. Mursell attempted to identify "the chief pertinent characteristics of the process of growth and

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[1]Thomas A. Regelski, Principles and Problems of Music Education (Englewood Cliffs: Prentice-Hall, Inc., 1975), p. 13.

[2]Glenn E. Snelbecker, Learning Theory, Instructional Theory, and Psychoeducational Design (New York: McGraw-Hill Book Co., 1974), pp. 420-21.

[3]James L. Mursell, "Growth Processes in Music Education," Basic Concepts in Music Education, Fifty-seventh Yearbook of the National Society for the Study of Education, Part I (Chicago: University of Chicago Press, 1958), p. 140.

their most important bearing upon music education."[1] He comments:

> If the claim that education is guided growth is to be more than a form of words, we must stringently ask ourselves exactly what the functions are with which we are dealing, and then set up conditions for their development, remembering that their essential nature remains unchanged at all levels of maturity.[2]

Citing E. L. Thorndike's research and admission that repetition is not the cause of learning, Mursell observes: "Behavior is changed, not by the repetition of specific connections, but by the reshaping of total patterns."[3] Mursell strongly denounces the main associationist doctrine of connections, "widely known as Thorndike's celebrated 'law of use,'" and advocates the basic tenets of developmental psychology as the answer to guiding musical growth.[4] Concurring with this viewpoint, Raley[5] defines learning as a process of developing the understanding of the essence of a field of study and agrees with Mursell's idea[6] that music

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[1]Mursell, "Growth Processes in Music Education," p. 140.

[2]Mursell, "Growth Processes in Music Education," p. 145.

[3]Mursell, "Growth Processes in Music Education," p. 142.

[4]Mursell, "Growth Processes in Music Education," p. 142.

[5]Alex Raley, "Developing Musical Concepts in the Primary Grades" (unpublished Doctoral dissertation, Columbia University, 1966), pp. 23-24.

[6]Mursell, "Growth Processes in Music Education," p. 144.

teachers need to be vitally concerned with the formulation of experiences to foster the process. Mursell thinks growth can best be achieved through teaching the concept of developmental continuity and refers to it as the "developmental line." He explains the developmental line as (1) an understanding of learning where growth is a continuum; (2) a sequence of learning in which generalizations will be understood with more and more completeness and maturity although the developmental line retains its own distinctive character throughout the entire course of growth.[1] This learning approach stresses the importance of continuous sequenced development of the line or musicality and understanding of an individual. Hence, a student has the opportunity to learn the essence of basic musical concepts at an early age. These concepts gradually can be refined as the student has more musical experiences in different situations and contexts. Mursell states:

> The pattern of growth is always the same. It begins always with the vague, the clumsy, the unorganized, the chaotic. . . . Differentiations make their appearance, in which one part or factor is set off against others. Hand in hand with this the parts coalesce or crystallize, and definite relationships are established through integration. The whole process, from start to finish, is an emergence of new patterns and arrangements.[2]

He further comments:

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[1]Mursell, "Growth Processes in Music Education," pp. 144-45.

[2]James L. Mursell, Educational Psychology (New York: W. W. Norton and Co., Inc., 1939), p. 134.

> Learning is a process in which the total pattern or picture or scheme of relationships constituting the goal of effort is at first dimly and imperfectly apprehended and emerges constantly into more and more articulate distinctions.[1]

Mursell believes that each separate and specific learning is but an organic element in the continuous process of growth and learning. Since each segment of learning relates to the whole process of learning, there is a fostering of evolvement rather than an accumulation. As learning proceeds, precision and refinement gradually emerge, and understandings deepen. Although growth in general reveals certain universal characteristics, each specific type of growth or learning exhibits its own distinctive characteristics throughout the entire course. Moreover, efficient learning is enhanced by a sequence of learning experiences which continually builds upon what has been experienced before. All further experiences should elucidate the insights and understandings previously accrued. Therefore, a sequence of learnings should be regarded and treated in practice as a process of mental growth.[1]

In Education for Musical Growth, Mursell emphasizes the idea that there are no self-contained stages or units in musical growth, but a continual unfolding of capacity and

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[1]James L. Mursell, The Psychology of Secondary School Teaching (New York: W. W. Norton and Co., Inc., 1939), p. 228.

[2]James L. Mursell, Successful Teaching (New York: McGraw-Hill Book Co., 1946), p. 228.

a gradual sharpening of discrimination and responsiveness to musical stimuli.[1] Mursell's developmental concept of continuity stresses that learning "is precisely a growth in awareness of relationships and meanings. . . ."[2] "Repetition is not the key; rather . . . insight is the master word."[3] Mursell believes all learning begins with a crude synthesis and passes by complex processes of analysis to a better synthesis.[4]

Metz summarizes Mursell's theory of learning into four constituents: (1) purpose, (2) continuity, (3) understanding, and (4) transformation.[5] He declares that Mursell's writings clearly indicate a preference for Gestalt psychology although there was never a stated preference for any psychological school of thought. Metz believes an analysis of the writings clearly indicate that Mursell's establishment of perception principles was based on Gestalt psychological principles.[6]

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[1]James L. Mursell, Education for Musical Growth (Boston: Ginn and Co., 1948), p. 63.

[2]Mursell, Educational Psychology, pp. 188-89.

[3]Mursell, Educational Psychology, p. 175.

[4]James L. Mursell and Mabelle Glenn, The Psychology of School Music Teaching (New York: McGraw-Hill Book Co., 1946), p. 49.

[5]Donald Edward Metz, "A Critical Analysis of Selected Aspects of the Thought of James L. Mursell in Music Education" (unpublished Doctoral dissertation, Case Western Reserve University, 1968), p. 54.

[6]Metz, p. 55.

Mursell believes beginners and experts should experience the same type learning process, the only difference being in the degree.[1] Metz comments on Mursell:

> Thus, he proposed a developmental approach to the teaching of music, which viewed the distance between the novice and professional as measured in degrees of insight, responsiveness, and understanding. The music program, as with all other subject programs, should focus upon the essence of the field, which in the case of music is aural responsiveness. As the pupil matures organically, he also matures psychologically, physiologically, and socially. With each new experience, he does not simply add that bit of experience to bits of other experiences. Rather, new situations continuously require new patterns of interaction and adaptability. The process is metamorphic, not aggregative. Therefore, Mursell clearly desired the kind of music program which would permit unfolding, this gradually broadening emergence of musical responsiveness.
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> A mechanistic approach would not do, precisely because it focused upon the part instead of the whole, upon the kind of repetitive drill which developed abilities in isolation.[2]

Among other findings, Metz denotes the similarity between Mursell's psychological concepts and those of Wheeler.[3] Wheeler's Organismic Theory emphasizes the biological aspects of growth, development, and learning. This concerns an area of Gestalt psychology referred to as organismic psychology. Organismic psychology, a derivation of Gestalt psychology, is augmented by the addition of independent developments in biology, neurology, physics, physiology, and sociology. Wheeler believes the following:

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[1]Mursell, Education for Musical Growth, p. 19.

[2]Metz, pp. 84-85.

[3]Metz, p. 56.

1. All behavior is the result of growth;
2. The growth process involves two kinds of maturation--age maturation and stimulation maturation (growth induced through stimulation);
3. All change is growth;
4. Learning is change, therefore, learning is growth;
5. All learning is goal-seeking;
6. All learning is meaningful and insightful, therefore, it is essentially cognitive.[1]

In summary, Metz concludes that during the early years of the twentieth century, music was often taught in a mechanistic fashion with emphasis being on the parts instead of the whole. The child-study movement and the drastic changes in economic and social life fostered new directions and procedures in education. Largely influenced by John Dewey, William Kilpatrick, and the Progressive Education movement in general, Mursell became a strong voice in translating progressive philosophy into practical musical methodologies. Moreover, Metz states music teachers lacked in psychological research and Mursell was able to speak with authority on the relationship of efficient principles of learning and the study of music.[2]

Metz suggests that Jean Piaget's work adds importance to Mursell's concept of learning. He comments: "While Piaget uses a different vocabulary, his work must be seen to

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[1]Raymond H. Wheeler, The Science of Psychology (New York: Thomas Y. Crowell, 1929), pp. 324-25; "The Laws of Learning," The Laws of Human Nature (London: Nisbet and Company, Ltd., 1931), pp. 141-47; and Principles of Mental Development (New York: Thomas Y. Crowell, 1932), pp. 492-93.

[2]Metz, pp. 159-60.

add strength to Mursell's concept."[1]

Jean Piaget's Theory of Intellectual Development

Since the 1950's, educators, child psychologists, and others have recognized Jean Piaget as the leading contributor to the field of intellectual development.[2] Piaget, a Swiss psychologist, is credited with developing a theory of intellectual development. The theory divides intellectual development into four principal periods: "sensorimotor (birth to two years), preoperational (two years to seven years); concrete operational (seven years to eleven years); and formal operational (eleven years and above)."[3] According to Piaget, the intellectual development of a child is an "evolution through qualitatively different stages of thought."[4] Piaget and Inhelder define the mental or intellectual development of a child as a gradual process occurring in three large periods; each period, expanding the previous one, reconstructing into a new and more complex level. These writers comment:

> The integration of successive structures, each of which leads to the emergence of the subsequent one, makes

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[1]Metz, p. 87.

[2]Herbert Ginsburg and Sylvia Opper, Piaget's Theory of Intellectual Development (Englewood Cliffs: Prentice-Hall, Inc., 1969), p. ix.

[3]Ginsburg and Opper, p. 26.

[4]Ginsburg and Opper, p. 6.

> it possible to divide the child's development into long periods or stages and subperiods or substages which can be characterized as follows: (1) Their order of succession is constant, although the average ages at which they occur may vary with the individual, according to his degree of intelligence or with the social milieu. Thus, the unfolding of the stages may give rise to accelerations or retardations, but their sequence remains constant in the areas (operations, etc.) in which such stages have been shown to exist. (2) Each stage is characterized by an overall structure in terms of which the main behavior patterns can be explained. . . . (3) These overall structures are integrative and non-interchangeable. Each results from the preceding one, integrating it as a subordinate structure, and prepares for the subsequent one, into which it is sooner or later itself integrated.[1]

Considering intellectual development as a progressive process, Piaget believes children gradually acquire the capacity to make keener perceptions and form more highly organized mental patterns through the evolvement of previous ones. Ginsburg relates:

> Mental development is more than a mere accumulation of isolated and unrelated experiences; it is a hierarchical process with the later acquisitions being built upon, and at the same time expanding upon the earlier ones.[2]

Piaget and Inhelder state that there are four general factors to mental development: (1) organic growth, specifically, the maturation of the nervous and endocrine systems; (2) the role of acquired experience in the actions performed upon objects; (3) social interaction and transmission between the child and the subject or structure; and (4) gradual

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[1]Jean Piaget and Barbel Inhelder, The Psychology of the Child (New York: Basic Books, Inc., 1969), p. 153.

[2]Ginsburg and Opper, p. 225.

evolution in which each innovation is dependent on the previous one.[1]

Ginsburg and Opper state Piaget was vitally concerned with developing a child's highest capabilities; thus, the "optimum functioning."[2] These authors comment:

> Piaget's theory stresses the interaction of current cognitive structure and new experiences for the arousal of interest and the subsequent development of understanding. One way of putting the matter is to say that interest and learning are facilitated if the experience presented to the child bears some relevance to what he already knows but at the same time is sufficiently novel to present incongruities and conflicts. . . . Piaget's proposition is that the child's interest is aroused when an experience is moderately novel; the experience is not so radically novel as to be unassimilable into current cognitive structure; and it is not so familiar as to surfeit the child . . . interest derives from the interaction between the state of the child's mind and the thing to be known.[3]

Ginsburg and Opper conclude:

> Since there are profound individual differences in almost all areas of cognitive development, it is unlikely that any one task or lesson will arouse the interest of or promote learning in all members of the class. . . . To promote interest and learning, then, the teacher should tailor the curriculum to the individual.[4]

Zimmerman relates that Piaget's research has provided tremendous insights into the growth of children's concept development:

> Piaget views concept development in terms of "conservation" which refers to an individual's ability to

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[1]Piaget and Inhelder, pp. 156-57.

[2]Ginsburg and Opper, p. 179.

[3]Ginsburg and Opper, p. 223.

[4]Ginsburg and Opper, p. 224.

> retain the invariant qualities of a particular stimulus when the stimulus field has been changed. For Piaget, conservation can be traced through successive growth from the child's perceptually dominated view of reality to a conceptual view.[1]

She believes that it is possible to apply Piaget's principle of conservation to the development of musical thought.[2]

Zimmerman denotes there is a direct relationship between Piagetian idea of conservation and the perception and concept formation. She defines concept as "a clear and complete thought about something acquired through sensory perception."[3] Commenting further, Zimmerman states that perceptions provide individuals the opportunity of developing concepts which allow a basis for communicating musical ideas.[4]

Jerome S. Bruner's Learning Theory

Jerome S. Bruner has been described as the most influential American interpreter of Piaget's work.[5] Referring to guidelines, Bruner contends that the following should be

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[1]Marilyn Pflederer Zimmerman, "Percept and Concept: Implications of Piaget," Music Educators Journal, LVI (February, 1970), p. 49.

[2]Marilyn Ruth Pflederer, "The Responses of Children to Musical Tasks Embodying Piaget's Principle of Conservation" (unpublished Doctoral dissertation, University of Illinois, 1963), p. 199.

[3]Zimmerman, p. 49. [4]Zimmerman, p. 49.

[5]Charles Leonhard and Robert W. House, Foundations and Principles of Music Education (New York: McGraw-Hill Book Co., 1972), p. 154.

included toward a theory of instruction: (1) effective sequences of experiences; (2) knowledge structured in a manner easily grasped by the learner; (3) procedures effectively described; and (4) criteria containing a high degree of generality.[1] Bruner holds that instruction "leads the learner through a sequence of statements and restatements of a problem that increases the learner's ability to grasp, transform, and transfer what is to be learned."[2] He stresses the need for the formulation of an effective learning sequence that is guided by (1) past learning, (2) the learner's present stage of development, (3) the nature of the material, and (4) individual differences. Moreover, Bruner advises that the sequence consider economy of material:

> . . . the assumption that more economically presented materials, learned first as a model, will serve to reduce the potential complexity of materials encountered later.[3]

Bruner states that Dewey and Wallas, among others, agree with the affirmation that learning can be divided or broken down into stages.[4] Bruner confirms that the role of the teacher encompasses diagnosing the present learning stage of each student. This infers that the diagnosis includes

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[1]Jerome S. Bruner, Toward a Theory of Instruction (Cambridge: Harvard University Press, 1966), pp. 40-41.

[2]Bruner, Toward a Theory of Instruction, p. 313.

[3]Bruner, Toward a Theory of Instruction, p. 313-14.

[4]Bruner, Toward a Theory of Instruction, p. 315.

the ability to: (1) discover a student's learning stage; (2) select appropriate musical experiences; and (3) formulate instructional sequences to help facilitate development and growth at each student's present learning stage.[1]

Beyond the simple present enjoyment of learning, Bruner emphasizes the importance of the future applicability: hence, learning structures "should not only take us somewhere; [they] should allow us later to go further more easily."[2] He believes learning should involve the understanding of fundamental principles and ideas instead of skills, referring to the process as "transfer of training" or "nonspecific transfer." Bruner has identified the core of the educational process as "the continual broadening and deepening of knowledge in terms of basic and general ideas."[3] Thus, he states:

> To understand something as a specific instance of a more general case--which is what understanding a more fundamental principle or structure means--is to have learned not only a specific thing but also a model for understanding other things like it that one may encounter.[4]

Very concerned with the nature of learning and transfer, Bruner believes that effective guidance and optimum conditions can produce massive general transfer to the point of

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[1]Bruner, Toward a Theory of Instruction, p. 269.

[2]Jerome S. Bruner, The Process of Education (New York: Random House, Inc., 1963), p. 17.

[3]Bruner, The Process of Education, p. 17.

[4]Bruner, The Process of Education, p. 25.

leading one to "learn how to learn."[1] He notes that learning structures are more important for the less talented students as those are the ones most easily confused or distracted.[2] Further commenting, Bruner stresses three ideas in readiness for learning: (1) the process of intellectual development; (2) the act of learning, and (3) the "spiral curriculum."[3] He infers that the spiral curriculum allows a beginner the availability of the same kind and quality of learning experiences as the expert, the only difference being in degree of detail.[4]

Boswell has asseverated the belief that musical understanding can best be achieved through the systematic study of concepts which include the underlying principles of learning as expressed by Bruner.[5] She defines the purpose of teaching as the process of formulating instructional procedures by which concepts can be systematically taught.[6] Boswell contends:

> Concepts are formed as events encountered are categorized, based upon common attributes of the event. Ways

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[1]Bruner, The Process of Education, p. 6.

[2]Bruner, The Process of Education, p. 9.

[3]Bruner, The Process of Education, p. 33.

[4]Bruner, The Process of Education, pp. 52-54.

[5]Jacquelyn Boswell, "An Application of Bruner's Theory of Mental Growth to the Teaching of Musical Concepts in Beginning Instrumental Music" (unpublished Doctoral dissertation, University of Illinois, 1969), p. 3.

[6]Boswell, p. 56.

> of searching for attributes of the concepts are influenced by the different ways events are represented. There is a progressive pattern from surface and single features used for grouping to a consideration of embedded features.[1]

She relates that educators generally believe:

> Concepts have no boundaries of meaning, and are not synonymous with learning facts or memorizing definitions. For this reason concepts are believed to have greater transfer value than rote memorization.[2]

Boswell concludes that research findings reveal an expanding interest concerning the conceptualization of music, but a corresponding absence of proposed guidelines for implementation through instrumental music.[3]

Bruner,[4] Boswell,[5] and Mursell,[6] among others, believe learners preserve musical experiences as models; therefore, the novice should experience the same type processes as evidenced in the professional. The fundamental difference is in the degree of detail and efficiency. Mursell relates: "The truly musical experience of the novice differs only quantitatively and not qualitatively from the experience of the fine performer."[7]

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[1]Boswell, p. 46. [2]Boswell, p. 5.

[3]Boswell, p. 46.

[4]Bruner, The Process of Education, pp. 16-17.

[5]Boswell, pp. 45-46.

[6]James L. Mursell, Education for Musical Growth (Boston: Ginn and Co., 1948), pp. 8-9.

[7]Mursell, Education for Musical Growth, pp. 8-9.

Relationship of Gestalt Psychology to the Learning Process in Music

In regard to the learning process, principles of Gestalt psychology support the theory that human beings tend to perceive, recall, and recognize objects and experiences as wholes rather than in separate components. Moreover, Gestalt psychologists aver the concept that wholes differ from the sum of its parts. These psychologists

> . . . believe mental development begins with the whole, which tends to become more clearly articulated and defined with increasing experience. The whole is not at once perceived, but what is perceived is perceived as a whole, a unit of ideas.[1]

Mainwaring relates that seeing the "whole," then the details, lends itself better to the theory of teaching.[2] This is illustrated in the studies and conclusions of Brown[3] and Adams.[4] Thus, Adams relates: "The gestalt method of instruction appeared to have assured a firmer grasp on the musical materials."[5]

In reference to music, Mainwaring identifies rhythm

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[1]J[ames] M[ainwaring], "Gestalt Psychology," Grove's Dictionary of Music and Musicians (1966), III, pp. 611-12.

[2]Mainwaring, p. 612.

[3]Roberta W. Brown, "The Relation Between Two Methods of Learning Piano Music," Journal of Experimental Psychology, XVI (February, 1933), pp. 435-41.

[4]Sterling Cameron Adams, "An Exploratory Study of the Application of Two Learning Theories to the Teaching of Piano," Dissertation Abstracts International, 15 (1955); 2163 (Indiana University).

[5]Adams, p. 2163.

as the all-encompassing force on the "whole" or over-all structure of a composition. He comments:

> In music and poetry, rhythm controls and regularizes the unfolding composition, firstly by imposing on it a regularly recurrent and immediate recognizable sound-pattern, and secondly by inter-relating these units into a patterned hierarchy which gives structural unity to the whole. There are in music three types of rhythmic Gestalten, three forms of rhythmic patterning, capable of immediate apprehension as such: (a) "pulse" or intensity-patterning; (b) duration-patterning and (c) "form," which includes phrasing. . . . It is self-evident that unless a rhythmic pattern is perceived as a rhythmic pattern, as a Gestalt, it is not perceived at all.[1]

Mainwaring believes that pulse or body rhythm is something that is heard rather than felt and points out pulse-units are not always represented by the bar-line; thus, the units may be part of a bar or larger than one bar section.[2]

According to Gestalt theory, a learner's past learnings accumulate and are gradually reorganized. New learnings are assimilated into the reorganization. The learnings are transferred from situation to situation as a synthesis rather than in separate constituents. Therefore, repetition of entire learning procedures is advocated by gestalt psychologists. Adams relates:

> In piano study, for example, learning new musical compositions would not be a matter of practicing and repeating prescribed and routine formulas (such as an invariable routine of hands separate--hands together sequence) but rather a general application of previously used procedures. . . . Repetition could be important,

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[1]Mainwaring, p. 612. [2]Mainwaring, p. 618.

> however, in that it would allow leveling and sharpening processes to operate.[1]

Adams concludes that implications of the gestalt principles for piano instruction and study include the following: (1) entire processes instead of individual elements should be transferred from one situation to another; (2) curricular materials should be presented in a patterned sequence; (3) learning with insight should involve a flexible approach in planning the learning situation; (4) problem solutions should be pursued through whole movements before partial ones.[2]

Summary

The current chapter presents a review of literature and research related to the developmental teaching and learning process as articulated in the writings of Mursell, Piaget, Bruner, and others. The findings disclose that there are many correlations of philosophical thought among these writers. The studies and conclusions of Boswell, Raley, and Zimmerman, among others, affirm the postulation that an instructional approach referenced to developmental teaching and learning theories can provide optimum conditions and effective guidance in the development of individual performance capacities. Furthermore, these studies ratify the

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[1]Sterling Cameron Adams, "An Exploratory Study of the Application of Two Learning Theories to the Teaching of Piano" (unpublished Doctoral dissertation, Indiana University, 1962), pp. 89-90.

[2]Adams, p. 92.

belief that the process can best be achieved through an instructional approach which promotes the continuous broadening and extension of musical concepts in terms of the formal elements or complexities inherent in the music.

The writers affirm that learning is a gradual process where concepts are understood and new ones experienced and subsequently reorganized gradually at a more complex level. Learning is enhanced by the integration of successive learning structures which build continually upon what has previously been experienced. All further learning experiences elucidate the insights and understanding previously accrued. Learners perceive and organize experiences as wholes rather than separate components; therefore, learnings are transferred from situation to situation as a synthesis. Because of this cognition process, the repetition of entire learning procedures is advocated. Based upon this premise, the beginner and expert should experience the same type learning process, the only difference being in the degree of detail and efficiency. This infers that the development of musical understanding should begin at the early stages of piano instruction and be fostered throughout all levels of performance.

Chapter 4

DELINEATION AND ESTABLISHMENT OF PROGRAM OBJECTIVES FOR PIANO STUDY

Introduction

The survey of related literature concerning the evolvement of pedagogical thought during the twentieth century has revealed only three distinct references to program objectives for piano study.[1] Most writings reflect generally upon specific aspects of the development of estimable piano performance. Because of this scarcity of information concerning the formulation of outlined goals, the writer believes there is a pressing need for the delineation and establishment of program objectives for piano study. The objectives would provide a basis for a philosophical foundation upon which piano teachers could base systematic pedagogical procedures and students could derive self-learning techniques.

The analysis of the findings in all components of the related literature and research reveals a marked absence of objectives that teachers and students may consider as guidelines for piano study. It is with this sphere of concern that the writer has endeavored to delineate and establish program

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[1]See pp. 51-54.

objectives for piano study. Referenced to these program objectives and knowledge of the developmental teaching and learning process, the writer has formulated and applied an instructional sequence to selected piano literature.

Outline of Objectives

(1) To provide organization and suggested application of experiences to facilitate the perception of musical concepts in terms of the melodic, harmonic, rhythmic, and formal hierarchic groupings inherent in the complexities of piano music.

(2) To provide a guiding set of philosophical concepts which can serve as a theoretical framework fostering the evolution of understanding, clarification, and explication of effective learning experiences as a means of developing individual performance capacities.

(3) To provide instructional procedures which foster a synthesis of aural, rhythmic, and technical control.

(4) To provide students with effective self-learning procedures for present and future musical experiences.

(5) To provide an instructional sequence which allows the student active involvement in interpretive decisions, promotes musical independence in the learning/performing process, and fosters the development of musical intelligence and aesthetic responsiveness for musical judgment in professional or self-actualization capacities.

These objectives are for all levels of advancement.

The fundamental difference at the various levels of advancement is in organization, efficiency, and degree of detail.

The means for determining the program objectives were based upon (1) the preceding investigation of literature concerning the learning/performing process; (2) research studies concerning twentieth century pedagogical writings; (3) a review of literature and research related to the developmental teaching and learning process as articulated in the writings of James L. Mursell, Jean Piaget, Jerome S. Bruner, and others; and (4) the writer's pedagogical experience and musical knowledge.

The examination of program objectives in any field is the application of the objectives within an instructional setting.

Overview of an Instructional Approach

This approach to piano instruction is developmental in nature and endeavors to provide optimum conditions and effective guidance in the growth of individual performance capacities. The approach is referenced to the delineated program objectives and knowledge of the developmental teaching and learning process.

In reference to any level of advancement, concepts are presented in a cyclical sequence arrangement, stressing (1) pedagogical purpose, (2) continuity, (3) understanding, and (4) transfer of learning. As conceptual development

progresses, students gradually acquire the capacity to make keener perceptions and form more highly organized concepts; hence, the concepts are cumulative and ever growing. The sequence of concepts is guided by (1) past learning; (2) stage of musical learning and performing; and (3) nature of material presented. The concepts need presentation and application in many different musical contexts and situations to allow for further clarification, understanding, and individual performance capacity development.

The process would respond to the individual needs, performance capacities, and interest of each student without any (1) self-contained units or lessons; (2) set patterns; or (3) time limits for any given learning level. This would enable the student to discover and explore music at an individual learning rate.

The procedures used in teaching the concepts would provide experiences and situations for developing musical intelligence and performance capacities. These procedures, systematically applied, would allow the learner to focus on the interaction of the musical elements rather than the study of separate components. The study of any separate component or subject-area, such as theory, form, or analysis, would be referenced to musical compositions for furthering musical understanding.

The sequence of pedagogical procedures would seek to serve as a guideline for fostering a synthesis of aural,

rhythmic, and technical controls in the development of piano performance capacities. This would include the understanding of the elements of a musical composition. As previously stated in this study, students develop musical understanding and controls within the synthesis in direct relationship to the degree of individual talent. This development occurs in students at an individual rate. Therefore, the sequence of procedures is exemplary and requires the adjustment to individual musicality, experience, and learning capacity. The difference in learners may command repetition or elimination of steps within the gradual evolution of musical complexities and controls; thereby, the sequence may require division into substages for the slower or less talented learner.

As a means of fostering the synthesis, this approach would present concepts pertinent to each individual learner's present needs, relating always to the interaction of the three controls: aural, rhythmic, and technical. Musical experiences would be organized to produce gradual understanding and show wider applications and relationships of the following concepts:

Aural

1. To foster the development of critical self-listening by an individual to the sounds made by that individual in regard to the inner sound image of pitch, tempo, dynamic, rhythm, and timbre, thus including the relationship

of voices, tonal attacks and releases, pedalling, and tonal and/or rhythmic nuances.

2. To allow for close examination of the sound produced and subsequent judgment of its qualities.

3. To direct both pre-hearing and post-hearing.

Rhythm

1. To comprehend and execute the architectonic qualities of the rhythmic structure within the hierarchic groupings of a musical composition at both the primary and intermensural metric levels.

2. To realize pulse or rhythmic-pulsation upon which the comprehension and execution of the rhythmic structure depends.

3. To manifest a basic body rhythm as a physical experience in response to a heard or felt stimulus in the form of rhythmic-pulsation as applied to piano performance.

Technique

1. To play the desired sound at the correct time with a definitely chosen quantity and quality of tone.

2. To control mentally and execute physically all the necessary movements to produce a desired musical interpretation, thus involving the integration of the physical, intellectual, and musical factors.

The role of the teacher involves the evaluation of each student's learning readiness, including:

1. Intellectual development.

2. Stage of understanding the musical complexities inherent in piano music.

3. Prior musical learning and performing experience.

4. Present level of aural, rhythmic, and technical control.

5. Cognitive and biological make-up and mental characteristics.

6. Two kinds of maturation: age and stimulation.

The teacher has the responsibility of providing a sequential ordering of materials comprising a theoretical framework of musical complexities inherent in piano music. The order would be in direct relationship to the following:

1. Student's musicality.

2. Level of advancement.

3. Present and future performance capacities.

The criteria for selection of compositions would be based on the pedagogical value of providing valid experiences for developing musical intelligence and performance capacities in each individual student.

The illustrative compositions used in the study have been selected from the three broad categories of piano advancement levels: (1) elementary, (2) intermediate, and (3) advanced.

Using relevant piano literature, the learner is constantly developing and broadening conceptual growth. The

practicing of each new piano composition would begin with an exaggerated version of the musical intentions. As the learner's musical understanding of the composition grows, this exaggerated version would be gradually clarified and refined. Refinement and clarification of the details of compositions, such as articulation, voice lines, and over-all musical and rhythmic shape, would be incorporated gradually into the performance of compositions as the learner's musical understanding grows through the interaction and relationship with the elements of the music studied. The consideration of the rhythm of articulation and inside details is significant only when fused into the larger scheme of a given work; thus, the rhythm of articulation would be understood and realized within the framework of the rhythm of form. From the initial stages of learning a composition, the student would be endeavoring to grasp the musical meaning. Although the initial version may begin in a crude state, the student is establishing the foundation for growth and development in the gradual clarification and refinement of performance possibilities.

To promote this gradual growth and development, the writer advocates the application and understanding of the hierarchic groupings within the rhythmic structure of a composition at both the mensural and intermensural architectonic levels. The writer regards rhythm as the prime musical element needed to facilitate the perception and conception

of the remaining elements inherent in the complexities of piano music. The rationale includes the following:

1. Rhythm provides a structure for the realization of musical intentions.

2. Rhythm serves as a vital force in the organization of elements which create and shape musical ideas.

3. Beginning students respond more easily to the rhythmic element.

4. Rhythmic groupings can help foster musical direction and continuity in students of all degrees of performance capacities.

In regard to the other elements:

1. Harmony is perhaps the most subtle of the musical elements and is comprehended usually only through a conscious study of harmonic technique.[1]

2. Melody is realized through the rhythmic structure.[2]

3. General rhythmic principles are the prime factor in creating the formal units of a composition.

Thus, an understanding and application of rhythmic hierarchic groupings offer avenues for perception and conception of the formal elements of music as a coherent "whole."

As music unfolds as sound through time, the succession

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[1]Elie Siegmeister, Harmony and Melody, I (Belmont, Calif.: Wadsworth Publishing Co., Inc., 1965), p. 10.

[2]William Christ et al., Materials and Structure of Music (Englewood Cliffs: Prentice-Hall, Inc., 1966), pp. 62-64; see also Wallace Berry, Form in Music (Englewood Cliffs: Prentice-Hall, Inc., 1966), p. 15.

of musical patterns forms phrases, sections, and entire compositions or coherent "wholes." Piano students, in general, have a tendency to practice and perform compositions with no conception of the music as a coherent "whole." Beginning students tend to perceive music as individual note values rather than integral components of a "whole" or larger rhythmic structure. Some students at the more advanced level experience the same problem. Moreover, many students perceive music as a series of figurations, both tonal and rhythmic, disregarding completely any syntactical relationships within the over-all rhythmic structure. Under these conditions, there is no "whole" or over-riding rhythmic structure upon which all subsequent musical intentions depend. Rhythmic structure may be perceived as an organic process where smaller units function as essential components of the over-all form; thus, a succession of subphrase-units of pitch and rhythmic patterns forms phrases, phrases form sections, and sections form a coherent "whole" or the entire composition.[1] Just as many melodies are made up of two phrases, many phrases are made up of smaller units or subphrases.[2] These subphrase units often occur in divisions of two or multiples of two.

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[1]Grosvenor W. Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: The University of Chicago Press, 1960), p. 2.

[2]William Christ et al., p. 66.

In light of these facts, the writer suggests a series of learning experiences to enable the student to understand and control sound through time. Starting with small learning-units, these experiences would help a student to comprehend compositions as a succession of musical patterns or sub-phrases which are integral parts of a coherent "whole." Students would obtain psychological ownership of the "whole" through acquiring gradual understanding of small-unit groupings or experiential components.

The writer advocates four steps as a means of leading a student to the comprehension and execution of the rhythmic hierarchic groupings within a phrase, section, and entire composition. These four steps are as follows:

1. The grouping of individual note values into pulses or beats.
2. The grouping of pulses into measures.
3. The grouping of measures into subphrase units.
4. The grouping of subphrase units into phrases.

The specific grouping of pulses within a composition is referred to as meter. The meter is acknowledged by a strong metric or mental accent on one note in a series of pitches. Christ, Delone, Kliewer, and others note the importance of this strong accent: ". . . the strong beat is often a rallying point for rhythmic patterns, phrase beginnings, or initiation of larger musical sections. Furthermore, strong beats are important in relation to cadences, melodic decoration, and

many types of harmonic progressions."[1] The organization of pitches into definite strong and weak relationships is enhanced by rhythmic grouping, and "accent gives the impression of grouping."[2] Pflederer states that accents, mental or metric, help promote a perception of definite relationships within a rhythmic grouping.[3] The length of each pulse-unit note or grouping may vary in different compositions, but the student should perceive, conceive, and execute each of the four outlined steps before attempting the next level. The rationale behind this procedure is that a student will fail to hear or execute a phrase as a grouping unless the inner subphrase units have been comprehended. The steps may be executed successively or in combinations, according to individual degree of talent and understanding.

These four steps are illustrated with the following phrase from "The School Band."[4]

Step I. As a means of grouping individual note values into pulses, a pulse-unit note is selected to represent the time-span from one pulse or basic duration to the next.

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[1]Christ et al., p. 4.

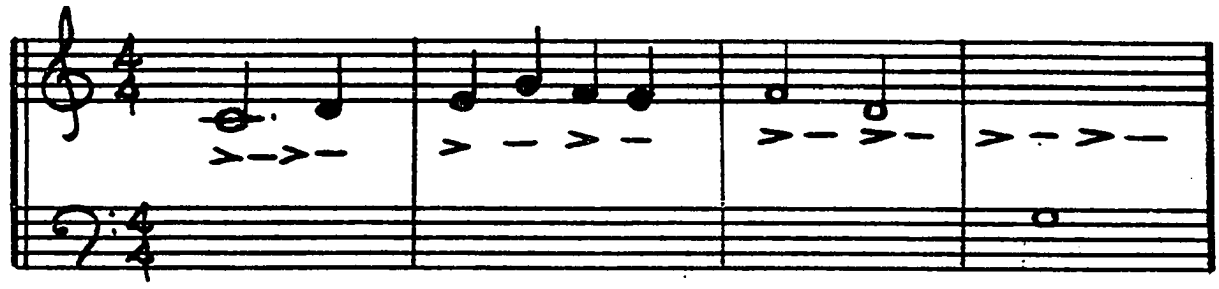
[2]Marilyn Ruth Pflederer, "Conservation Laws Applied to the Development of Musical Intelligence," Journal of Research in Music Education XV (Fall, 1967), p. 221.

[3]Pflederer, "Conservation Laws Applied to the Development of Musical Intelligence," p. 221.

[4]Melvin Stecher, Norman Horowitz, and Claire Gordon, Playing to Learn, Book I (New York: G. Schirmer, Inc., 1965). p. 4.

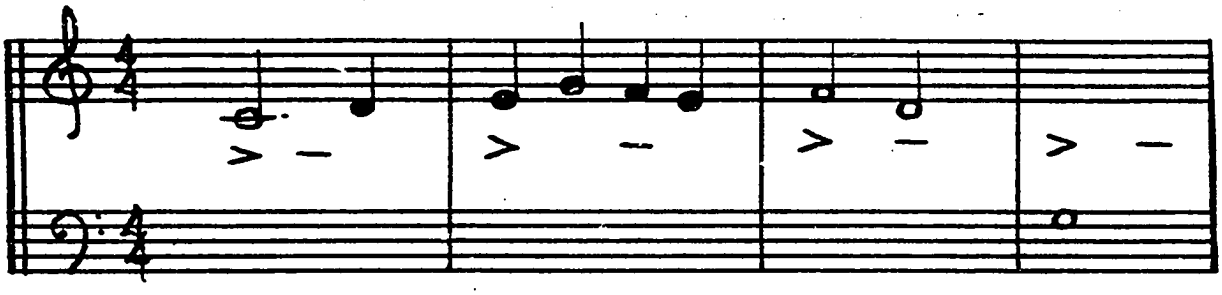
Pulse-unit note: ♩

Excerpt from "The School Band," Playing to Learn, Book I, Stecher, Horowitz, and Gordon



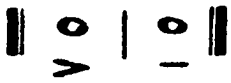
Step II. As an aid to grouping pulses into measures, the measure grouping note is identified to represent the time-span of the complete measure.

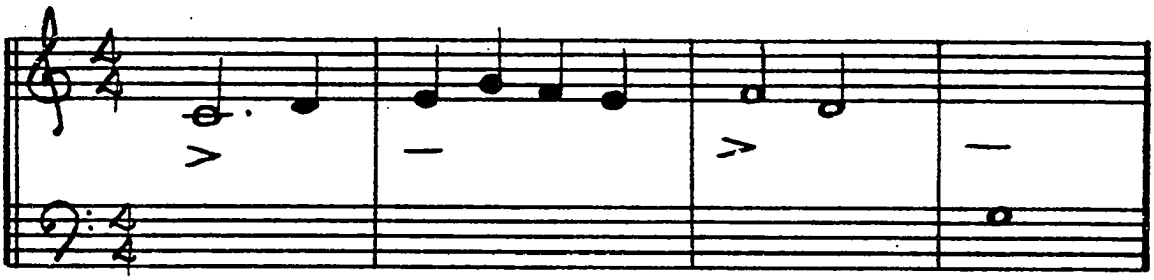
Measure grouping note: 𝅝



Step III. As a means of grouping measures into sub-phrase units, a two-measure learning unit is identified as the time span.

Two-measure learning unit:

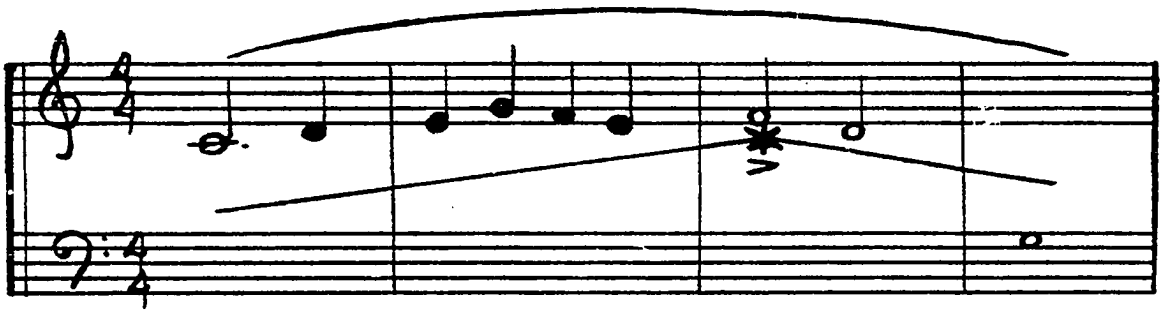




Step IV. As an aid to grouping measures into phrase groupings, four measures are identified as the time span.

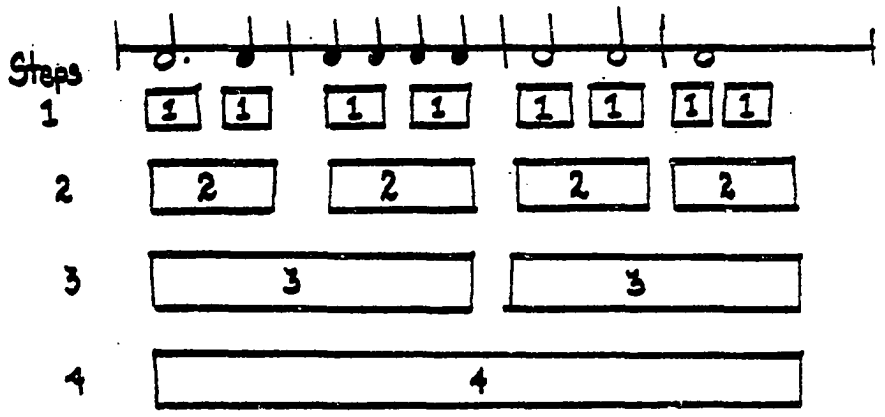
Four measure phrase:





* Suggested focal point

Diagram of the Four Steps:



The writer believes the application and understanding of rhythmic hierarchic groupings include the comprehension of melodic hierarchic groupings, as the two are considered inseparable. Therefore, the reason for beginning the instructional sequence with the rhythmic aspect is twofold: to foster the understanding and the execution of the rhythmic and melodic hierarchic groupings. Even in elementary music, these melodic-rhythmic groupings contain focal points of interest; thus, suggested phrase focal points are included as a part of the phrase concept.[1]

Students would execute the rhythmic-melodic hierarchic groupings in a pronounced accentual form. Exaggeration

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[1]Christ et al., p. 19.

of the accented and unaccented note groupings would be applied as a means of promoting an aural image of phrase-to-phrase production rather than a note-to-note production. This would provide the beginning stages of systematic guidance and conditions for an emotional response to an aural image created in the student by a basic rhythm. As many writers have noted, aural images promote physical coordination.

The shading-off of the accents would be advised as the student demonstrates a basic understanding of the groupings. The student's involvement with the gradual shading-off of accents would be in direct relationship to the present level of individual musical understanding and performance capacity. Thus, a student's interpretive experience would emerge from a crude and imperfect synthesis and progress to an improved synthesis as individual musical growth and development occurs.

The rhythmic, melodic, harmonic, and formal hierarchic groupings are shown in the illustrative lessons as a guide for the teacher in comprehending the formal elements or internal characteristics of the music. As the evolution of musical understanding emerges in the student, additional information is presented gradually to the students to help guide the personal involvement in the clarification and refinement of musical interpretations. The presentation of hierarchic groupings within all the elements would be made in a gradual sequence according to the individual student's

level of musical comprehension. First, the presentation would be made in non-technical language. As the student's musical understanding and conceptual development progresses, more complex musical meanings may be presented.

The following sequence of lessons and musical examples will endeavor to illustrate a systematic approach to the organization and application of experiences designed to provide guidance and conditions for understanding the musical complexities inherent in piano music and to foster a synthesis of aural, rhythmic, and technical control in the development of performance capacities.

Illustrative Lessons

Early Elementary Level
Compositions

These compositions display a strong congruency among the melodic, harmonic, and rhythmic elements. Hence, the melodic, harmonic, rhythmic, and formal groupings are corroborating as a synthesis in achieving intensifications and diminutions of the musical activity. The continual rise and fall between tension and release is realized through the melodic movement, implied harmonic progressions, and the metric structure at both the mensural and intermensural levels. Generally, phrase climaxes or focal points are the result of dynamic or metric stress, rhythmic duration, pitch level, approaches by melodic leap, or melodic dissonance, implied

harmonic dissonance or a combination of these factors.[1] The pieces display (1) a minimum of articulation, (2) no voicing in either hand, (3) no pedalling, (4) very simple texture, and (5) slow harmonic rhythm.

A number of early elementary level compositions have been included in the illustrative lessons. These compositions were included as a means of guiding teachers who have difficulty in comprehending the musical elements of pieces which only display patterns of single lines with harmonic implications. Teachers may play the compositions of this type for the students and include a realization of the implied harmony as a means of fostering the musical comprehension of the elements as a "whole."

In reference to the harmonic analysis, the writer's premise includes the following:

1. Standard analysis symbols are used.

2. Inversions of chords are not indicated except cadential I_4^6 chords.

3. Altered chords built in major and minor thirds with an altered scale step as the root are indicated by a # or ♭ sign before the chord number. The signs # and ♭ do not precede symbols for chords built on the sixth and seventh scale steps in a minor key. For example:

VI = triad built on lowered sixth scale step

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[1]Wallace Berry, Form in Music (Englewood Cliffs: Prentice-Hall Inc., 1966), pp. 370-78.

vi^{o} = triad built on a raised sixth scale step

VII = triad built on lowered seventh scale step

vii^{o} = triad built on raised seventh scale step

4. Seventh chords are recognized even if the seventh does not resolve in the normal fashion to a chord tone of a new harmony. For example, a chord in which the seventh is a pedal tone is analyzed with an arabic number, the same as a chord in which the seventh moves as a passing tone. Diatonic seventh chords are indicated by the arabic numbers as follows:

Major Keys

C: I_7 ii_7 iii_7 IV_7 V_7 vi_7 $vii^{\emptyset}{}_7$

Minor Keys

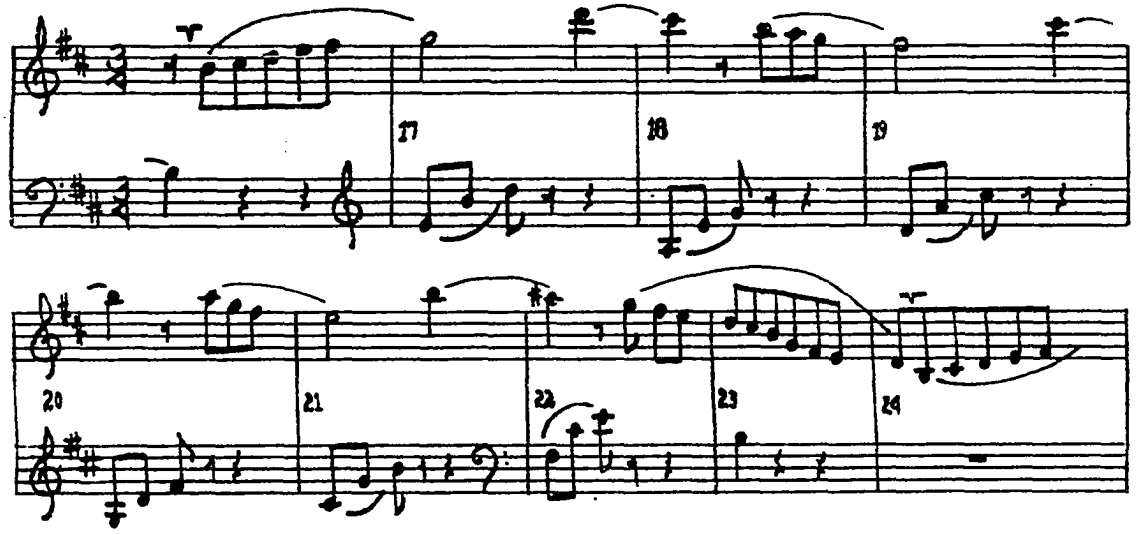
C: i_7 $ii^{\emptyset}{}_7$ III_7 iv_7 IV_7 v_7 V_7 VI_7 $vi^{\emptyset}{}_7$ VII_7 $vii^{o}{}_7$

5. Ninth, eleventh, and thirteenth chords are indicated only as arabic numbers with no attempt to indicate intervallic quality. Chords labeled as incomplete dominant ninths are indicated by the following symbol: $^{o}V_9$

In the lessons, the harmonic hierarchic groupings are illustrated by slurs. The first hierarchy of slurs may show the internal groupings created by any one or combination of musical elements. In some cases, the last chord of a number of internal groupings ends in a chord of harmonic activity which implies motion forward despite a possible slowing of harmonic and/or melodic motion. Frequently, the harmony does support the grouping, particularly at cadential

points. Therefore, it has been included.

The beginning and ending of phrases are indicated by the following marking: ⌐¬ . Measure numbers are given for phrase groupings. In cases where phrases begin with an anacrusis, measures are numbered from the first full measure as illustrated in the following fragment, phrase three, "Autumn Sketch," from the Lyric Preludes by William Gillock, example 14:



Lesson 1. "Play It Over," from The Pianist, Book I, Noona.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit =  note
2. Measure groupings =  note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

   Phrase I. Measures 1-4

   Phrase II. Measures 5-8

Suggested Phrase Focal Points:

Phrase I. Measure 4, beat one; influenced by rhythmic duration

Phrase II. Measure 7, beat one; influenced by the resolution of melodic tones, 4-3, and the return to implied tonic harmony.

Harmonic

Key of C major

I $\overset{\frown}{V_7 \quad I}$

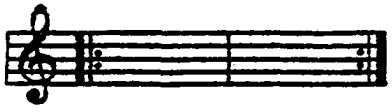
Groupings are set up by the progression of implied harmony

Formal

Two four-measure phrases

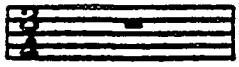
EXAMPLE 1

Repeat Signs



Play these measures again.
If there is no ||: sign, go back to the beginning.

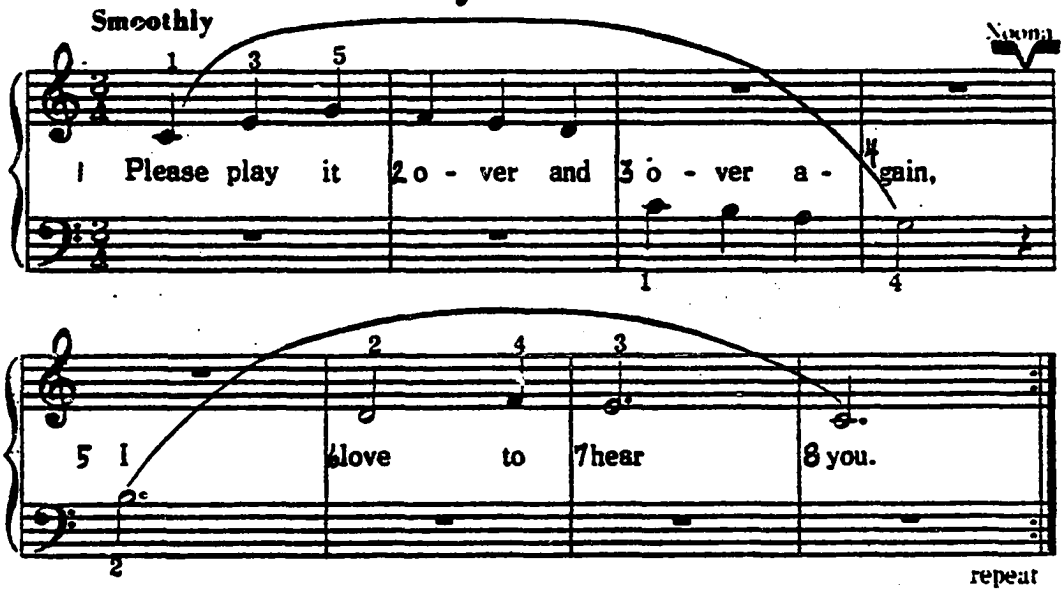
Whole Rest in $\frac{3}{4}$ time



A whole rest takes up an entire measure regardless of the time signature.



Play It Over



EXPERIMENT: Be a broken record. Play the 5th and 6th measures three times in a row, tap the floor, and then finish the piece!

Fill in the values of these notes and rests in $\frac{4}{4}$ time.
Draw each of these notes and rests.

Quarter note _____ or quarter rest _____ = _____ beat
Half note _____ or half rest _____ = _____ beats
Dotted half note _____ = _____ beats
Whole note _____ or whole rest _____ = _____ beats

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Lesson 2. "Fred," from The Pianist, Book I, Noona.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = 𝅗𝅥. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

   Phrase I. Measures 1-4
   Phrase II. Measures 5-8
   Phrase III. Measures 9-12
   Phrase IV. Measures 13-16

Suggested Phrase Focal Points:

Phrase I. Measure 3, beat one; influenced by the rhythmic duration and implied harmonic progression to the dominant.

Phrase II. Measure 7, beat one; influenced by the rhythmic duration and implied harmonic progression back to the tonic.

Phrase III. Measure 11, beat one; influenced by the rhythmic duration and implied harmonic progression to the dominant.

Phrase IV. Measure 15, beat one; influenced by the rhythmic duration and implied harmonic progression back to the tonic.

Harmonic

Key of C major



Groupings are set up by the progression of implied harmony

Formal

Phrases one and two = period

Phrases three and four = period

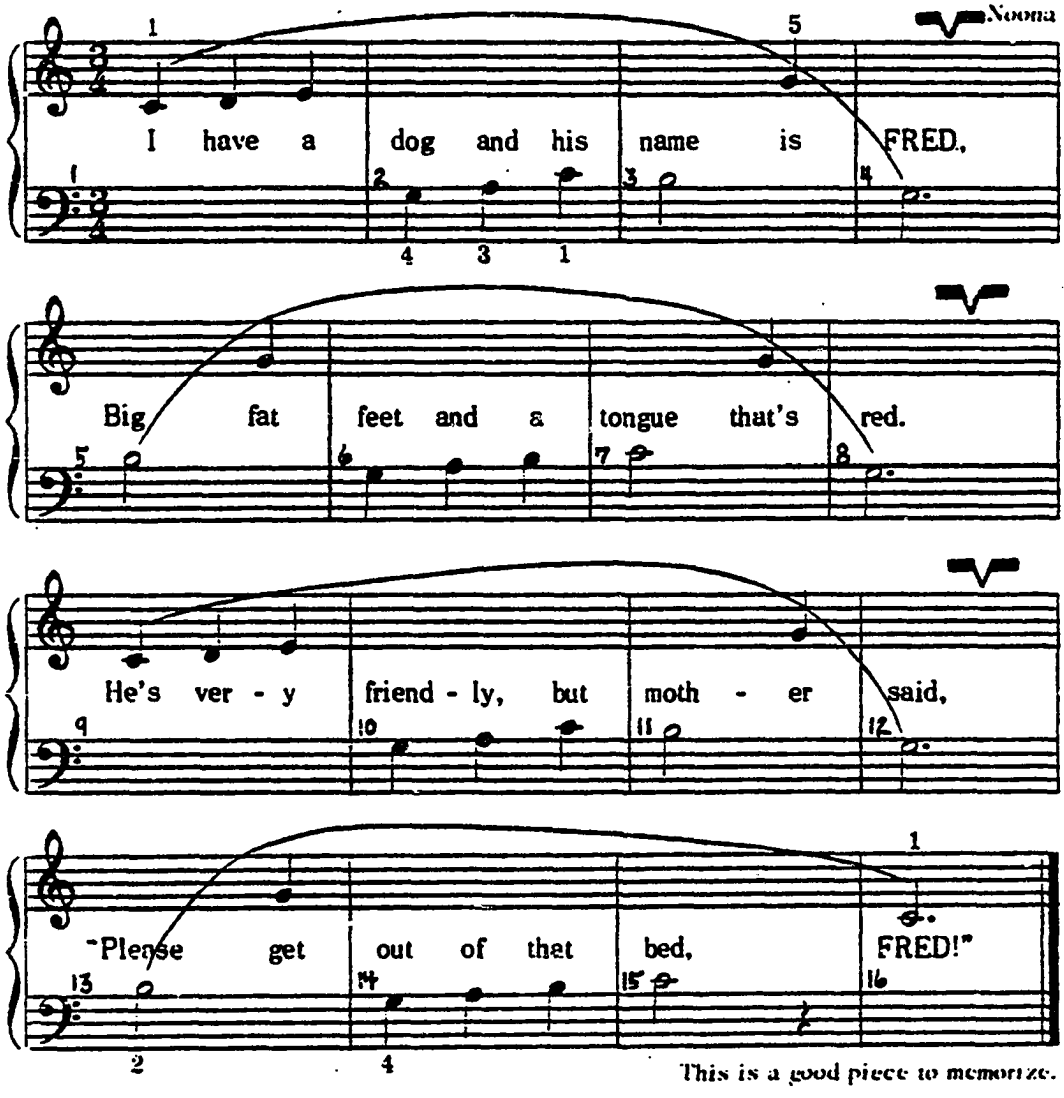
EXAMPLE 2

$\frac{3}{4}$ **Time Signature**
3 3 beats to a measure 4 a quarter note (♩) gets one beat
𝅗𝅥. dotted half note = 3 beats



Fred

Happily



This is a good piece to memorize.

EXPERIMENT: To make a funny tune change the last note of each line.

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Lesson 3. "Way Out West," from Playing to Learn, Book I, Stecher, Horowitz, and Gordon.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = ♩. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16

Suggested Phrase Focal Points:

Phrase I. Measure 3, beat one; influenced by the accented melodic dissonance.

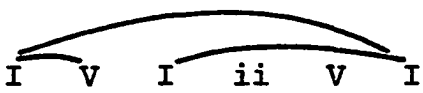
Phrase II. Measure 8, beat one; influenced by the implied harmonic progression to the dominant.

Phrase III. Identical to Phrase I.

Phrase IV. Measure 15, beat one; influenced by melodic dissonance and faster harmonic rhythm which reinforces the closing qualities at the cadential point.

Harmonic

Key of G major implied



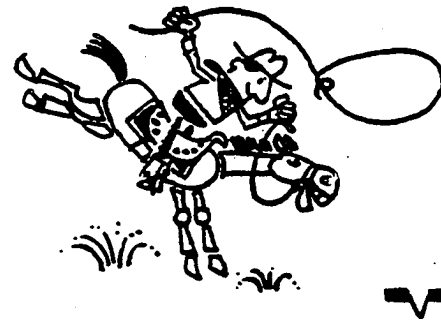
Groupings are set up by the progression of implied harmony

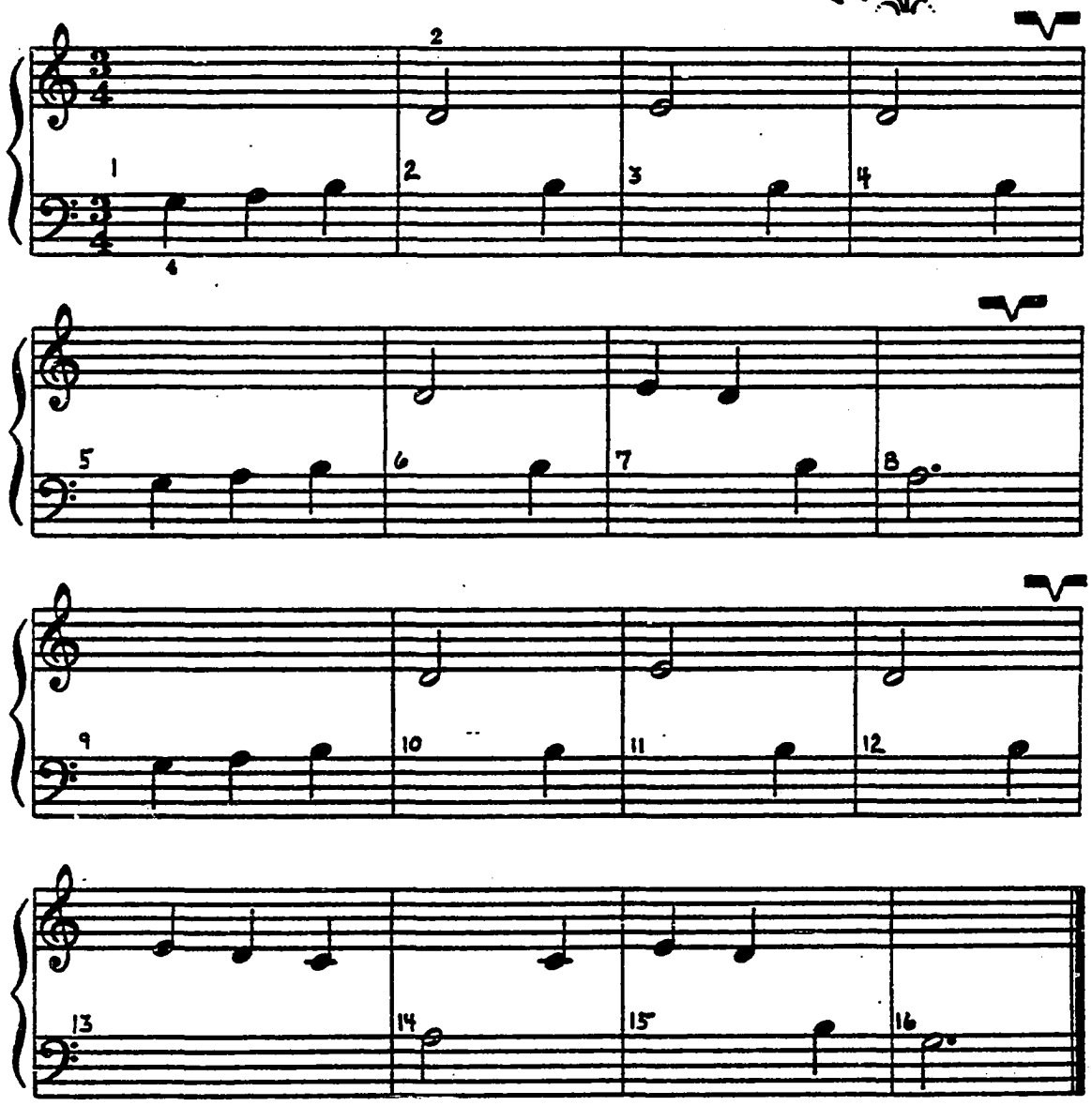
Formal

(four + four) + (four + four) = double period

EXAMPLE 3

Way Out West





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Lesson 4. "The School Band," from Playing to Learn, Book I, Stecher, Horowitz, and Gordon.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

   Phrase I. Measures 1-4

   Phrase II. Measures 5-8

   Phrase III. Measures 9-12

   Phrase IV. Measures 13-16

Suggested Phrase Focal Points:

Phrase I. Measure 3, beat one; influenced by the implied harmonic progression to the dominant seventh chord.

Phrase II. Measure 7, beat one; influenced by the implied harmonic progression back to the tonic.

Phrase III. Measure 11, beat one; influenced by the implied harmonic progression from sub-dominant to tonic.

Phrase IV. Measure 15; influenced by the implied harmonic progression from dominant to tonic and the conclusion of the cadential pattern, IV $I\frac{6}{4}$ V I of the phrase grouping, measures 9-16.

Lesson 4 continued.

Harmonic

Key of C major



Groupings are set up by the progression of implied harmony

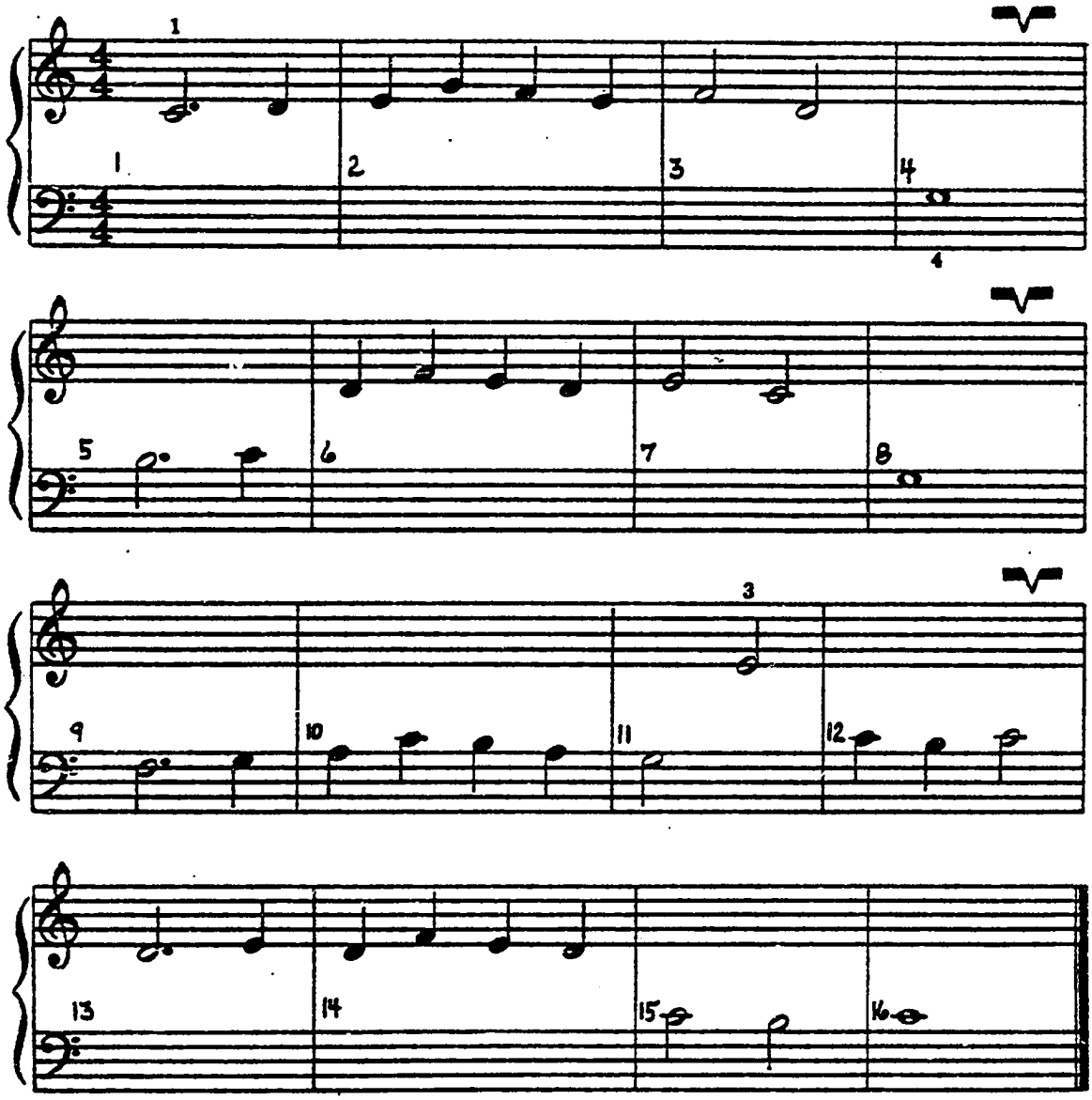
Formal

Phrase one and two = period

Phrases three and four = an eight measure phrase grouping

EXAMPLE 4

The School Band



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Lesson 5. "The Computer," from Playing to Learn, Book II, Stecher, Horowitz, and Gordon.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = eight measures

Phrase I. Measures 1-8
Phrase II. Measures 9-16

Suggested Phrase Focal Points:

Phrase I. Measure 5, beat one; influenced by the implied harmonic progression to the dominant. The lowered sixth degree, beat one, measure 4, adds impetus towards the harmonic and melodic destination to the dominant pitch in measure 5, beat one.

Phrase II. Measure 15, beat one; influenced by the arrival back to the implied tonic harmony. Identical to Phrase I except the final pitch in measure 16, which reinforces the implied tonic harmony, measure 15.

Harmonic

Key of C major



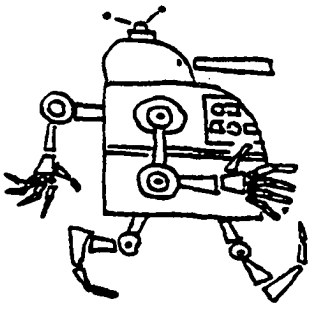
Groupings are set up by the progression of implied harmony

Formal

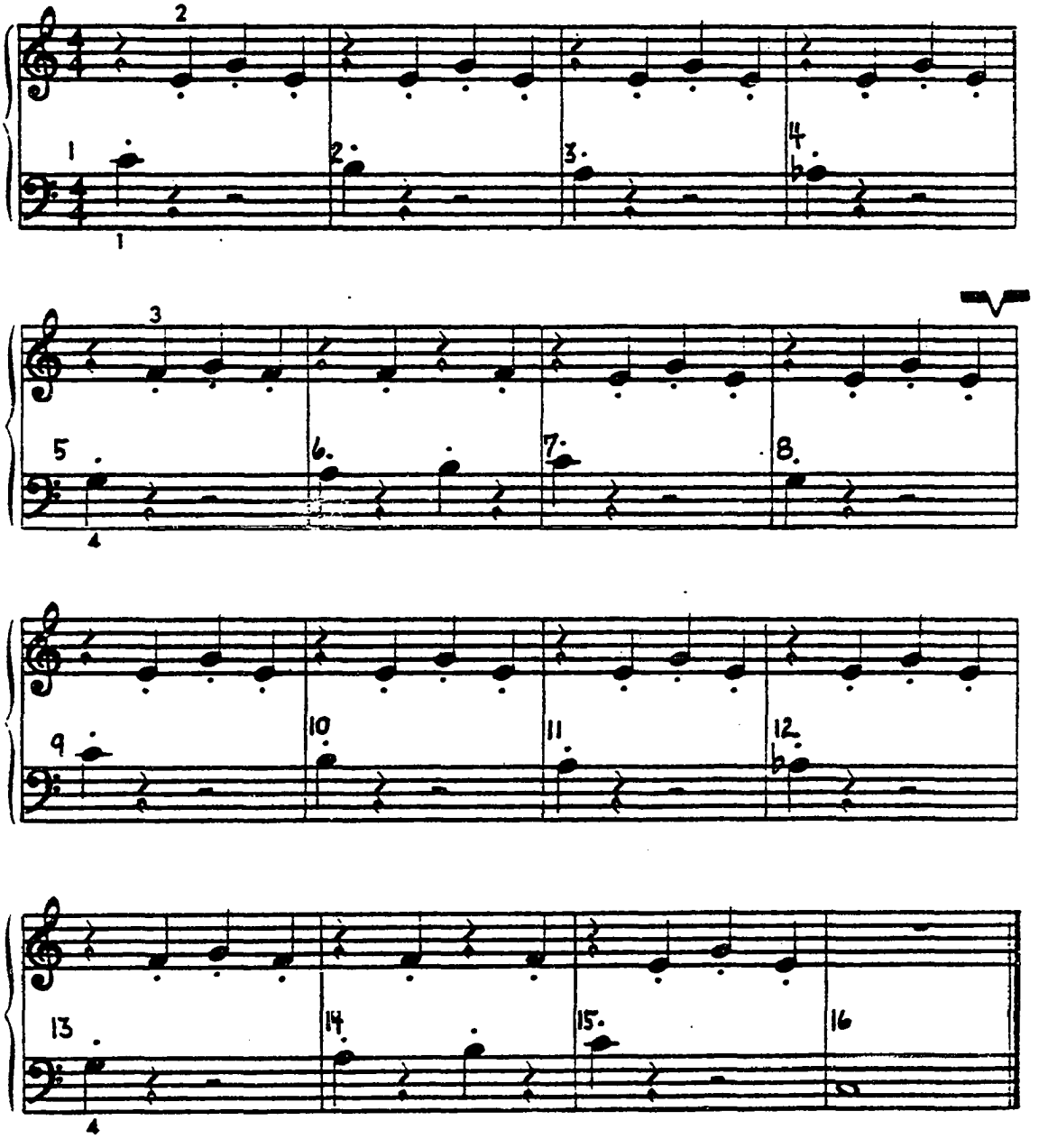
An eight measure phrase stated twice

EXAMPLE 5

The Computer



With motion



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Lesson 6. "Country Dance," from Learning to Play, Book II, Stecher, Horowitz, and Gordon.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = ♩. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

   Phrase I. Measures 1-4

   Phrase II. Measures 5-8

   Phrase III. Measures 9-12

   Phrase IV. Measures 13-16

Suggested Phrase Focal Points:

Phrase I. Measure 3, beat one; influenced by the implied harmonic progression to the dominant and resolution to the tonic in measure 4, beat one.

Phrase II. Repetition of Phrase I.

Phrase III. Measure 10, beat one; influenced by the resolution of the raised fourth degree in the melodic movement which promotes emphasis towards the temporary harmonic destination. Measure 12, beat one; influenced by an identical progression.

Phrase IV. Measure 15, beat one; influenced by the cadential implied harmonic progression to the dominant seventh and resolution to the tonic in measure 16.

Lesson 6 continued.

Harmonic

Key of C major



Formal

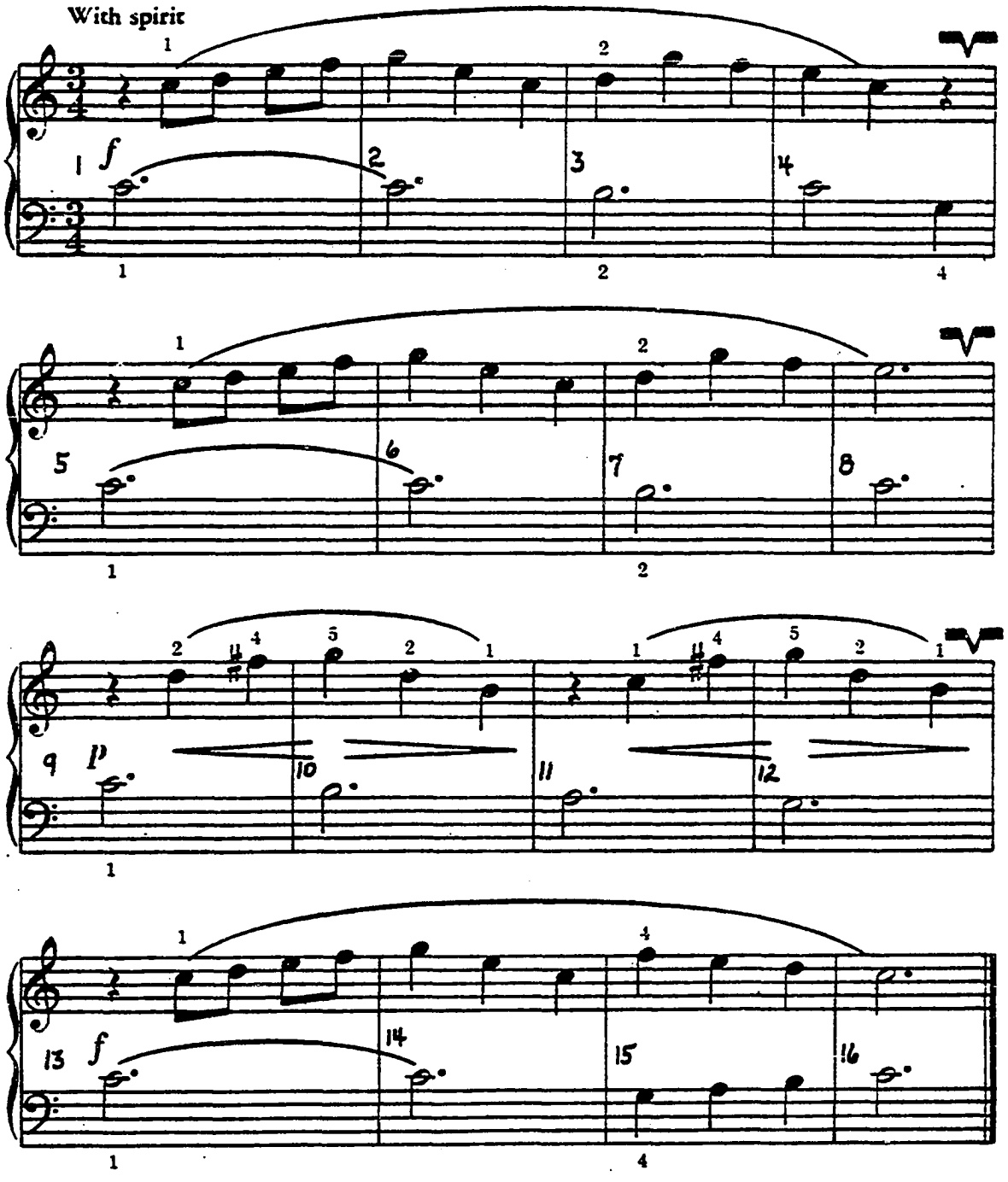
Four measures + four measures + four measures + four measures

Simple ABA′ form:

A	B	A′
mm. 1-8	mm. 9-12	mm. 13-16

EXAMPLE 6

Country Dance



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Lesson 7. "Marshmallow Sundae," from The Delicious Book, Bergerac.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = ♩. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16

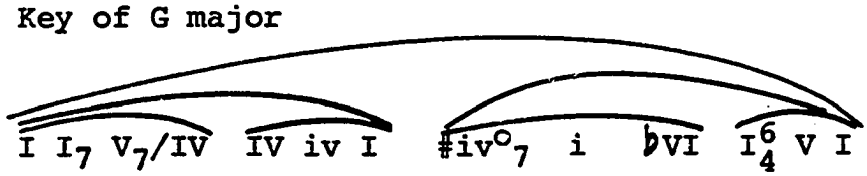
Measures 17-32 are a direct repetition of the first sixteen measures stated an octave lower.

Suggested Phrase Focal Points:

Phrases I, II, III, and IV. Third measure, beat one of each phrase (measures 3, 7, 11, and 15); influenced by the rhythmic duration of the melodic pitch and harmonic change. The sixteen measure melodic pattern progresses in half-steps from the tonic pitch, measure 1 to the dominant pitch in measure 13, announcing the cadential area, I^6_4 V I.

Harmonic

Key of G major



Formal

(four measures + four measures) + (four measures + four measures) = sixteen measure double period; repeated an octave lower

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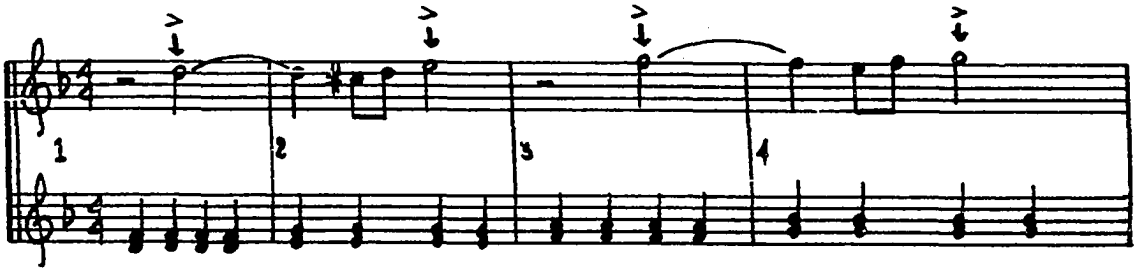
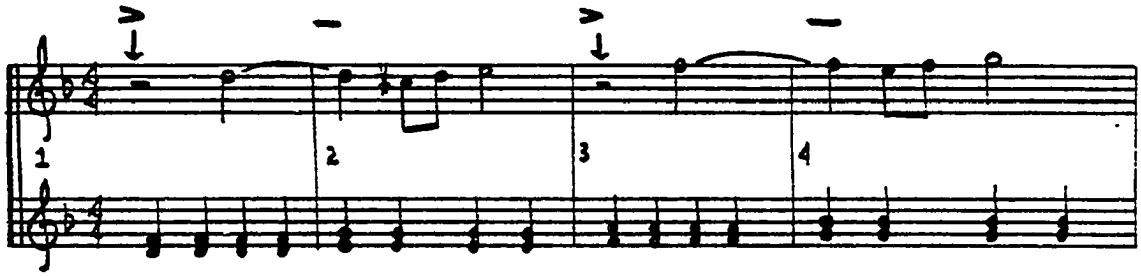
Late Elementary Level Compositions

In general, these compositions also display a congruency among the harmonic, melodic, rhythmic, and formal groupings. However, the Rowley, "Prelude No. II," Lesson 10, exhibits some incongruity among the elements. The suspension, occurring several times in the melodic line, prevents the melodic rhythm from agreeing with the harmonic rhythm and metric structure. Therefore, the writer advocates the use of some body movement to help strengthen corroboration between the metric structure and the harmonic rhythm. If the student is allowed to feel the metric structure with the melodic rhythm, the phrase rhythm is disrupted, and musical shape and direction become confused. Hence, the resolution of each suspension becomes accented as a downbeat. The following illustrative fragment, phrase one of "Prelude No. II," exemplifies the problem:



This problem may be alleviated by the synchronization of body movement with the metric structure and harmonic rhythm:



Body movement may be defined as the physical activity or action of the torso which creates a release for the emotional response to music. Whiteside refers to this physical activity as a fundamental or basic rhythm, the physical counterpart to an aural image.[1] She notes the importance of synchronizing basic rhythm with the metric structure, describing basic rhythm as "the illuminating guide" in producing phrase-wise listening, musical subtleties, and sense of musical elasticity.[2] Further commenting, Whiteside states:

---

[1]Abby Whiteside, Mastering the Chopin Etudes and Other Essays (New York: Charles Scribner's Sons, 1969), pp. 4-5.

[2]Whiteside, Mastering the Chopin Etudes and Other Essays, pp. 26-31.

"For a performer all listening is conditioned by the kind of physical activity which dominates his playing."[1] Although the type or size of movement may be individual with each student, there is a need for developing a feeling of physical response to the metric structure. If the development of a basic rhythm is neglected, problems will occur each time a student learns a composition that contains any type of incongruousness among the elements. This incongruity may be set up by a number of factors, such as melodic rhythm, harmonic rhythm, rhythmic duration, or dynamic accents. The process may be further complicated in advanced level music by sections of meter changes, hemiola or rhythmic ambiguities. Thus, the possibilities for the development of musical understanding and performance capacities may be lessened.

Further musical complexities found in these compositions include an increase of the following: (1) voicing, (2) articulation, (3) secondary harmonies, (4) non-harmonic embellishments, (5) phrase length, and (6) melodic accented dissonances. Moreover, the compositions illustrate (1) faster harmonic rhythm, (2) patterns of long-substained melodic notes against moving accompaniment patterns, (3) mode changes, and (4) a melodic-harmonic wedge contained in one voice.

Although requiring no set pattern or time limit, these new complexities would need to appear in many

---

[1]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 28.

situations and contexts for full comprehension by the student. The sequence of the complexities would need to be adapted to individual learning and performance capacities. If the sequence is paced too quickly, musical understanding becomes superficial and the synthesis of aural, rhythmic, and technical controls is impaired.

The student begins each piece with the following instructions: exaggeration of balance and clarity between (1) melody and accompaniment; (2) voice lines and/or stratification of sound levels; (3) length and placement of tonal and rhythm pitches at both the mensural and intermensural levels of meter; (4) intensification and diminution of musical activity, including phrase, section, composition climaxes or focal points; (5) attacks and releases; and (6) exaggeration of any advised movements to promote physical coordination or synchronization of the hands. If there is a breakdown in controls within the synthesis, the beginning stages of learning a composition may include disregarding all articulation; releasing all notes to help promote physical continuity of free movement and to curtail physical inhibition. Writers suggest that this type of practice procedure fosters aural awareness and lessens technical problems caused by the increase of articulation or voice lines. Pedalling may also be delayed until the composition is perceived and conceived in rhythmic, harmonic, melodic, and formal groupings.

By this level of advancement, the student begins each new piano composition with an exaggerated version of the overall shape and sound of the long-term musical intention. As the learner's musical understanding of the composition grows, this exaggerated version gradually becomes clarified and refined. Previously outlined rhythmic practice procedures would be continued and melodic, harmonic, and formal hierarchic groupings considered from the beginning practice stage. The length of what is perceived by each individual would vary according to relevant experience and musical ability. The gestalt or whole of what is perceived will become more clearly defined with increasing experience and conceptual growth. An analysis must be made of the size of groupings possible for individual students to perceive and maintain a synthesis of aural, rhythmic, and technical control. Selection of practice tempos should be in direct relationship to present state of musical understanding and controls within the synthesis. Refinement of these relationships gradually will be clarified and understood as the learner acquires more experience and understanding of the composition. The pace and sequence of practice procedures and literature selections would be applied according to individual musical understanding and performance capacity. The evolvement of performance tempo and realization of the long-term musical intention will emerge.

Lesson 8. "Cinderella's Lament," from Cinderella Suite, Barrett.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16
Phrase V.	Measures 17-20
Phrase VI.	Measures 21-24
Phrase VII.	Measures 25-28
Phrase VIII.	Measures 29-32

Suggested Phrase Focal Points:

Measure 1, beat one of every other four measure phrase (measures 5, 13, 21, and 29). The fifth measure of each eight measure phrase chain[1] signifies a beginning of harmonic, melodic, and rhythmic activity after four measures of a rather static sound caused by the i VII i VII progression in phrases one, three, and seven; and the VI III VI III progression in phrase five.

---

[1]Douglass M. Green, Form in Tonal Music (New York: Holt, Rinehart and Winston, Inc., 1965), p. 48.

Lesson 8 continued.

Harmonic

Key of A minor

Section A: i VII i VII VI v iv V i

i VII i VII VI v iv V i

Section B: VI III VI III VI v iv V i

Section A′: i VII i VII VI v iv V i

Formal

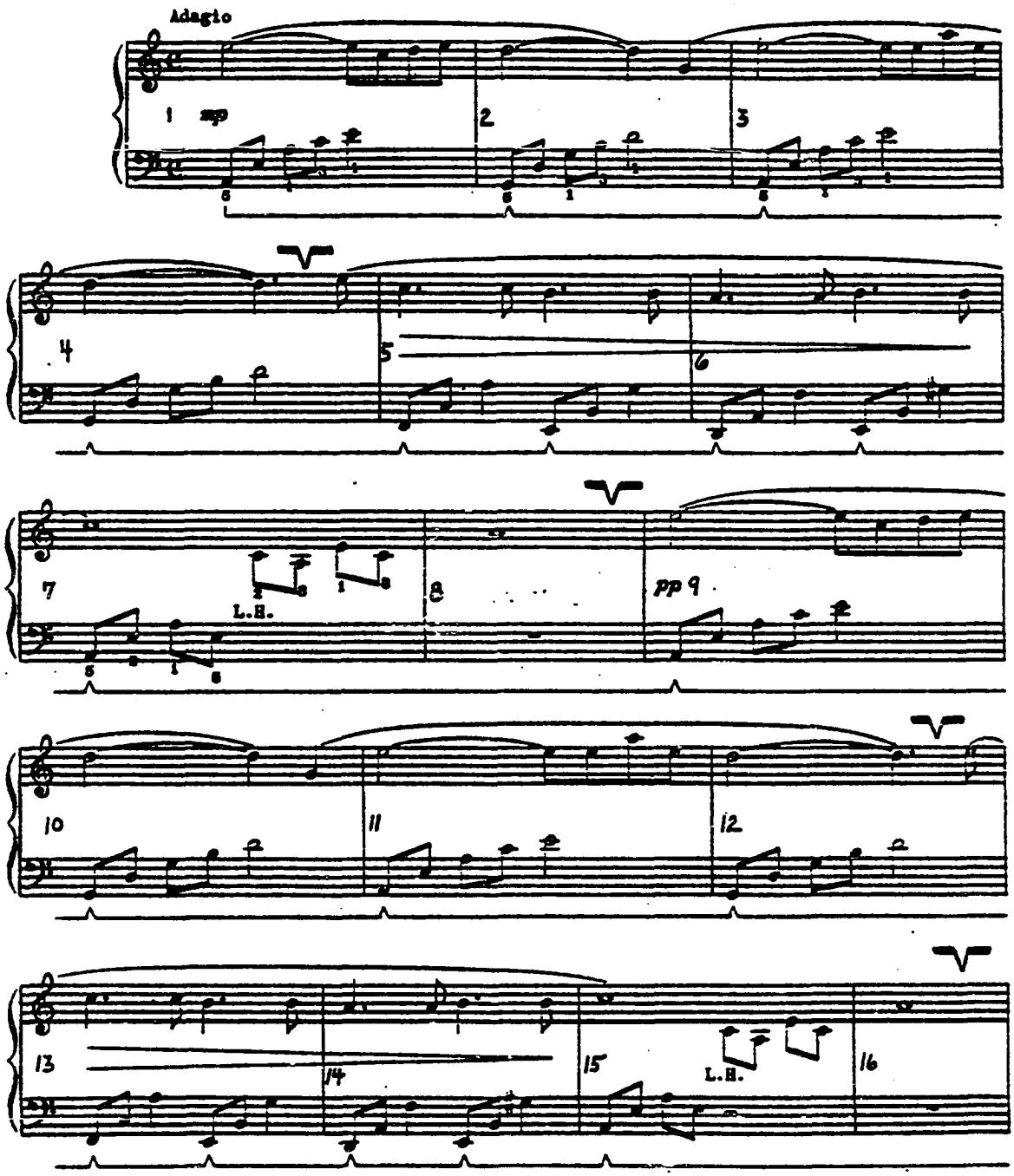
Eight four measure phrases (four eight measure phrase chains)

An ABA′ form:

A	B	A′
mm. 1-16	mm. 17-24	mm. 25-32

EXAMPLE 8

1. CINDERELLA'S LAMENT



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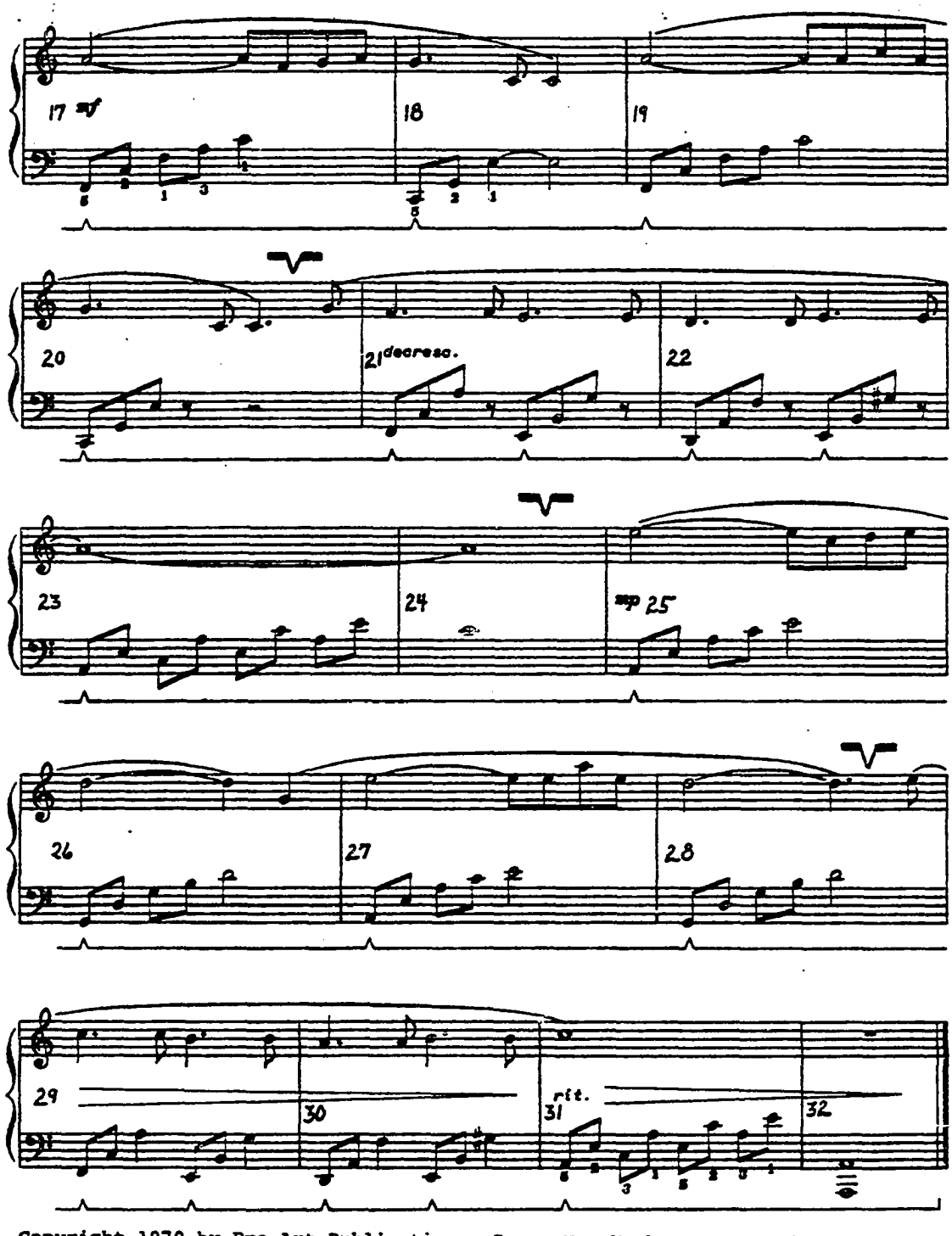

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Lesson 9. "Wind Song," from Kaleidoscope Solos, Book IV, George.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = ♩. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Introduction.	Measures 1-2
Phrase I.	Measures 3-6
Phrase II.	Measures 7-10
Phrase III.	Measures 11-14
Phrase IV.	Measures 15-18
Extension.	Measures 19-22

Suggested Phrase Focal Points:

Phrases I, II, and IV. Measure 3, beat one of each phrase (measures 5, 9, and 13); influenced by the rhythmic duration of the melodic pitch.

Phrase III. Measure 12, beat one; influenced by the melodic dissonance, melodic high point, and dynamic stress.

Harmonic

Key of E minor

i VI iv_7 V i

Formal

Two measures of introduction + four measures + four measures + four measures + four measures with four measures of extension

Lesson 10. "Prelude No. II," from Five Miniature Preludes and Fugues, Rowley.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = irregular

Phrase I.	Measures 1-4
Phrase II.	Measures 5-11
Phrase III.	Measures 12-15
Phrase IV.	Measures 16-23

Suggested Phrase Focal Points:

Phrase I. Measures 1 and 3, beat 3; influenced by the incongruity of the melodic rhythm with the harmonic rhythm and the metric structure.

Phrase II. Measure 11, beat one; influenced by the rhythmic duration, arrival of the dominant harmony, increase in harmonic rhythm, and the half-cadence; measure 8, beat 3, provides a melodic and harmonic pause, but there is a sense of incompletion and pull to the dominant harmony, measure 11, beat one.

Phrase III. Measures 12 and 14, beat three; influenced by the incongruity of the melodic rhythm with the harmonic rhythm and the metric structure (as found in Phrase I).

Phrase IV. Measure 22, beat one; influenced by the arrival of the dominant harmony and resolution to the tonic harmony with the picardie-third, measure 23. Measure 19, beat 3, provides a melodic and harmonic pause (as found in measure 8, beat 3), but there is a sense of incompletion and pull to the dominant-tonic cadential harmony, measures 22-23.

Lesson 10 continued.

Harmonic

Key of D minor





Formal

Four measures + seven measures; repeated as four measures + eight measures

Lesson 11. "The Spinners," from Fanfare, Gillock.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16

Suggested Phrase Focal Points:

Section A. Phrase I: Measure 3, beat one; influenced by the culmination of the melodic-harmonic wedge activity, and the beginning of slower harmonic rhythmic. Phrase II: Repetition of Phrase I with new cadential ending. Melodic motion progresses to the same spot as in Phrase I, but continues on to a full climax in measure 8, beat three on pitches 5-1; adding emphasis to the V-I harmonic motion, a V-I closing cadence.

Section B: The same type melodic pattern from Section A, presented in four-measure groupings, is now presented sequentially in two-measure subphrase groupings. The focal point of each two-measure subphrase grouping

Lesson 11 continued.

occurs on the first beat of measure two of each grouping (measures 10, 12, and 14); influenced by the culmination of the melodic-harmonic wedge activity, dynamic stress, and rhythmic duration of the harmony. In measures 15-16, the focal point is measure 16; influenced by the arrival of the dominant-seventh harmony and half-cadence. These two measures of melodic motion culminate the B section and serve as a melodic link to the return of Section A. Section A is repeated.

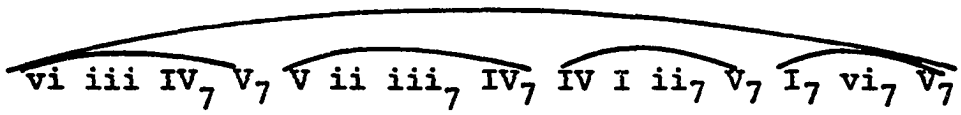
Harmonic

Key of F major

Section A:



Section B:



Formal

Four measures + four measures = period; an eight measure phrase consisting of four two-measure groupings; repetition of opening period

An ABA′ form: A mm. 1-8 B mm. 9-16 A′ mm. 1-8

Intermediate Level Compositions

The instructional procedures presented with the elementary level piano music need to be thoroughly comprehended before advancement is made to intermediate level music. The previous sequence of learning experiences should increase the learner's ability to grasp, transform, and transfer musical concepts to new contexts and situations, and provide generalizations for musical understanding in present and future circumstances. Many intermediate level compositions reveal musical settings directly correlated to previous experiences with elementary level music. For example, Berenice Benson Bentley's "Autumn," from the Rondolettes, lesson 12, may be compared to the "Wind Song," from Kaleidoscope Solos, Book IV by Jon George, lesson 9. In the "Wind Song," the focal point of Phrase III, and the climax of the entire piece (measure 12, beat one), is influenced by a melodic dissonance, melodic high point of the phrase, and dynamic stress. The focal point of each phrase in "Autumn" is influenced by the melodic motion to the highest pitch, and dynamic stress. In addition, the focal points of three of the four phrases are influenced by the dissonance created by the struck suspension. The composition's climactic point is influenced by the melodic high point of the work and the dynamic stress. The basic difference in the compositions is the degree of complexity in the musical settings. "Autumn" exhibits a much more complex setting evidenced in the

(1) notational patterns; (2) tempo changes; and (3) voice lines in more complex textures.

In providing effective guidance and optimum conditions for development of performance capacities at the intermediate level, the sequence of instructional procedures and piano literature must provide a framework for continued broadening and extension of musical concepts in terms of the formal elements or complexities inherent in piano music. As writers have advocated, the mastery of synthesis control is directly related to the evolving understanding of the internal characteristics of music and the development of a basic body rhythm.[1] Whiteside affirms that a basic rhythm is "the essential physical counterpart of musical continuity."[2] She notes:

> A sensitive, phrasewise performance will not take place--no matter how much scholarship, emotional involvement, and natural musical endowment is present--unless the performer uses this basic rhythm continuously whether he is aware of it or not.[3]

The writer believes the key concept in the full comprehension and realization of this basic rhythm in piano performance is related directly to the congruence or incongruence of the harmonic, melodic, rhythmic, and formal

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[1]See pp. 14, 39-43.

[2]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 4.

[3]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 4.

groupings. The basic rhythm or feeling of body rhythm must corroborate with the metric structure unless there are strong indications of non-coincidence, such as patterns set up by hemiola, meter changes, rhythmic ambiguities, or other factors. Whiteside avers the need of coordinating the basic rhythm and musical ideas from the beginning stages of learning a composition. She comments:

> The player is told often enough that listening to oneself is the important thing in practice and performance. But he should be told more often that the physical action of the performer conditions his listening. Unless these two processes, physical activity and listening, are fully coordinated, the pupil will never achieve ease, enduring technical facility, and complete enjoyment of the piano.[1]

Intermediate level compositions present further musical complexities. These include: (1) increase in tonal and rhythmic nuance possibilities; (2) the occurrence of voice lines in more complex textures, including chordal and contrapuntal settings; (3) increase in keyboard mobility; (4) contrasting articulation in the two hands; (5) more contrasting touches within a single composition; and (6) further incongruousness of the elements.

The increase in musical complexities may give rise to a breakdown in the interrelationship of aural, rhythmic, and technical control, thus, interrupting the development of performance capacities and musical understanding. At any

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[1]Whiteside, Mastering the Chopin Etudes and Other Essays, p. 156-57.

time, the instructor or student may find the prescribed sequence of literature contains a combination of demands which prevent synthesis control. Upon analysis, the disruption of the coherent whole may be due to rhythmic, aural, or technical aspects, or a combination of these. The problem may be alleviated by the learner gaining more musical experience with the same combination of demands, but in a less complex setting.

In guiding the student through musical experiences at the intermediate level of advancement, the teacher structures the material in a manner which will continue the fostering of the learner's ability to grasp, transform, and transfer musical knowledge, and further develop performance capacity. The student continues the sequence of previously stated instructional procedures. This sequence needs to be guided by (1) past learning, (2) present state of development, (3) nature of material, and (4) individual learning and performance capacities.

Lesson 12. "Autumn," from Rondolettes, Bentley.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅗𝅥 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

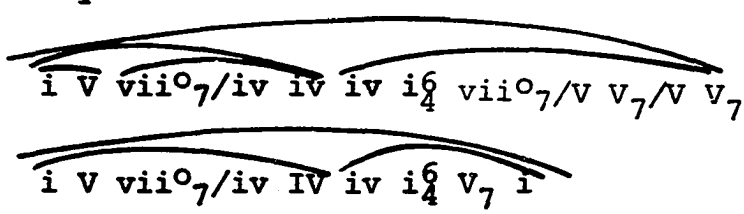
Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16
Cadential Extension:	Measures 17-24

Suggested Phrase Focal Points:

Measure 4, beat one of every four measure phrase (4, 8, 12, and 16); influenced by the melodic motion to the highest pitch of each phrase and dynamic stress. In addition, focal points in Phrases I, III, and IV are influenced by rhythmic duration, and the dissonance created by the struck suspension in Phrase III, measure 12, pitches b-a. Measures 17-24 are a reiteration of the tonic e minor triad with decorative pitches.

Harmonic

Key of E minor



Formal

Two four-measure phrases ending in a half-cadence; two four-measure phrases ending in a full cadence = double period; and an eight-measure phrase, cadential extension.

Lesson 13. "Solitude," from Rondolettes, Bentley.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅗𝅥 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

Phrase I.	Measures 1-4
Phrase II.	Measures 5-8
Phrase III.	Measures 9-12
Phrase IV.	Measures 13-16
Cadential Extension:	Measures 17-20

Suggested Phrase Focal Points:

Phrase I. Measure 4, beat one; influenced by the melodic dissonance, arrival of the dominant-seventh harmony in root position, and the highest melodic pitch.

Phrase II. Measure 7, beat one; influenced by the rhythmic duration of the melodic line and the increase in tonal intensification created by the fully diminished-seventh harmony.

Phrase III. Identical to Phrase I.

Phrase IV. Measure 14, beat one; influenced by the melodic dissonance and leap to the highest point of the phrase.

Harmonic

Key of G minor



Formal

Two four-measure phrases ending in a half-cadence and two four measure phrases ending in a full cadence = double period. One four-measure phrase, cadential extension

Lesson 14. "Autumn Sketch," from Lyric Preludes in Romantic Style, Gillock.

Hierarchic Groupings:

Rhythmic-Melodic

1. Pulse-unit = ♩. note
2. Measure groupings = ♩. note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = eight measure phrases

Phrase I.	Measures 1-8 (4+4)
Phrase II.	Measures 9-16 (4+4)
Phrase III.	Measures 17-24
Phrase IV.	Measures 25-32
Cadential Expansion:	Measures 33-36

Suggested Phrase Focal Points:

Phrase I. Measure 7, beat one; influenced by the importance of the cadential progression to the dominant harmony and the lowest melodic pitch.

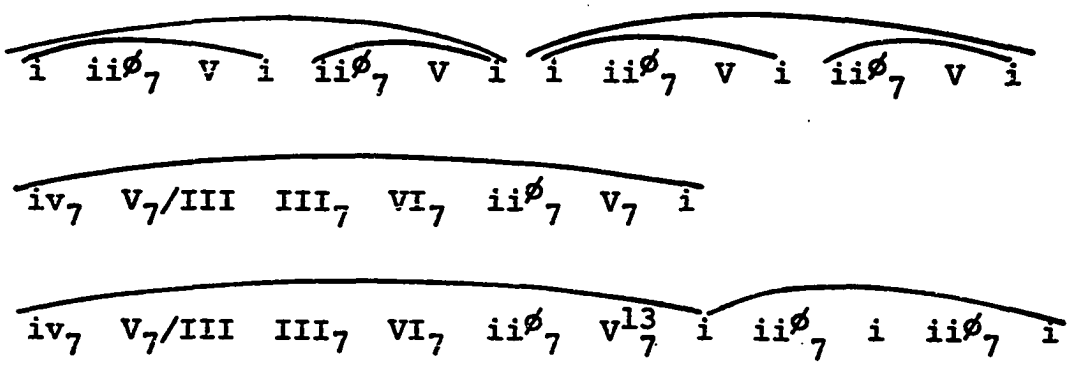
Phrase II. Repetition of Phrase I. Due to the omission of the sixth measure of the original statement, the focal point of Phrase II occurs one measure earlier, (the sixth measure of the phrase rather than the seventh measure: measure 7, Phrase I, measure 14, Phrase II). The shortening of Phrase II allows for a melodic link into Phrase III.

Phrases III and IV. Measures 22 and 30 respectively, beat one. As in Phrase II, focal points of Phrases III and IV occur on beat one of the sixth measure of each phrase; influenced by the importance of the cadential progression to the dominant harmony. Phrases III and IV are identical except for the inclusion of a third voice which appears intermittently.

Lesson 14 continued.

Harmonic

Key of B minor



Formal

Four eight measure phrases plus a four-measure phrase extension at the end of Phrase IV

Late Intermediate Level Compositions

Additional practice procedures are suggested as more intricate musical structures give rise to difficulty in perceiving rhythmic, harmonic, melodic, and formal groupings; thus disrupting aural, rhythmic, and technical controls. It is common knowledge that students easily mix pitches from different voice lines, especially in the beginning stages of practicing new compositions from this level of advancement. To alleviate the difficulty, the student may practice a composition in skeleton-outline and/or blocked form with inclusion of the metric structure practice guidelines. This process emphasizes harmonic progression, melodic movement, and phrase rhythm, rather than giving attention to notes in separate voices. This procedure enhances the learner's assessment of tonal nuance and "shape of the melodic idea."[1]

Snelbecker illustrates that the mode of representation is vital in the organization of material to be learned. He suggests that content can be presented in optimal form through visual or auditory means, graphically showing concepts that are to be perceived and conceived.[2] The following examples display visual presentations of skeleton-outline and blocked-form practice procedures.

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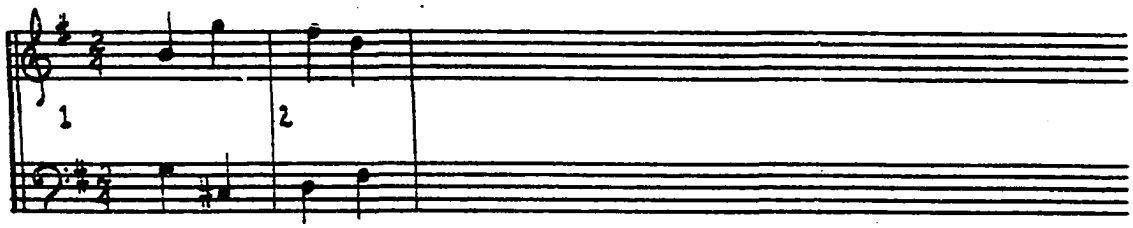
[1]Joan Last, Interpretation for the Piano Student (New York: Oxford University Press, 1962), pp. 46-52.

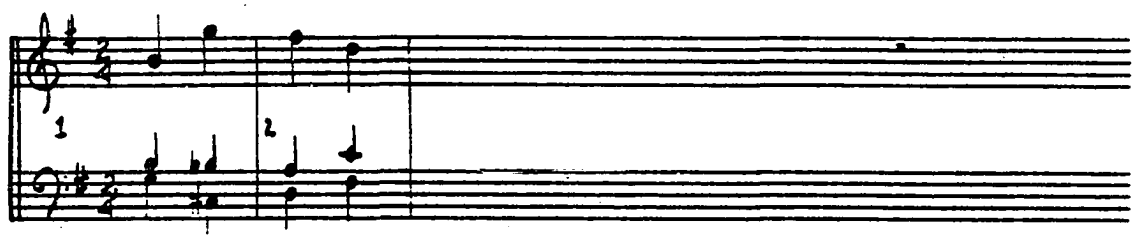
[2]Glenn E. Snelbecker, Learning Theory, Instructional Theory, and Psychoeducational Design (New York: McGraw-Hill Book Co., 1974), pp. 420-21.

Lesson 15. "From Strange Lands and People," from Kinderszenen, Op. 15, Schumann.

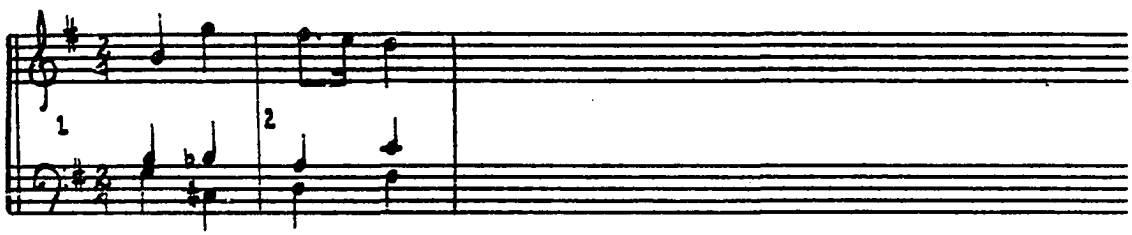
Melodic and Harmonic Skeleton Outline



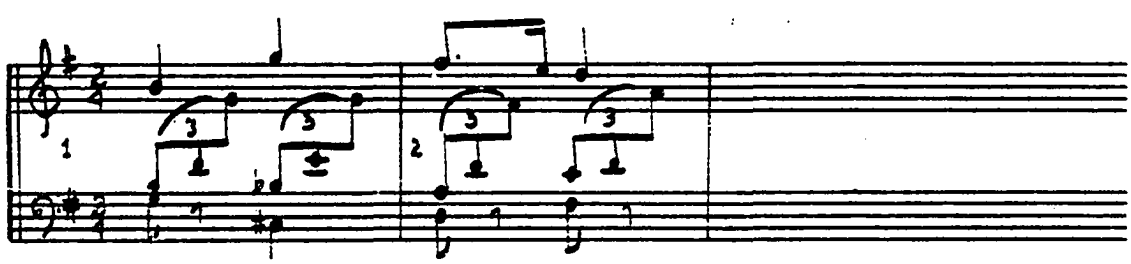
Partially Filled-in Melodic Outline and Blocked Harmonic Structure



Complete Melodic Structure and Blocked Harmonic Structure



Complete Score

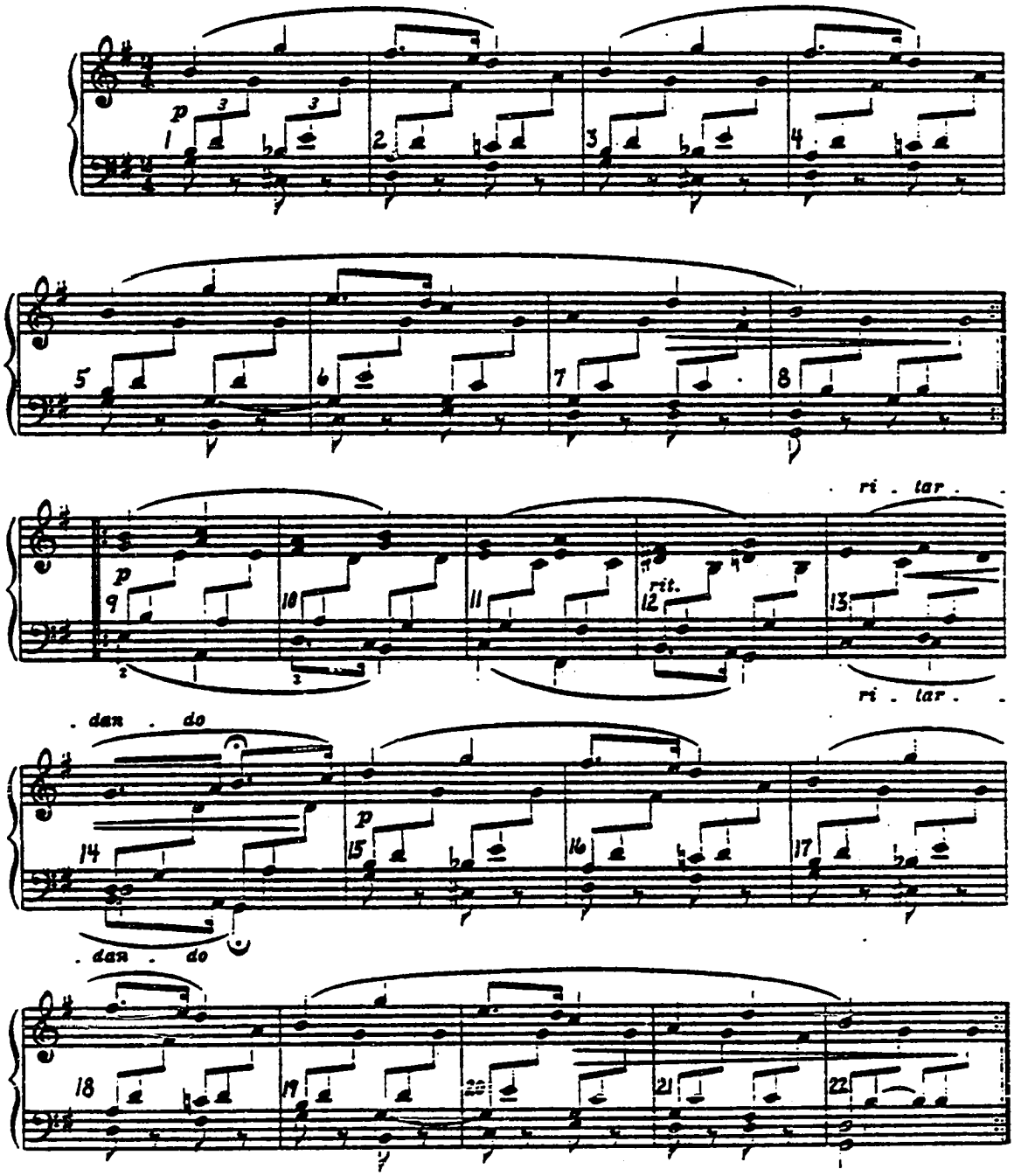


EXAMPLE 15

KINDERSZENEN

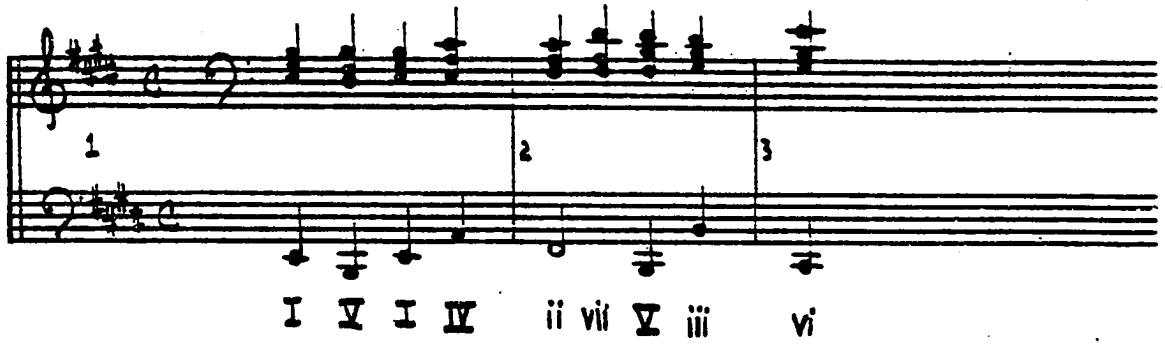
Opus 15

From foreign lands and people

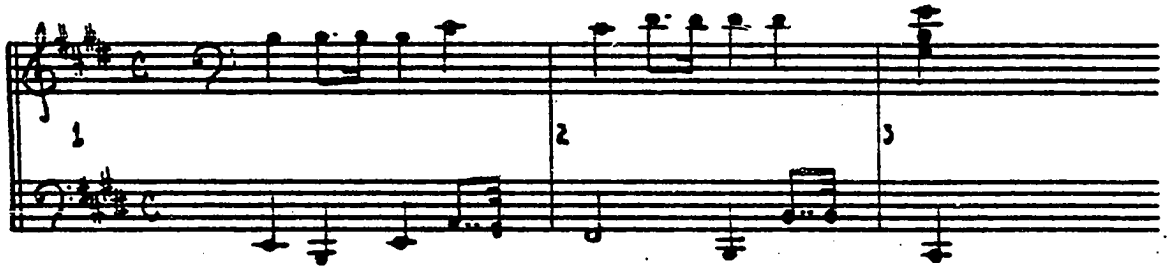


Lesson 16. "Prelude in E Major," Op. 28, No. 9, from Preludes, Chopin.

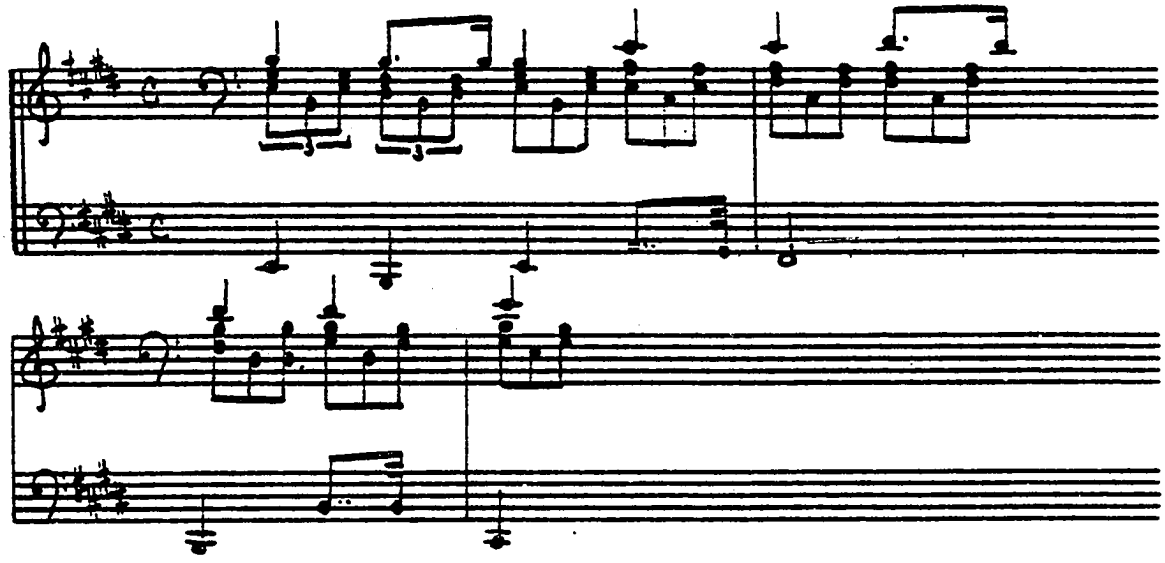
Harmonic Blocks



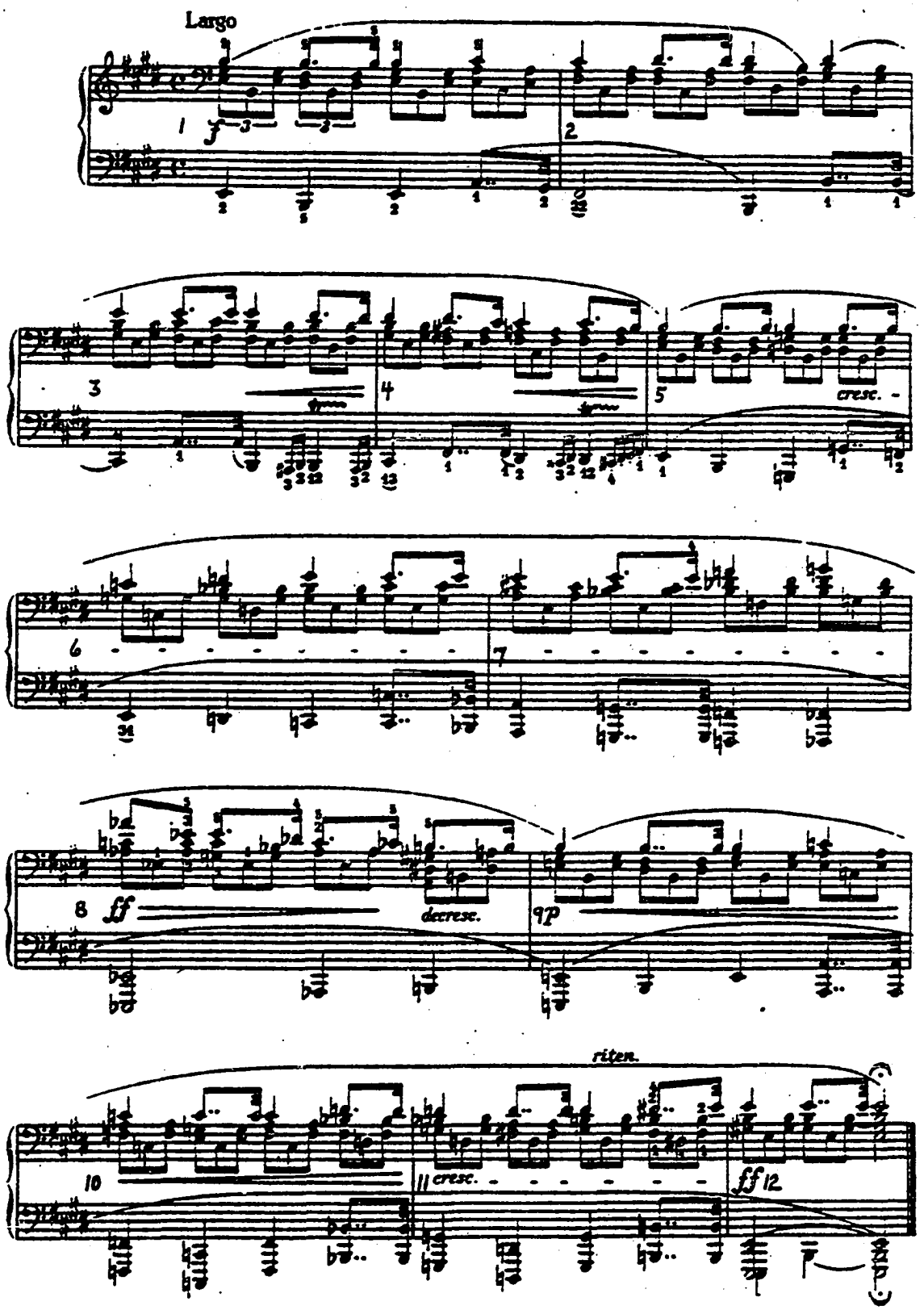
Harmonic and Melodic Skeleton Outline



Complete Score

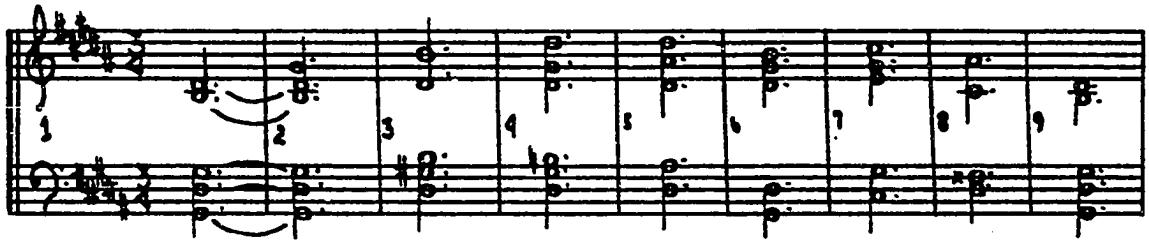


EXAMPLE 16

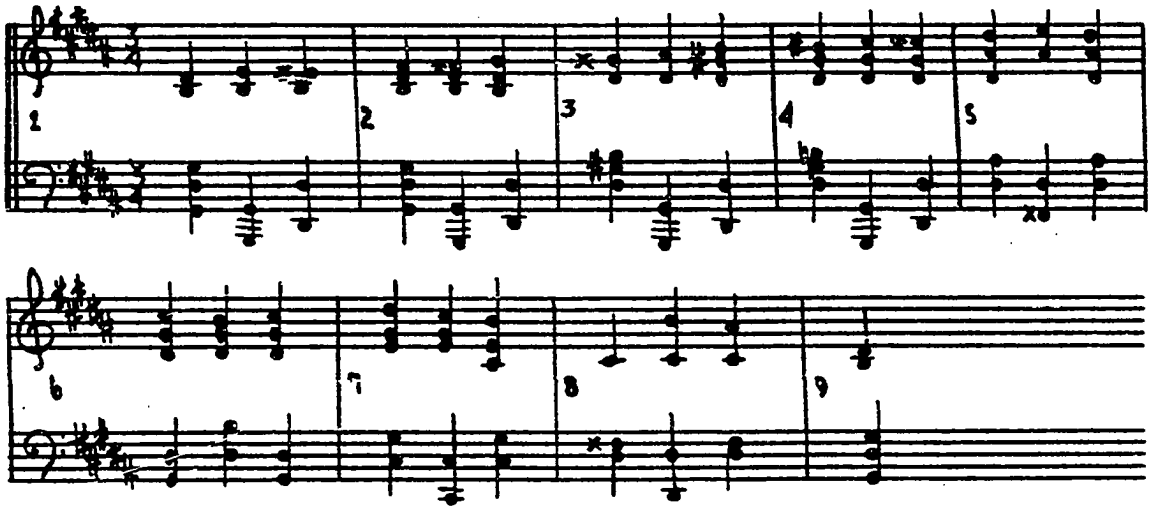


Lesson 17. "Prelude in G# Minor," Op. 28, No. 12, from Preludes, Chopin.

Blocked Harmonic Progression

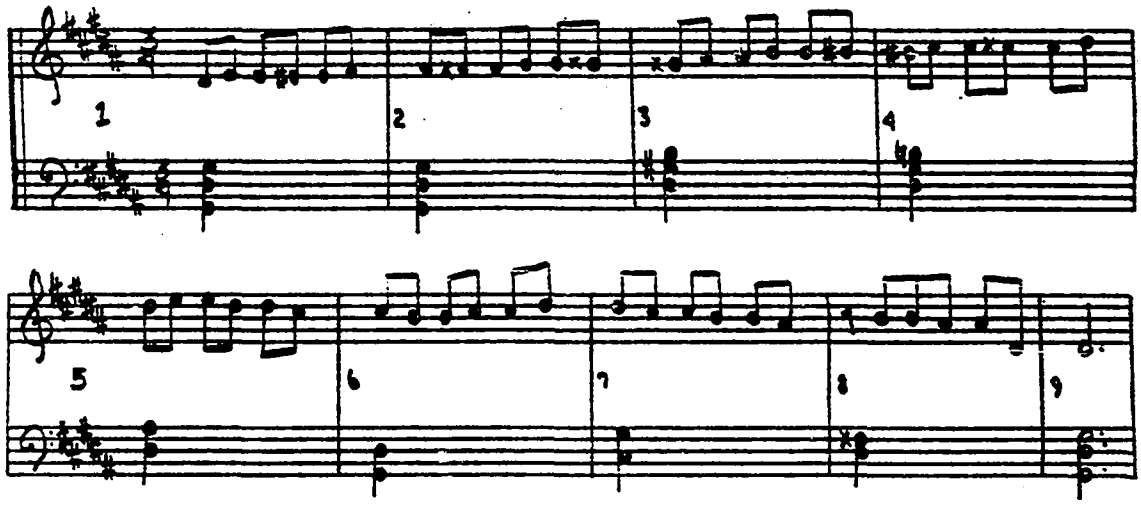


Complete Blocked Vertical Structure

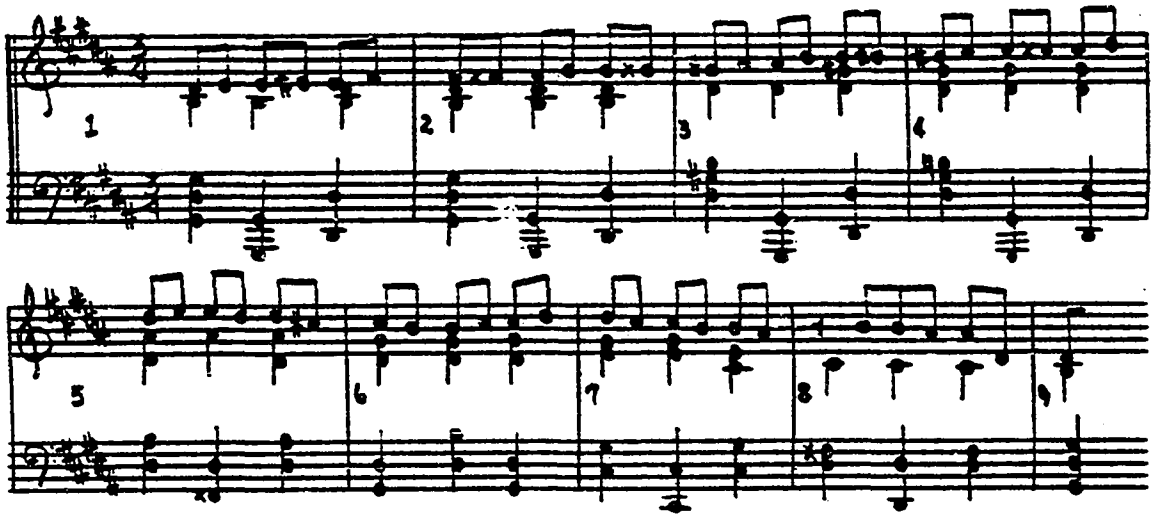


Lesson 17 continued.

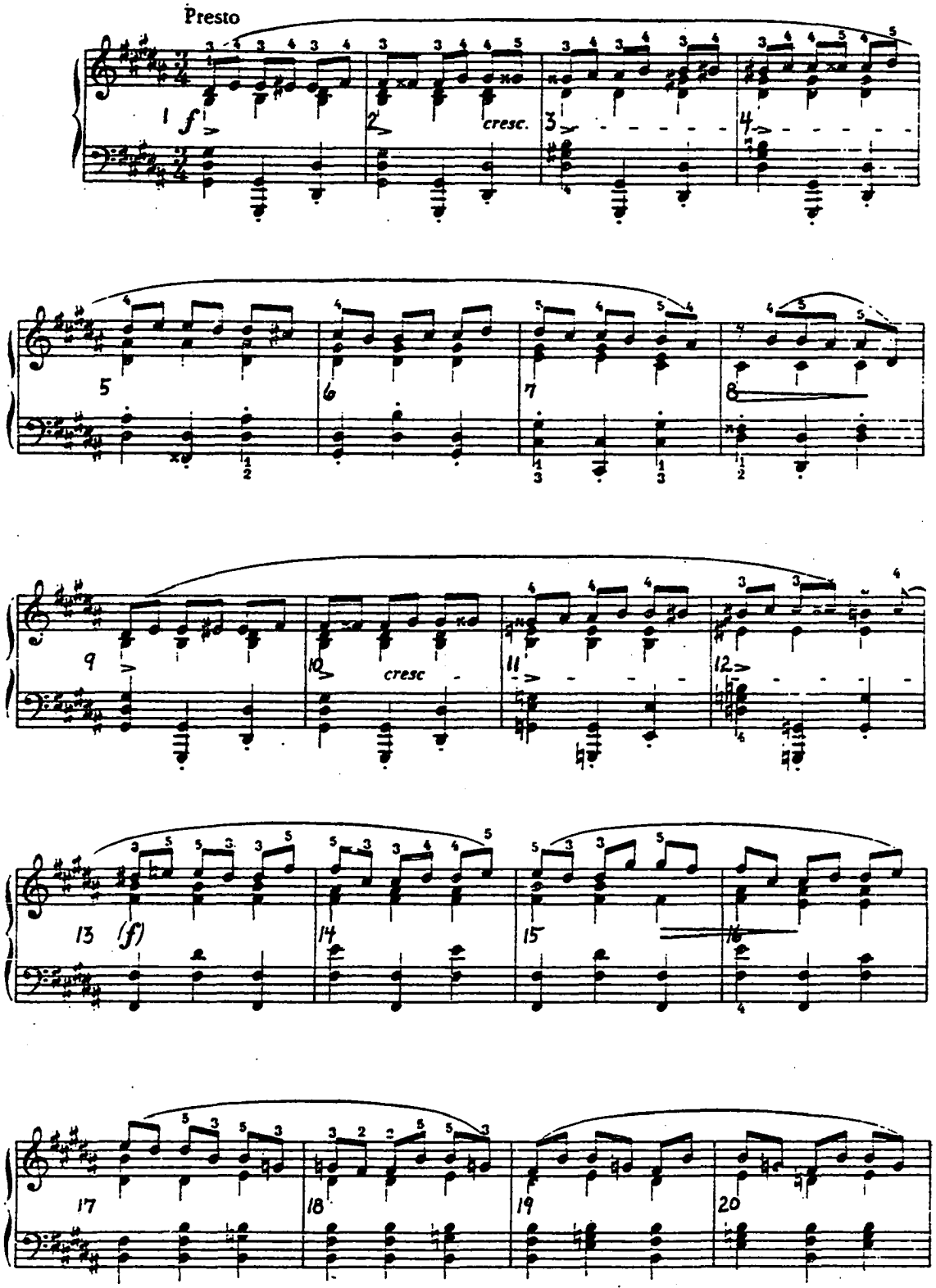
Melodic Structure and Blocked Harmonic Progression



Complete Score

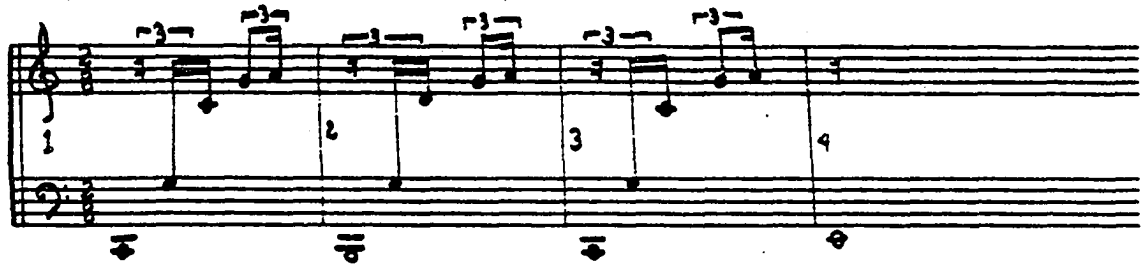


EXAMPLE 17

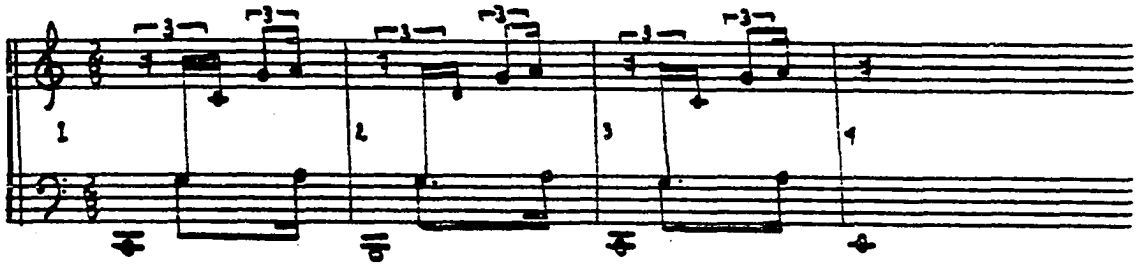


Lesson 18. "Prelude in C Major," Op. 28, No. 1, from Preludes, Chopin.

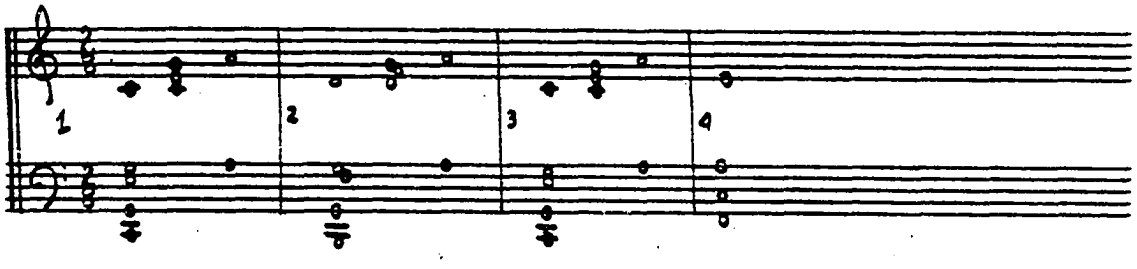
Harmonic and Melodic Skeleton Outline: Primary Melodic Idea Only



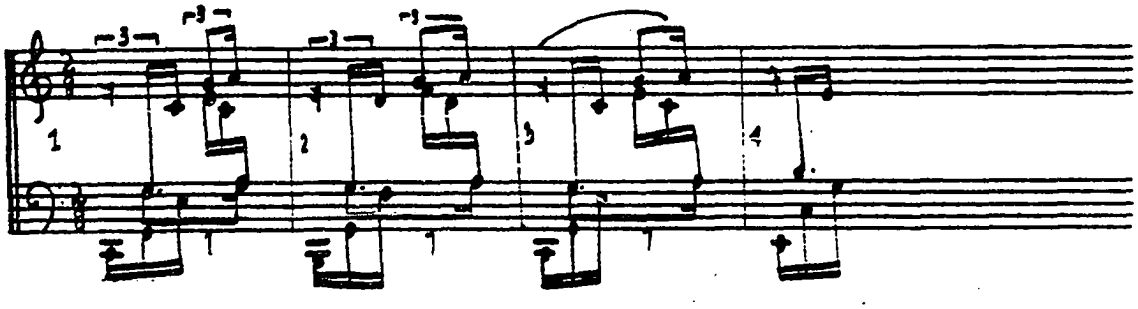
Harmonic and Melodic Skeleton Outline Including the Primary and Secondary Melodic Ideas



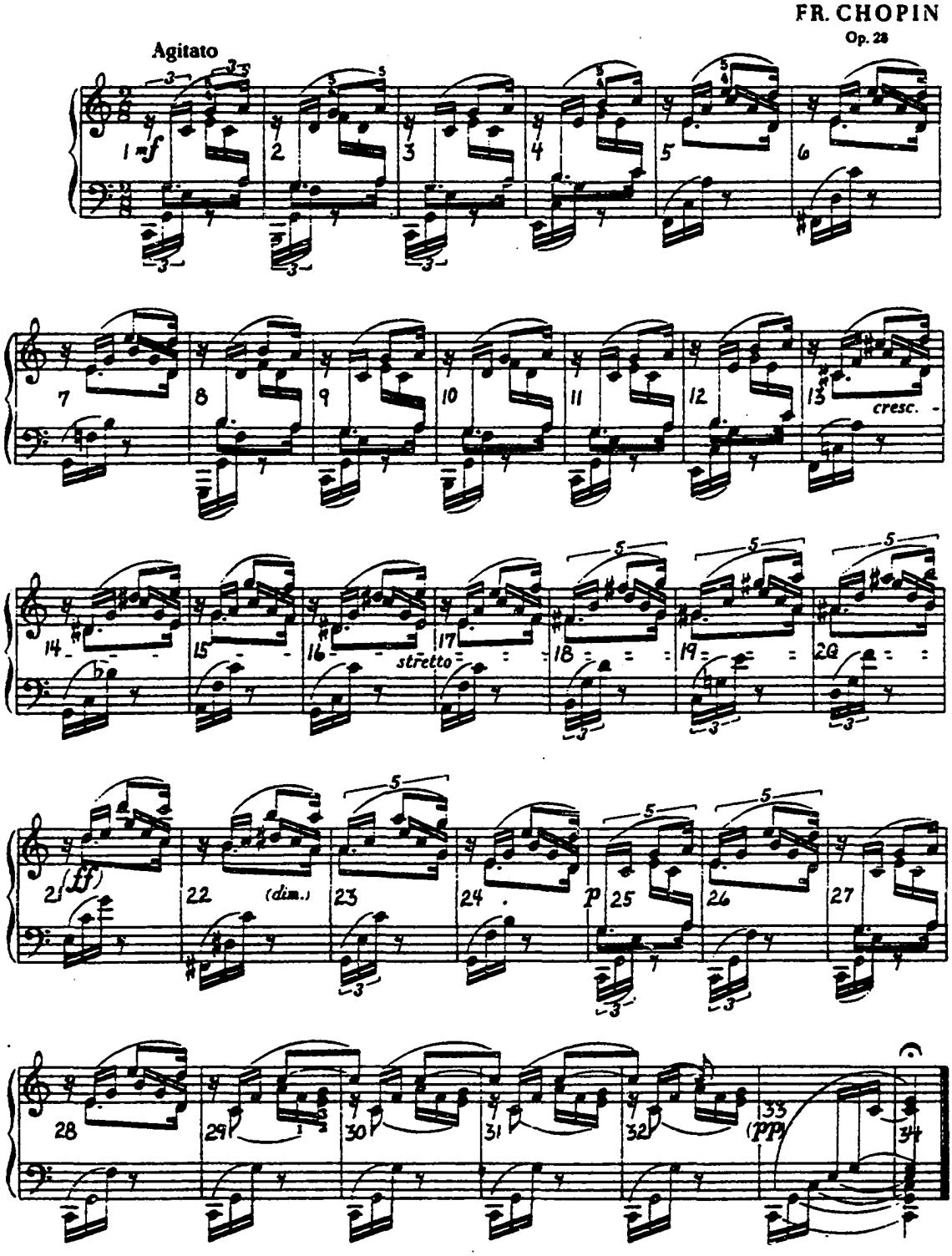
Harmony - Blocked Positions



Complete Score



EXAMPLE 18

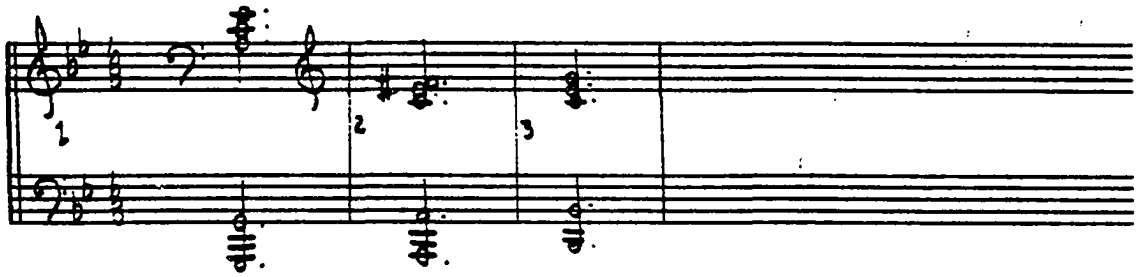


As displayed in Rowley's Prelude No. II, example 10, Chopin's Prelude in G Minor, Op. 28, No. 22, contains passages with incongruousness among the elements. At the beginning of this work, the harmony is first implied by the bass melody. Beginning in measure 1, the harmonic rhythm begins to anticipate the melodic rhythm. In measures 1-12, the harmonic structure is congruent with the melodic structure when it first appears in each measure but progresses into an incongruousness on beat two. Each time the harmony moves into a new vertical structure, the melodic structure is propelled into further activity until measure 13. In measures 13-15, the melody and harmony are congruent at the beginning of each measure, become incongruent, and return to congruency at the close of each bar. In measures 13-15, rhythmic duration, placement in the measure, and stress accents set up melodic incongruousness with the metric structure. In measures 17-22, the melodic rhythm of the bass and the metric structure are congruent, but the dynamic stress, rhythmic duration, and placement in the measure set up a harmonic rhythm which is incongruent with the metric structure. The metric structure should be firmly heard and felt by the learner before melodic or harmonic syncopation or stress accents should be considered. The writer advocates that the basic body rhythm and the metric structure should corroborate with each other throughout a composition in this type setting. In measures 1-12, chord changes are established

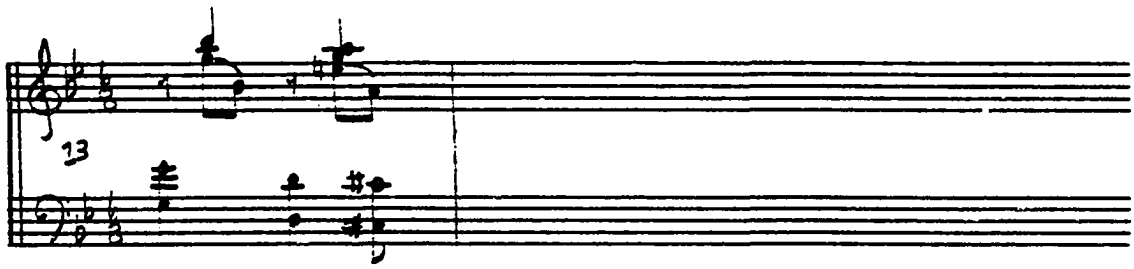
on the primary and secondary beats of the measure, producing congruency between the harmonic rhythm and the metric structure. Therefore, in measures 17-22, this same harmonic rhythm should be maintained by the body rhythm to act as a foil to the accent marks.

Lesson 19. "Prelude in G Minor," Op. 28, No. 22, from Preludes, Chopin.

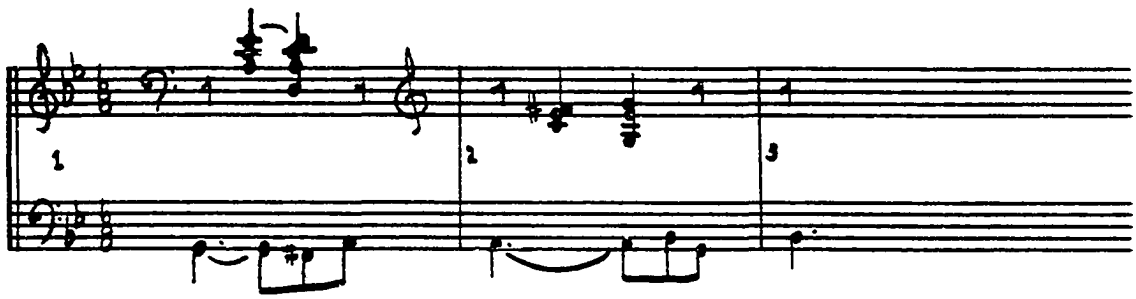
Blocked Harmonic Progression



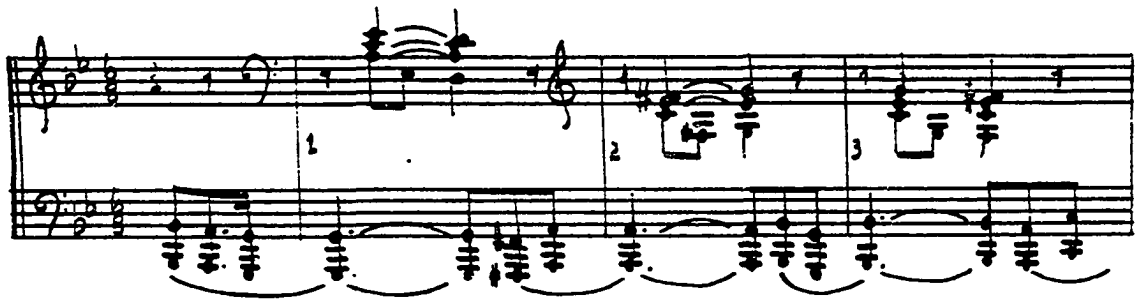
Skeleton Rhythm Outline



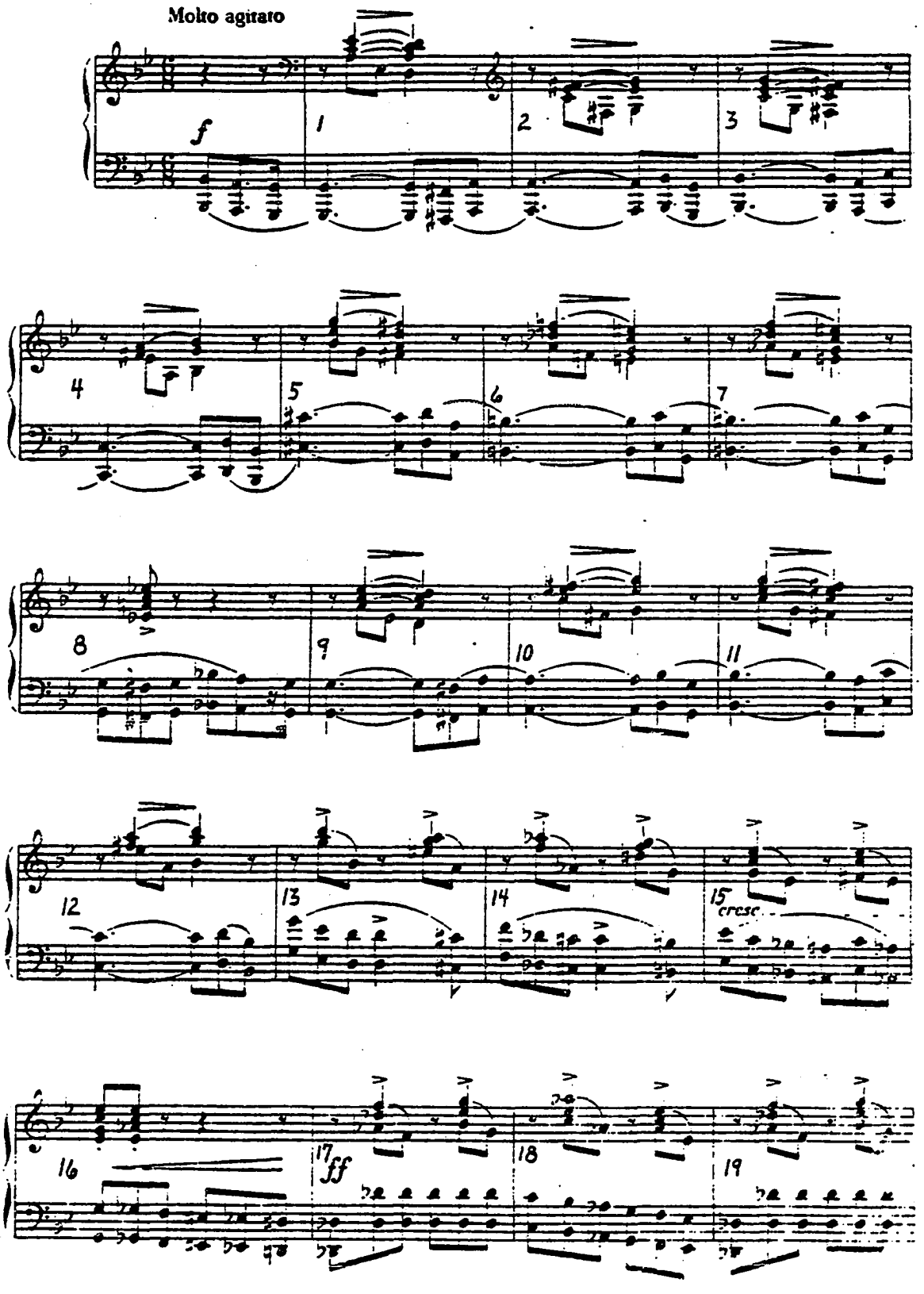
Skeleton Melodic Outline, Blocked Harmonic Progression and Rhythmic Outline

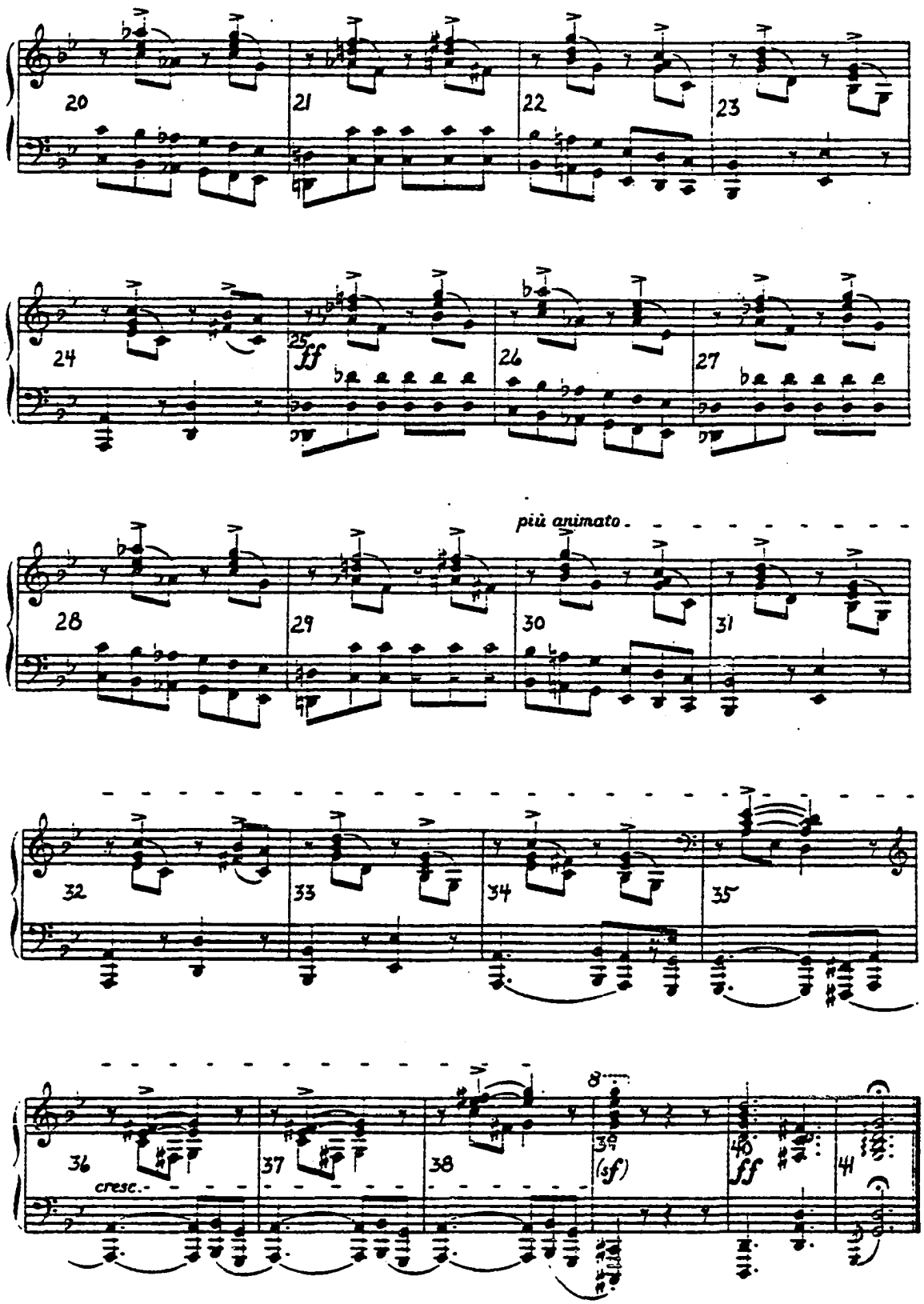


Complete Score



EXAMPLE 19




20
21
22
23
24
25
ff
26
27
più animato
28
29
30
31
32
33
34
35
36
cresc.
37
38
39
(sf)
40
ff
41

Advanced Level Compositions

Although advanced compositions present further complexities, the writer believes the same processes may be applied in the development of performance capacities at this level. As Werner,[1] Mursell,[2] Neuhaus,[3] among others have commented, the pattern of musical learning is the same for all levels of advancement. The basic difference is the degree of complexity.

The musical vocabulary inherent in advanced compositions increases the probability of demand for synthesis control by the student. Intensifications and diminutions of musical activity tend to be produced through settings with more complex textures. These complexities, also found in lesser advanced music, now may be combined or juxtaposed. Many advanced level compositions include the following: (1) incongruousness of the musical elements occurring in complex or widely-spaced notational settings; (2) frequent shift in figurations, mood, and articulation; (3) increase in the activity of secondary voices; (4) tonal and rhythmic nuances that require a high degree of subtlety; (5) diverse

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[1]Robert J. Werner, "The Contemporary Music Project: The Development of the Theory of Comprehensive Musicianship," Contemporary Music Project Conference on College Music Curricula (Reston: CMP, 1970), p. 3.

[2]James L. Mursell, Developmental Teaching (New York: McGraw-Hill Book Co., 1949), pp. 30-31.

[3]Heinrich Neuhaus, The Art of Piano Playing (New York: Praeger Publishers, 1973), pp. 8-9.

articulation and figuration patterns between the hands; and (6) an increase in notational density and complexity which give rise to unwanted accents due to quick changes of figuration, direction, and/or incongruousness of the elements.

As in previous levels of advancement, further development of performance capacities and musical understanding depends on an ordered sequence directly related to individual musicality and level of advancement. Each stage of development must be thoroughly understood prior to advancement.[1] If progress stops or lessens, an in-depth analysis should be made of the learner's present level of understanding and synthesis control as well as the prescribed sequence of instructional procedures and/or literature selection.

In an analysis of the student's performance, the teacher will seek to find answers to the following questions: (1) Is the incongruousness of the elements disrupting aural awareness, physical coordination and/or unerring rhythm? (2) Is the feeling of body rhythm corroborating with the metric structure in compositions which display indications that the two should coincide? (3) Is musical understanding confused because of the degree of complexities inherent in the selected compositions? (4) Is it possible for the learner

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[1]John F. Carré, The Psychology of Piano Playing (Melville, N.Y.: Belwin Mills, 1957), pp. 16-18; see also Celia Mae Bryant, "Teaching Requires Foresight," Clavier, II (May-June, 1963), p. 41.

to execute the inside details within the framework of the composition as a "whole" without disruption of the synthesis control?

As students attempt to learn music from more advanced levels, new problems or difficulties are an accepted normality. The following questions remain: (1) Can these problems and difficulties be solved within a reasonable number of experiences with a composition? (2) Considering the respective circumstances in a given context or situation, will performance development and musical growth be allowed to continue?

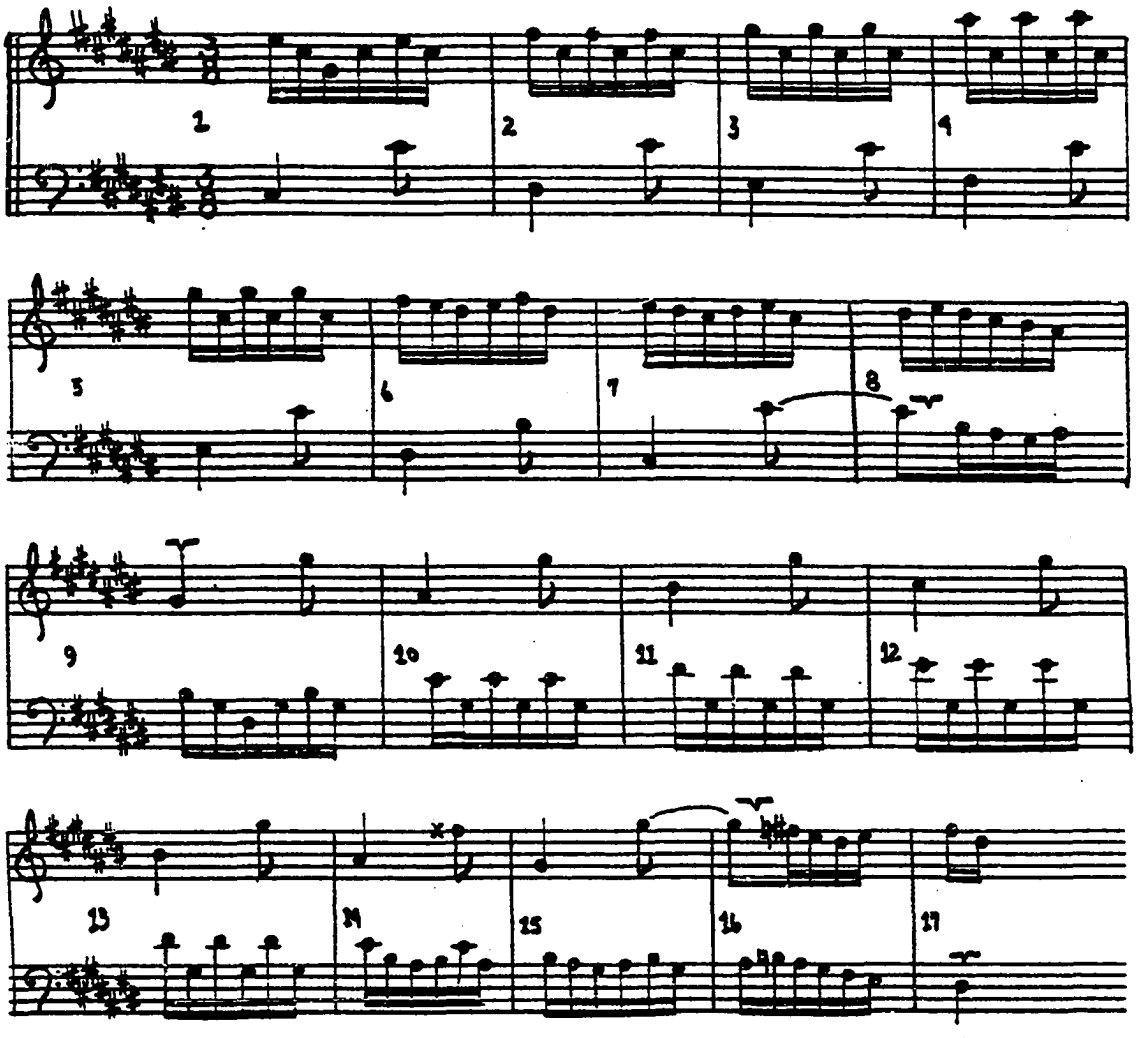
The sequence of learning experiences with advanced level music should continually build upon what has been achieved with lesser advanced music. Although musical endeavors with advanced level music involve more complexities and a higher degree of detail, these experiences should help elucidate insights and understandings previously accrued. Properly sequenced learning experiences should provide the learner the capacity to make keener perceptions and form more highly organized patterns of understanding, thereby, furnishing the learner with the ability to continue the development of musical understanding and synthesis control.

Many advanced level compositions reveal musical settings directly correlated to previous experiences with less advanced music. The musical setting of J. S. Bach's "Praeludium III," from Das wohltemperierte Clavier, Volume I,

lesson 20, may be compared to the "Spinners," from Fanfare by William Gillock, lesson 11. The difference in the two compositions is the degree of complexity. Although both works display a congruency among the musical elements, the "Praeludium" exhibits a more complex setting, including: (1) transference between the hands of the melodic-harmonic wedge pattern that is found in the moving voice; (2) harmonic structure involving much tonal instability; (3) longer phrase patterns and elisions; and (4) interruption of the rhythmic, melodic-harmonic wedge pattern by a triadic hocket-type pattern.

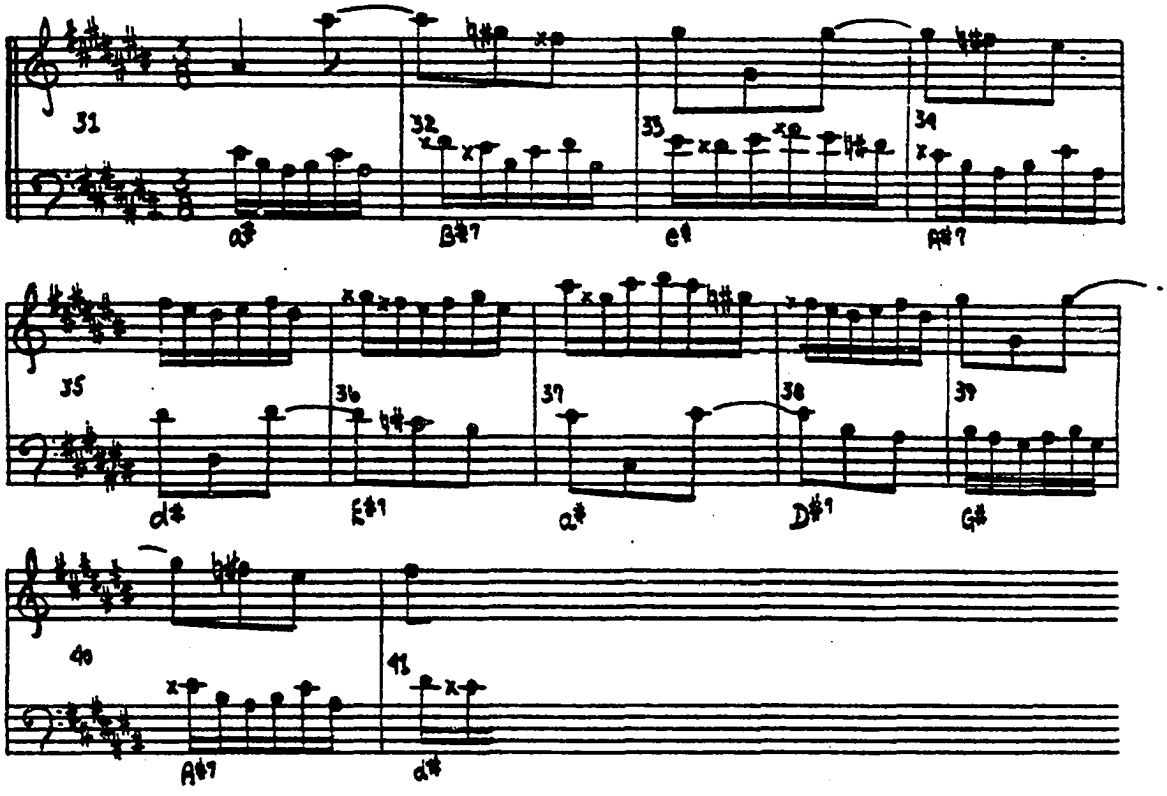
Lesson 20. "Praeludium III," from Das wohltemperierte Clavier, Vol. I, Bach.

Transference Between the Hands of the Melodic-Harmonic Wedge Pattern



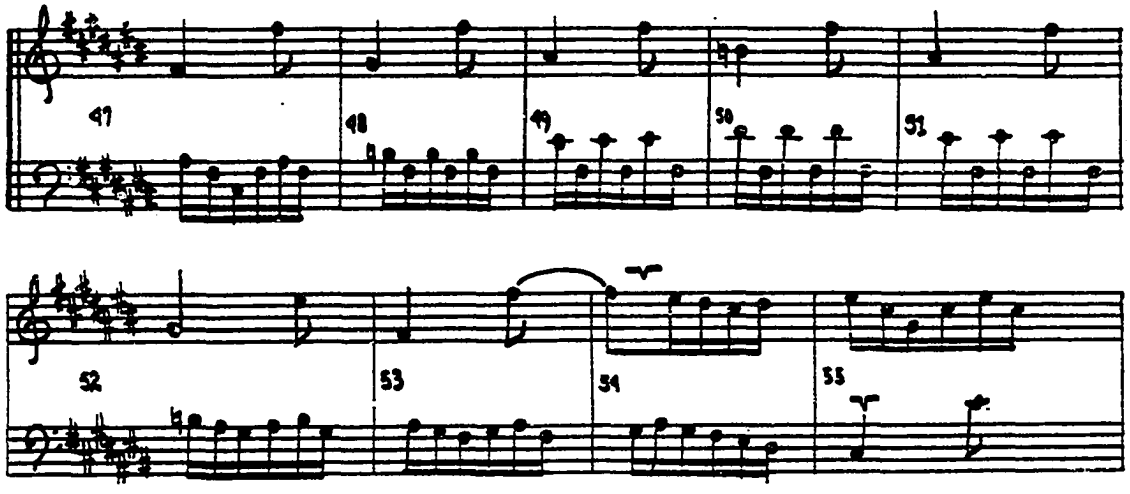
Lesson 20 continued.

Harmonic Structure Involving Much Tonal Instability



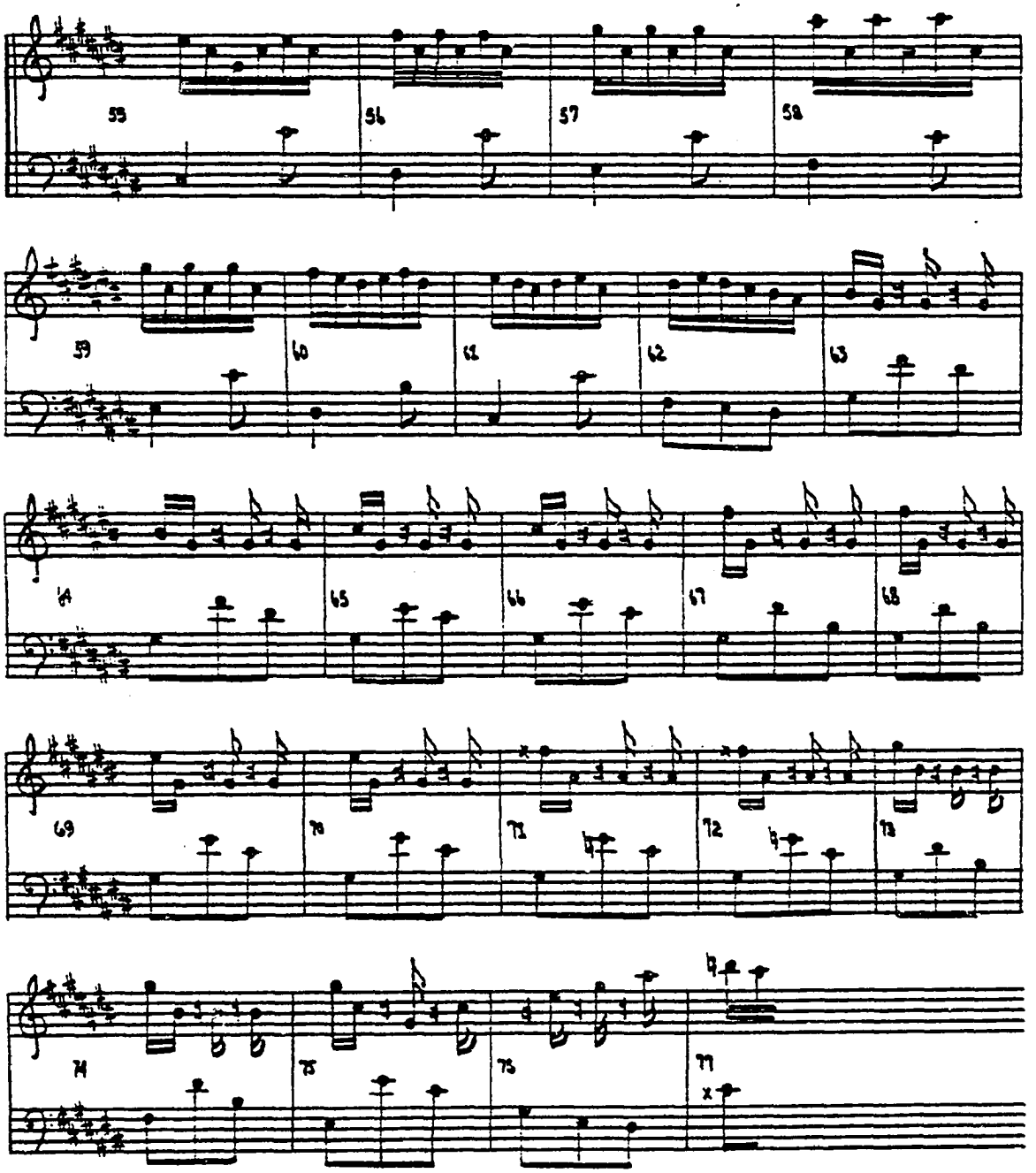
Lesson 20 continued.

Long Phrase Patterns and an Elision

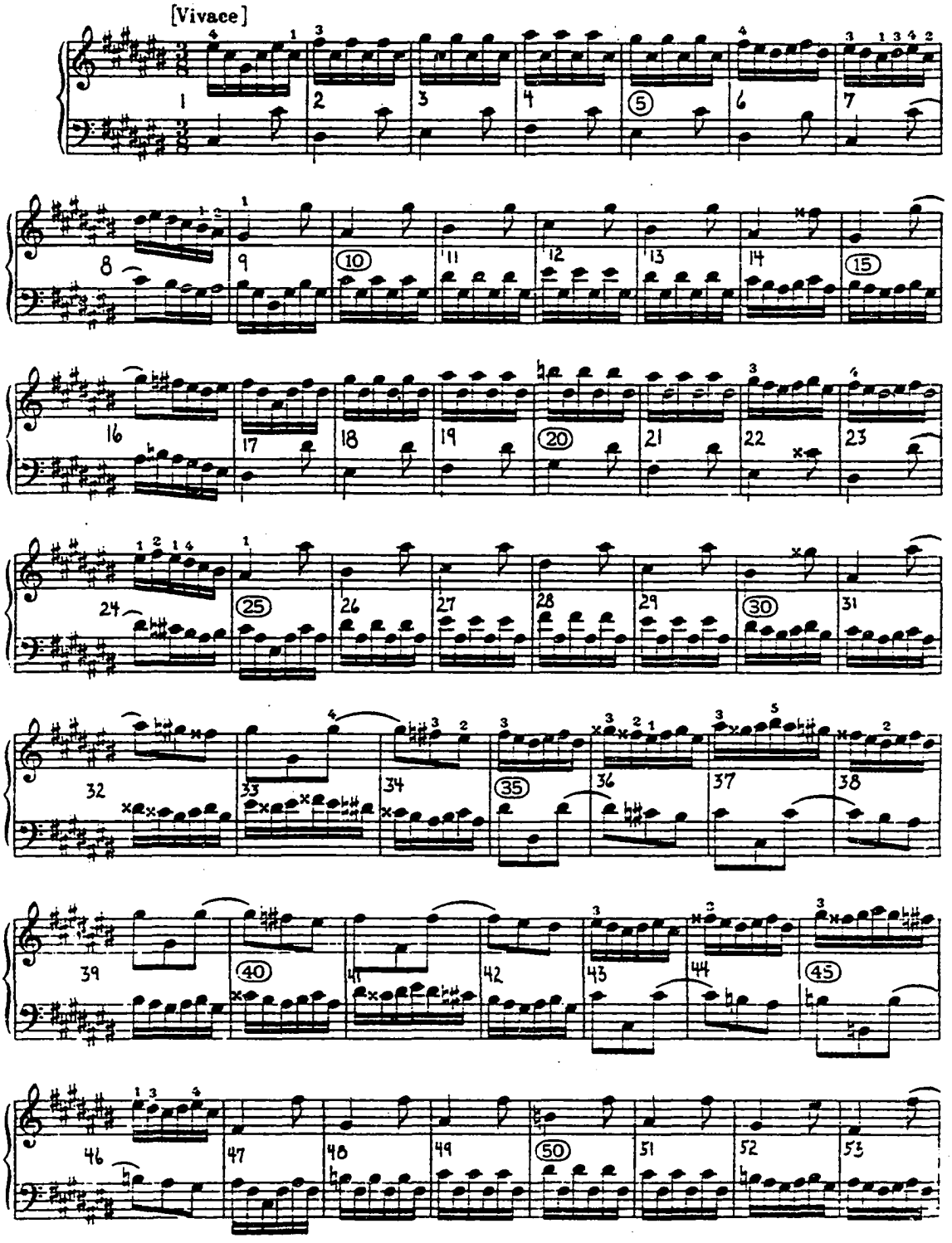


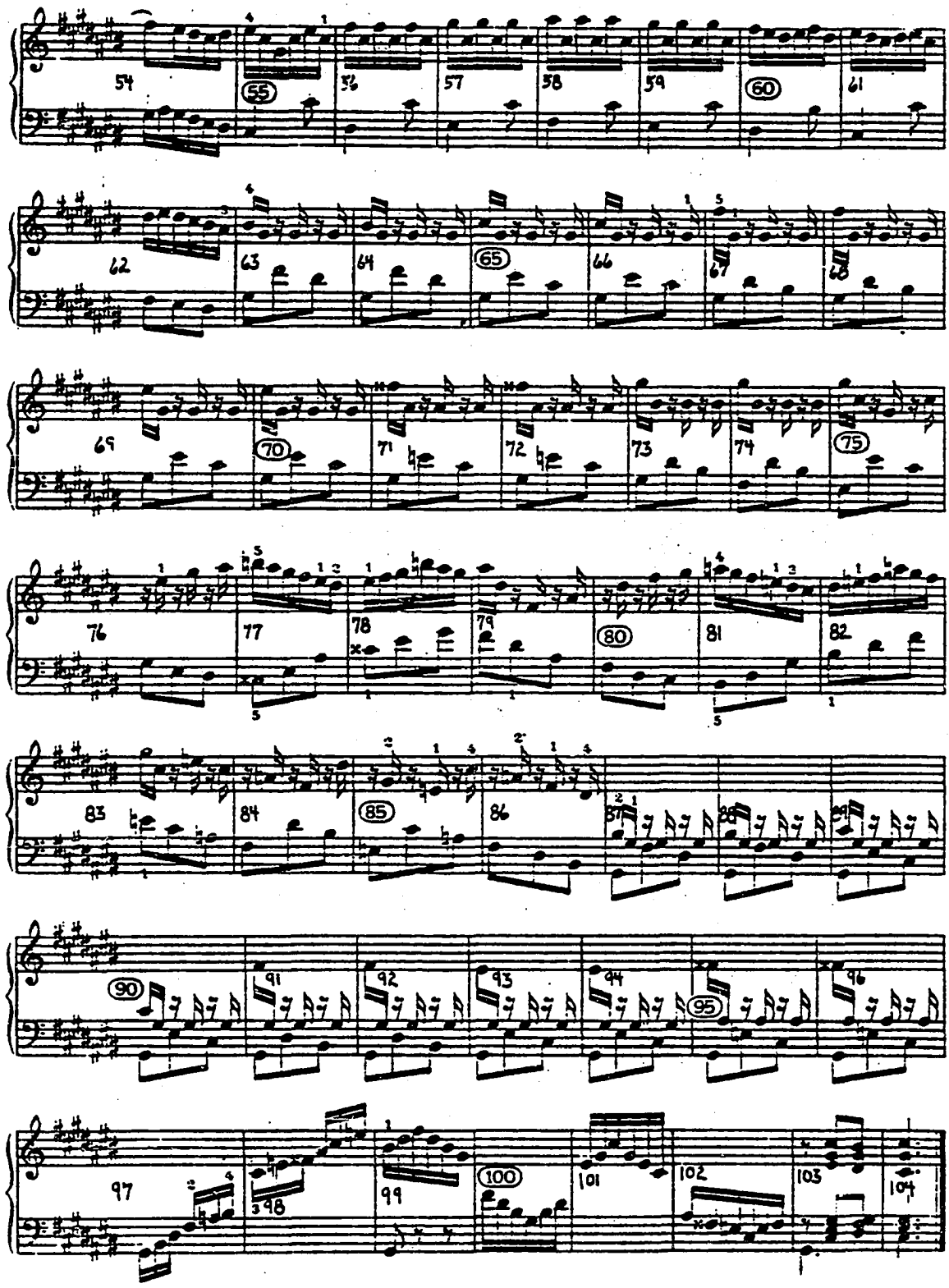
Lesson 20 continued.

Interruption of the Rhythmic, Melodic-Harmonic Wedge Pattern by a Triadic Hocket-Type Pattern



PRELUDE III





Chopin's Nocturne in C Minor, Op. 48, No. 1, lesson 21, displays an incongruousness among the elements as was shown in Rowley's Prelude No. II, lesson 10, and Chopin's Prelude in G Minor, Op. 28, No. 22, example 19. In the Nocturne in C Minor, the melodic rhythm is not always congruent with the harmonic and metric rhythm. Furthermore, the melodic line is embellished with figurations. The sequence of instructional procedures for learning the Nocturne in C Minor would include those specified for Rowley's Prelude No. II plus those outlined for the Chopin Preludes, lessons 15-19. Since further experiences should elucidate the insights and understandings previously accrued, the Nocturne in C Minor provides the learner with the opportunity to apply past learning structures to new situations and contexts. Learning structures should foster the evolution of understanding, clarification, and explication of musical experiences which provide favorable conditions for musical growth and the development of individual performance capacities. In emphasizing the importance of future applicability, Bruner states that learning structures "should not only take us somewhere; [they] should allow us later to go further more easily."[1]

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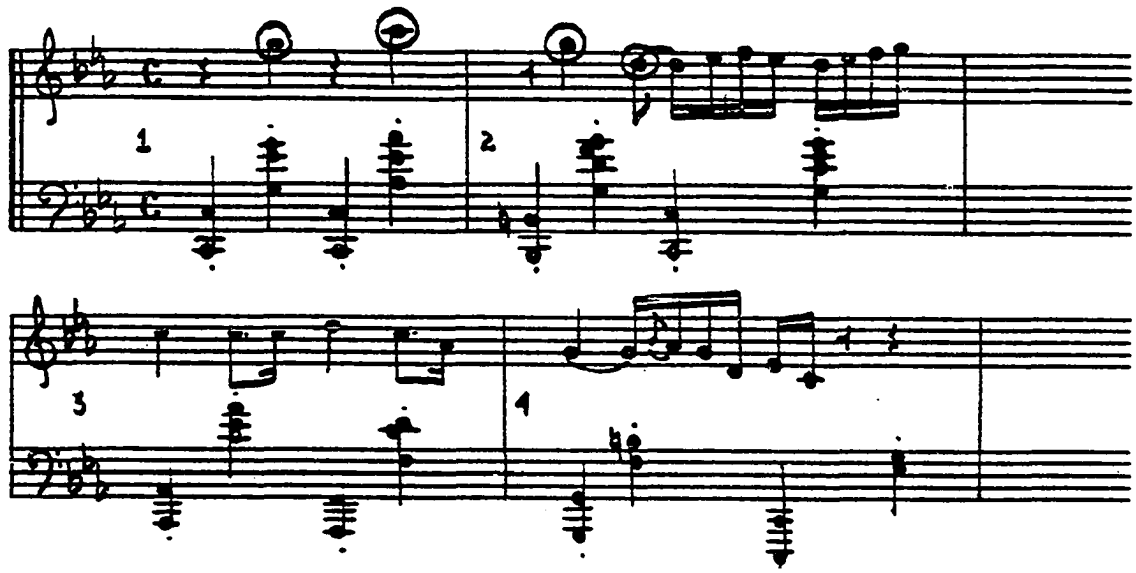
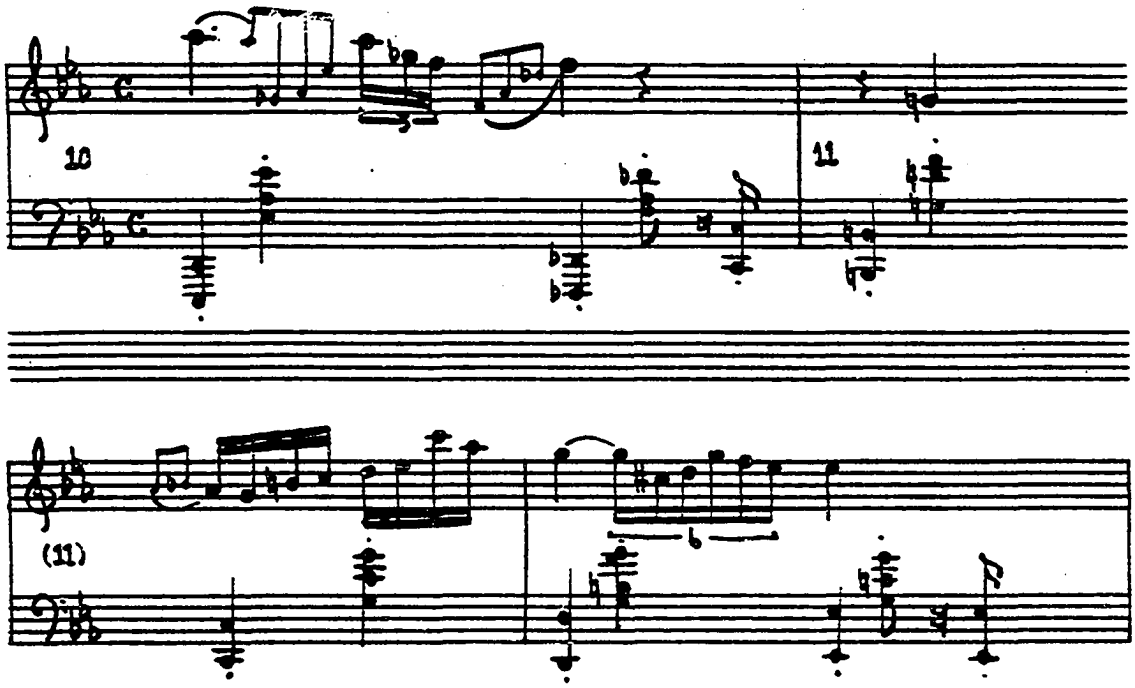
[1]Jerome S. Bruner, The Process of Education, Vintage Books (New York: Alfred A. Knopf, Inc., and Random House, 1963), p. 17.

Lesson 21. "Nocturne in C Minor," Op. 48, No. 1, from Nocturnes, Chopin.

Melodic Rhythm Incongruent with Harmonic and Metric Rhythm



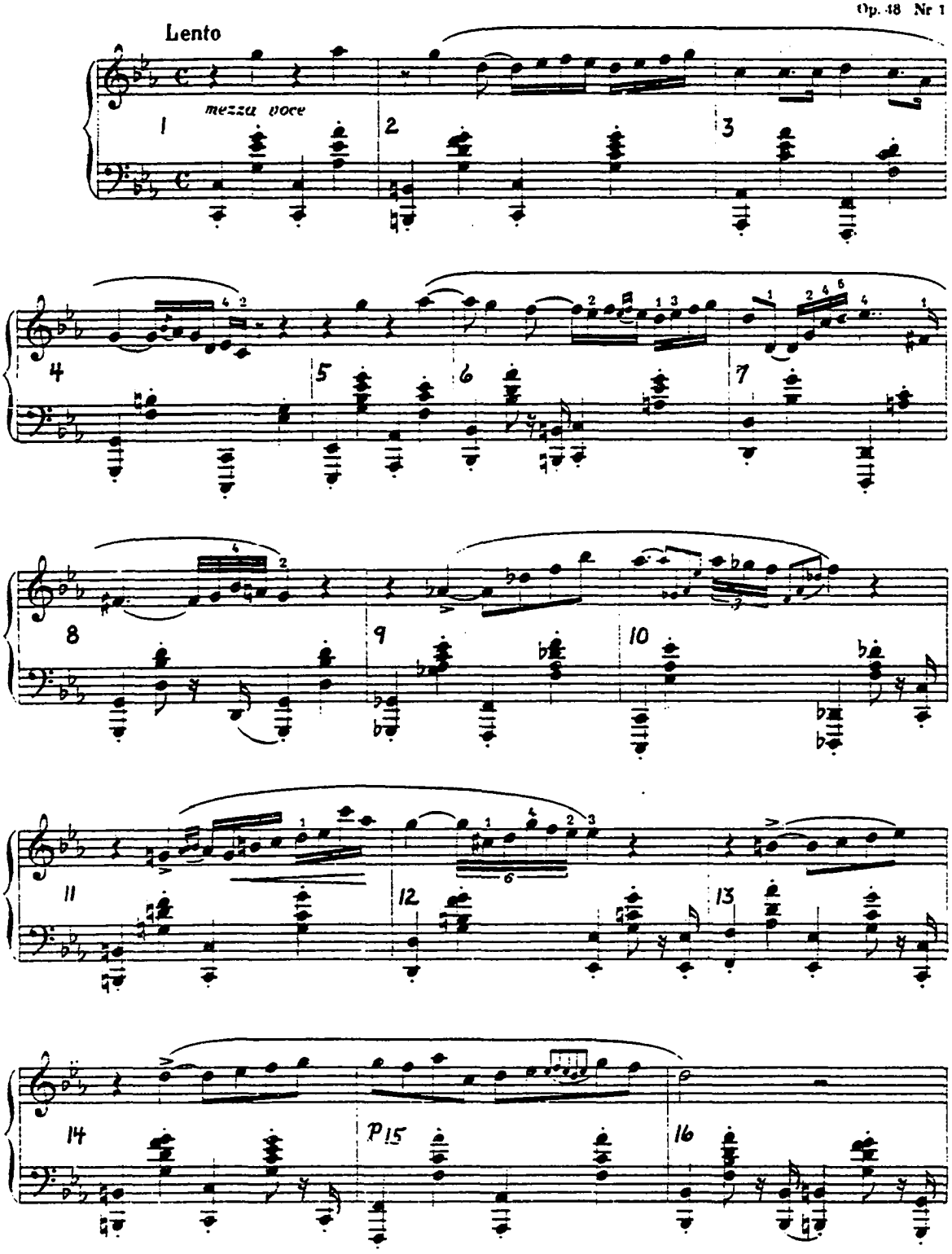
Melodic Line Embellished with Figuration



EXAMPLE 21

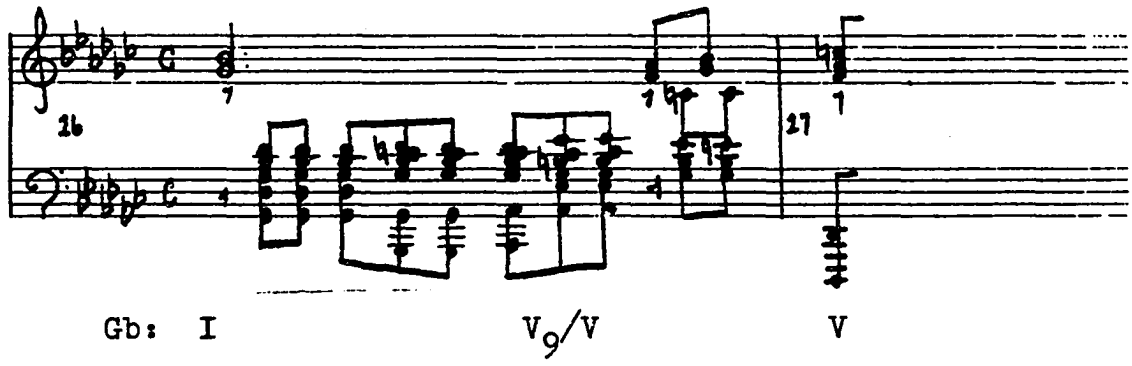
DEUX NOCTURNES

Op. 48 Nr 1

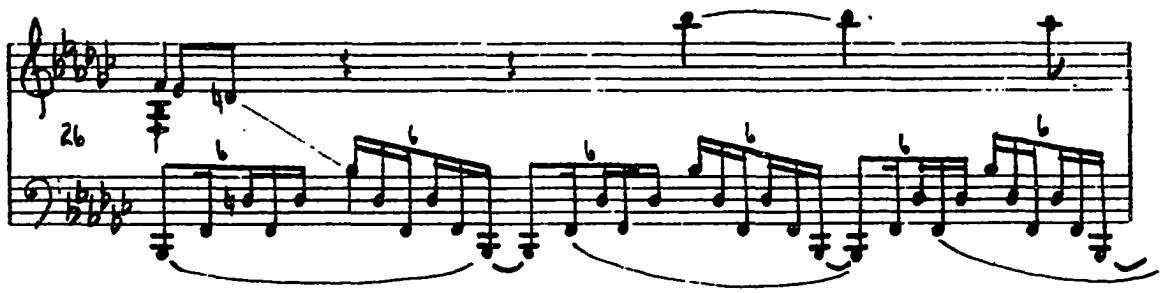


In Rachmaninoff's Etude Tableau, Op. 39, No. 5, lesson 22, there are many complexities which may lead to difficulty in musical understanding and synthesis control. Incongruousness among the elements occurs in a number of places, including:

Measure 16. Harmonic rhythm incongruent with the melodic-metric rhythm.

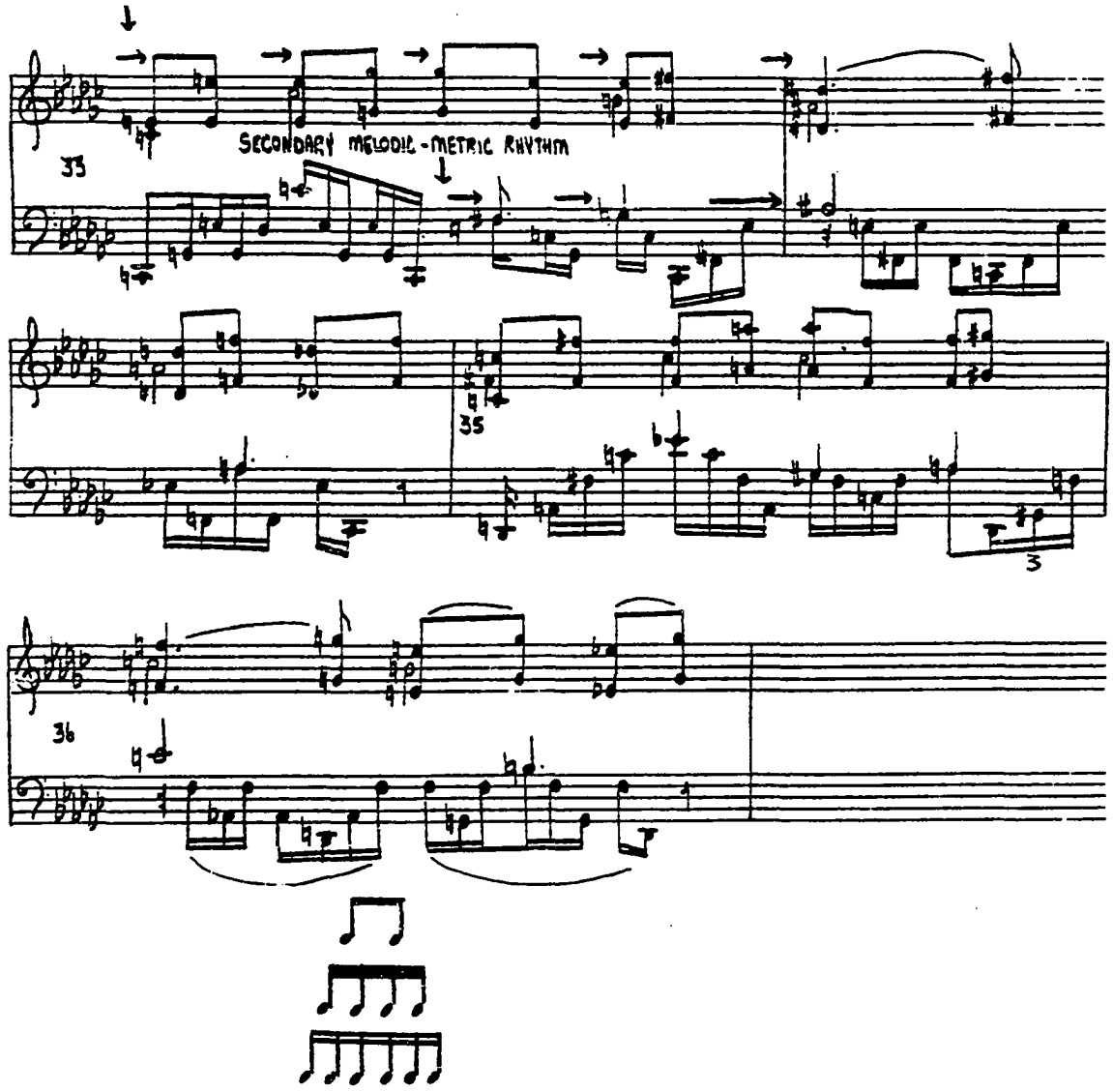


Measure 26. Melodic rhythm incongruent with the metric rhythm.



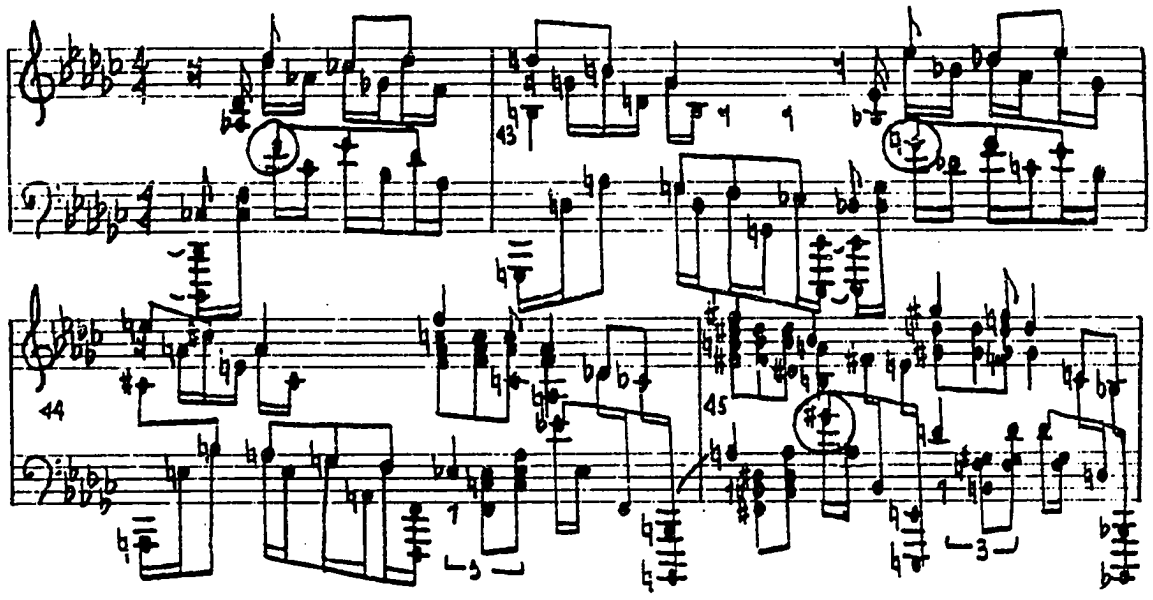
Measures 33-36. Primary melodic-metric rhythm incongruent with the secondary melodic-metric rhythm. In addition, measure 36 includes an example of an hierarchy of metric organization.[1]

Primary Melodic-Metric Rhythm

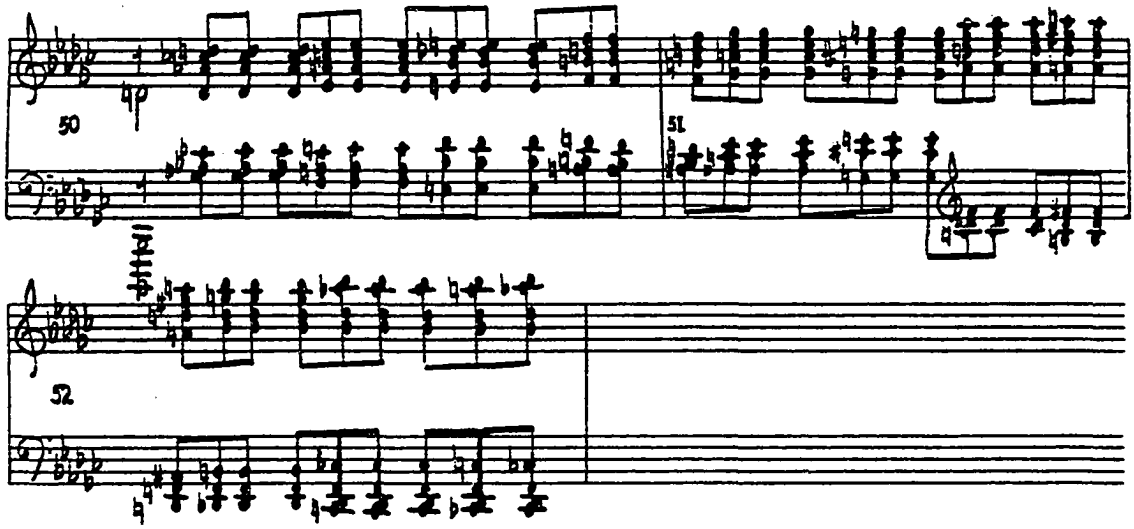


[1]Grosvenor Cooper and Leonard B. Meyer, The Rhythmic Structure of Music (Chicago: The University of Chicago Press, 1960), pp. 4-5.

Measures 43-46. Rhythmic and tonal shift of whole-tone scale may produce incongruousness. The shift in placement in the measure highlights the move of the whole-tone pattern up one-half step.



Measures 50-52. The harmonic and melodic rhythm are incongruent with the metric rhythm.



In measures 50-52, the harmonic and melodic rhythm may dominate over the metric rhythm in these measures as it appears the composer purposely has destroyed the symmetry of the barline pulse for the three measures. This may be interpreted as a means of increasing the musical intensity to announce the return of the opening section of the work, which now appears in a more dramatic, widely-spaced notational setting.

The metric structure of the composition must be heard

and felt by the learner before any melodic or harmonic syncopation, and/or dynamic-stress accents should be considered. The writer advocates that the metric structure and the basic rhythm of the body should corroborate throughout the composition, except in measures 50-52 as previously discussed.

This composition is an exemplar of advanced level music which contains musical complexities in an intricate notational setting.[1] These complexities include: (1) hierarchic metric organizations displaying a variety of divided and compounded metric units; (2) incongruousness among the elements; (3) measures lengthened from four beats to six beats; and (4) secondary voices occurring incongruently with the metric rhythm. If a learner has integrated the successive structures of the outlined instructional sequence of this study, development of musical comprehension and performance capacity will be allowed to continue during the experience with compositions of this level of difficulty. Learners may have integrated the successive structures into subsequent ones in an individual manner as each student's accumulation of experiences and understanding differs.[2]

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[1]To facilitate comprehension of the harmonic analysis in example 22, chord symbols have been placed on the score of the first twelve measures, and non-harmonic tones and pedal tones have been circled.

[2]Herbert Ginsberg and Sylvia Opper, Piaget's Theory of Intellectual Development (Englewood Cliffs: Prentice-Hall, Inc., 1969), p. 225.

Therefore, each step or combined steps of the instructional sequence may be needed for the learning of advanced literature. Each learner's musical understanding and controls within the synthesis need to be considered on an individual basis.

Practice procedures for developing performance capacity and musical understanding for Rachmaninoff's Etude Tableau, Op. 39, No. 5, involve a compendium of the instructional sequence outlined in the exemplary lessons of this study. For the average learner, practice procedures are suggested as follows:

Lesson 22. Etude-Tableaux, Op. 39, No. 5, Rachmaninoff.

Exaggeration of Melodic-Rhythmic Groupings

Hierarchic Groupings:

Section I, Measures 1-12

Rhythmic-Melodic

1. Pulse-unit = ♩ note
2. Measure groupings = 𝅝 note
3. Subphrase groupings = two-measure learning unit
4. Phrase groupings = four measures

   Phrase I. Measures 1-4

   Phrase II. Measures 5-8

   Phrase III. Measures 9-12

Suggested Phrase Focal Points: Section I

Phrase I. Measure 3, beat one; influenced by the first melodic dissonance and highest melodic pitch.

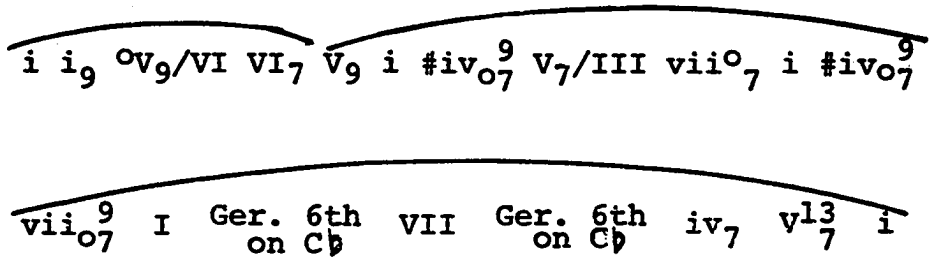
Phrase II. Measure 8, beat one; influenced by the harmonic-melodic destination (measure 8) created by the increase in harmonic-melodic rhythm in measure 7.

Phrase III. Measure 12, beat one, conclusionary to Section I, eliding into Section II; influenced by the melodic-harmonic sequence (mm. 9-10), lessening of the dynamic level, and thinner texture upon the return of the opening meausre of Section I (measure 12).

Lesson 22 continued.

Harmonic

Key of Eb minor

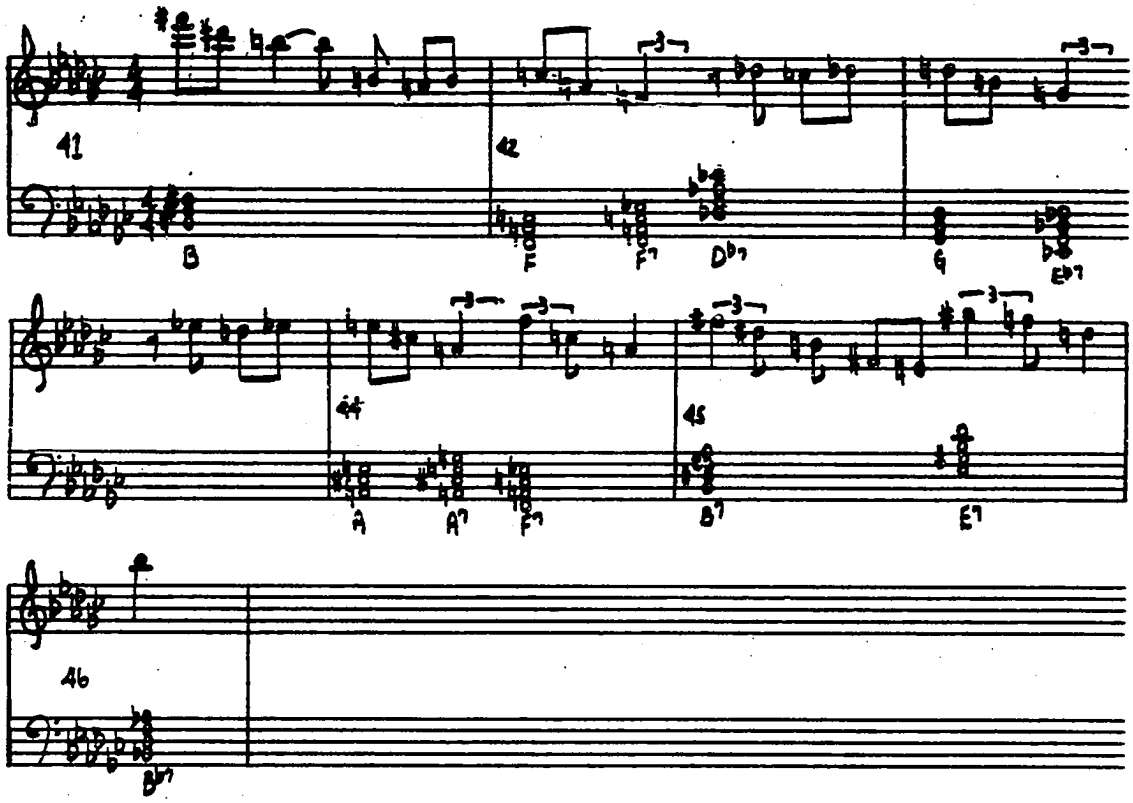


Formal

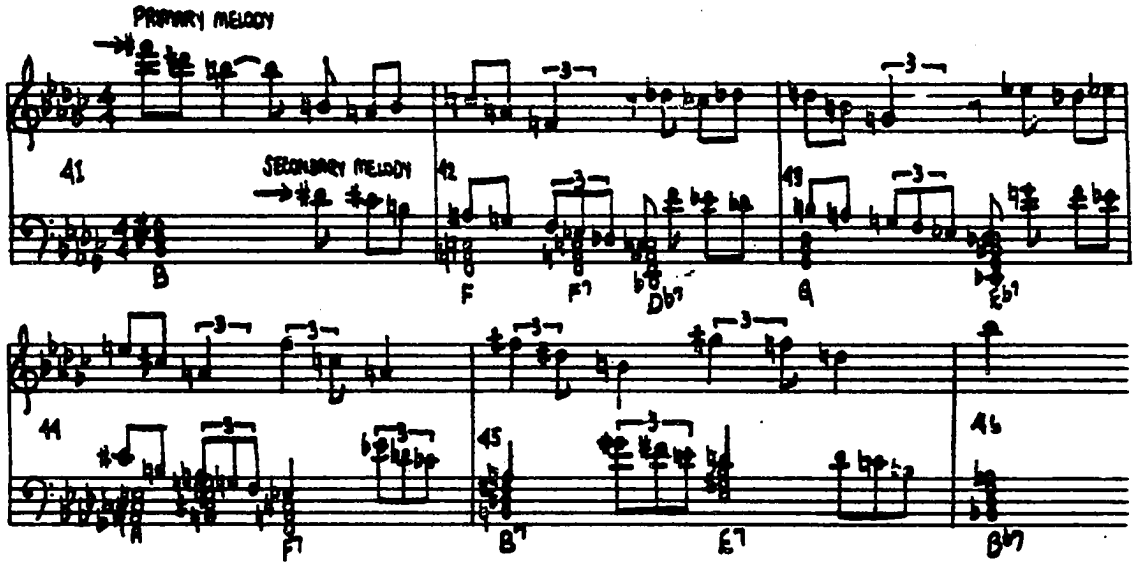
Four measures + four measures + four measures = Section I

Lesson 22 continued.

Primary Melodic Outline and Blocked Harmony

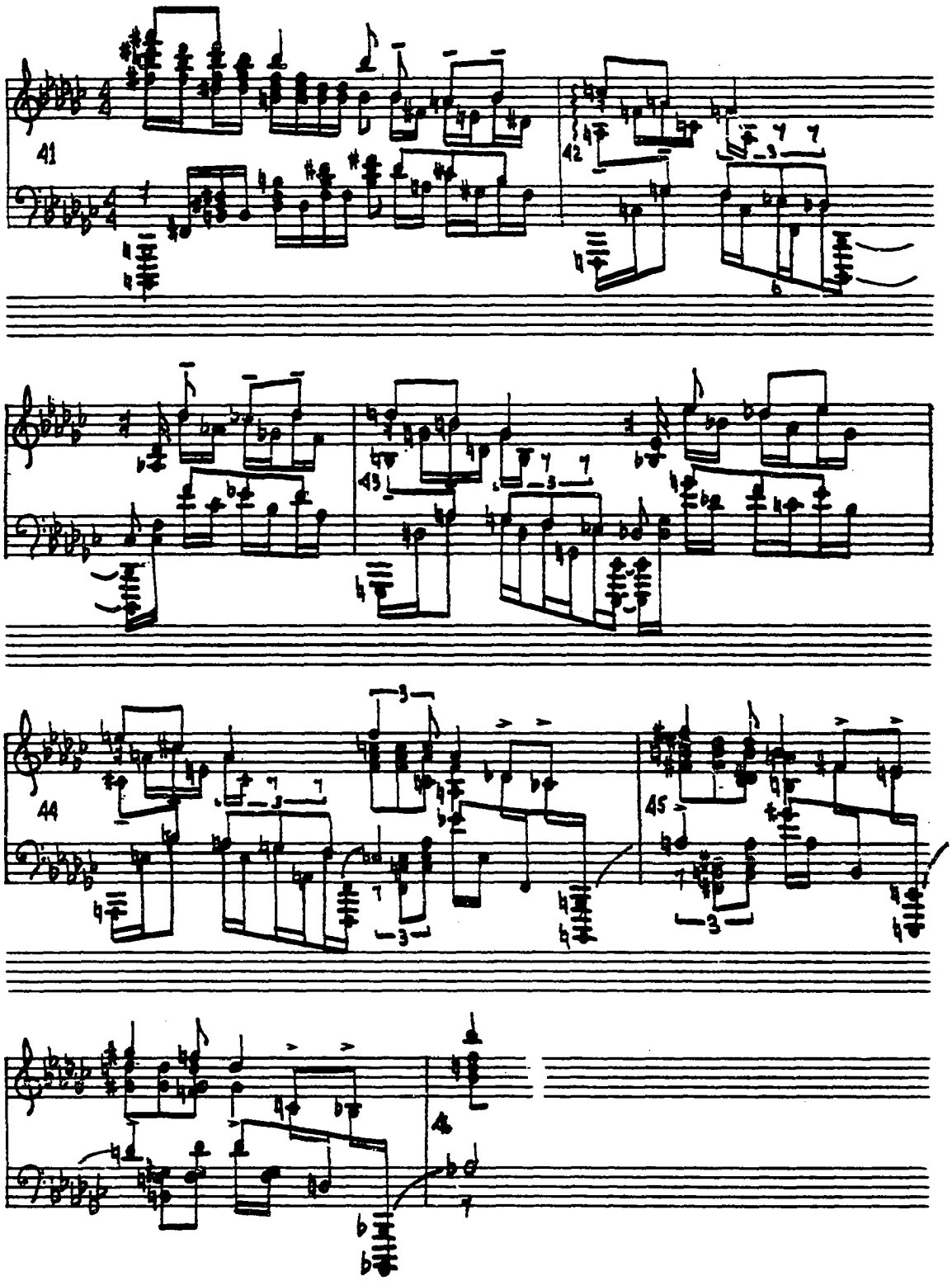


Primary and Secondary Melodic Outline and Blocked Harmony



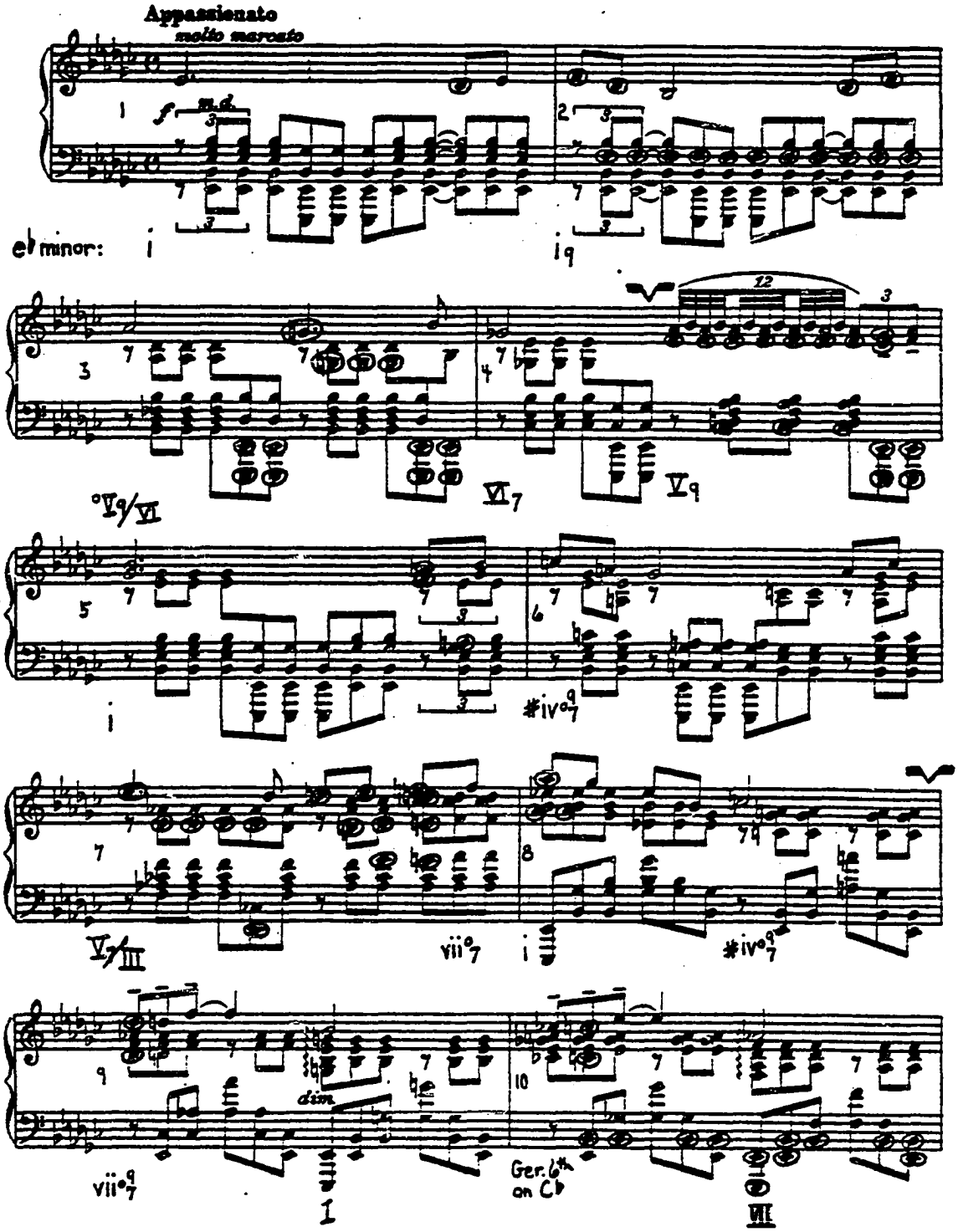
Lesson 22 continued.

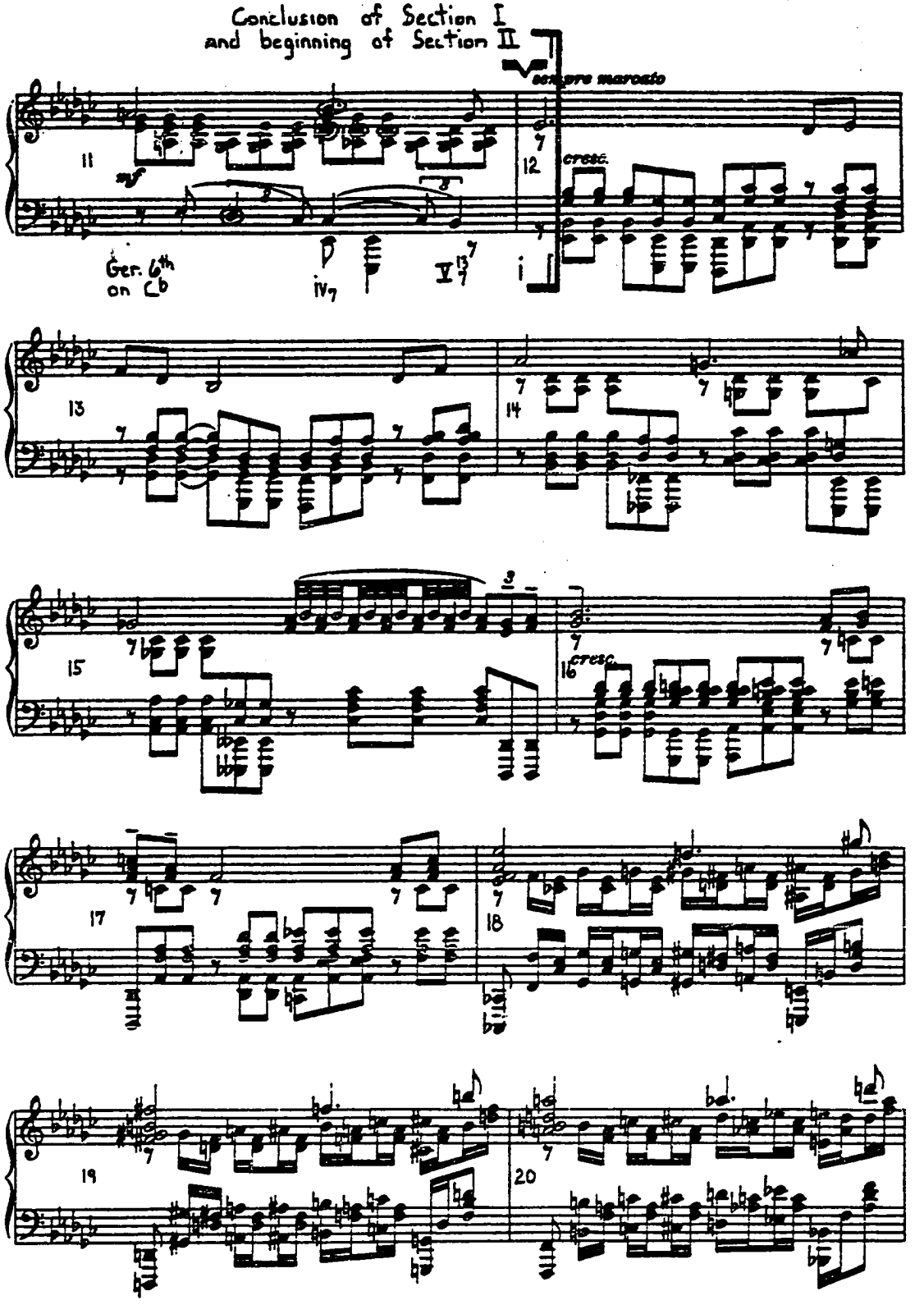
Complete Score

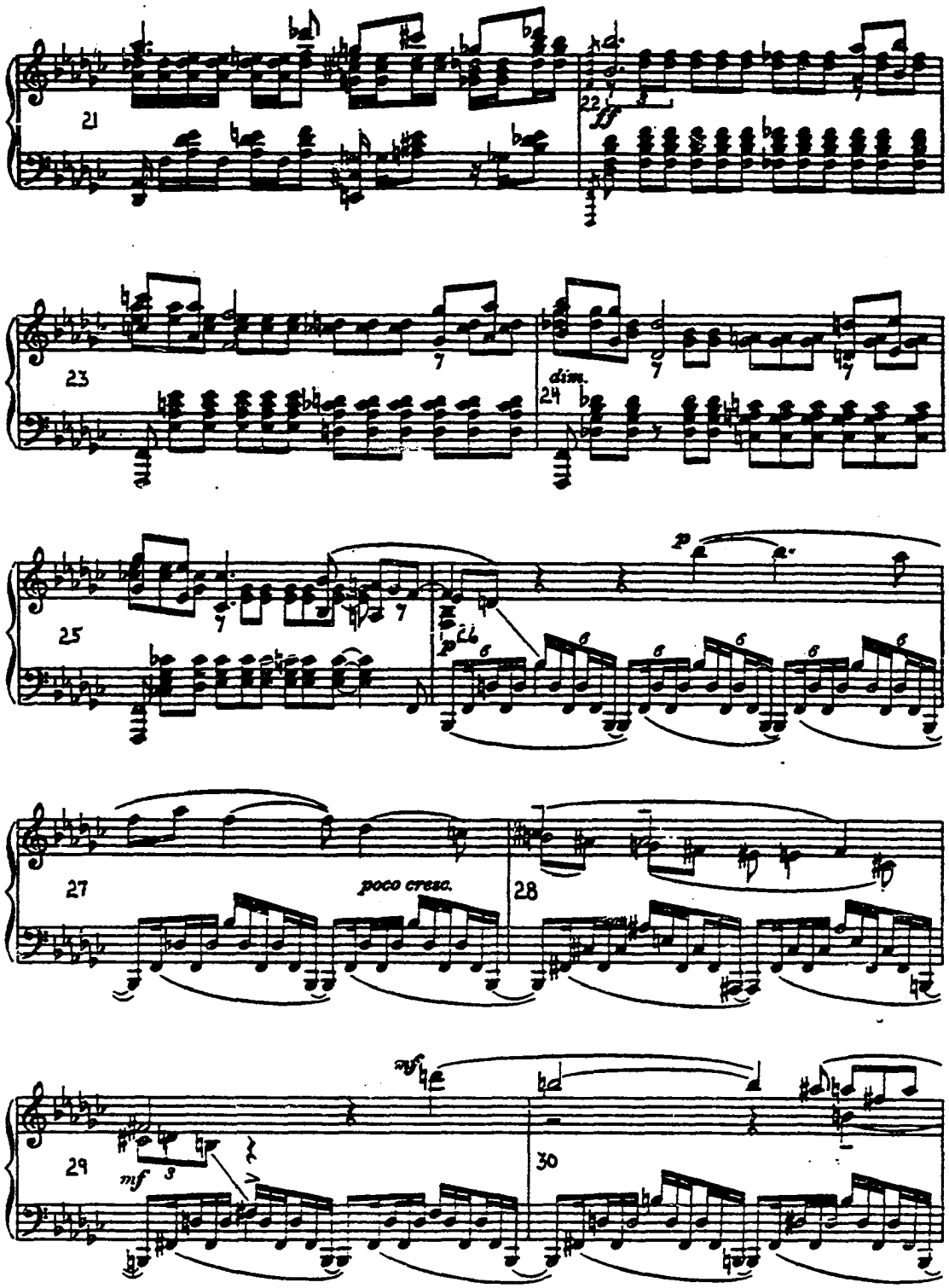


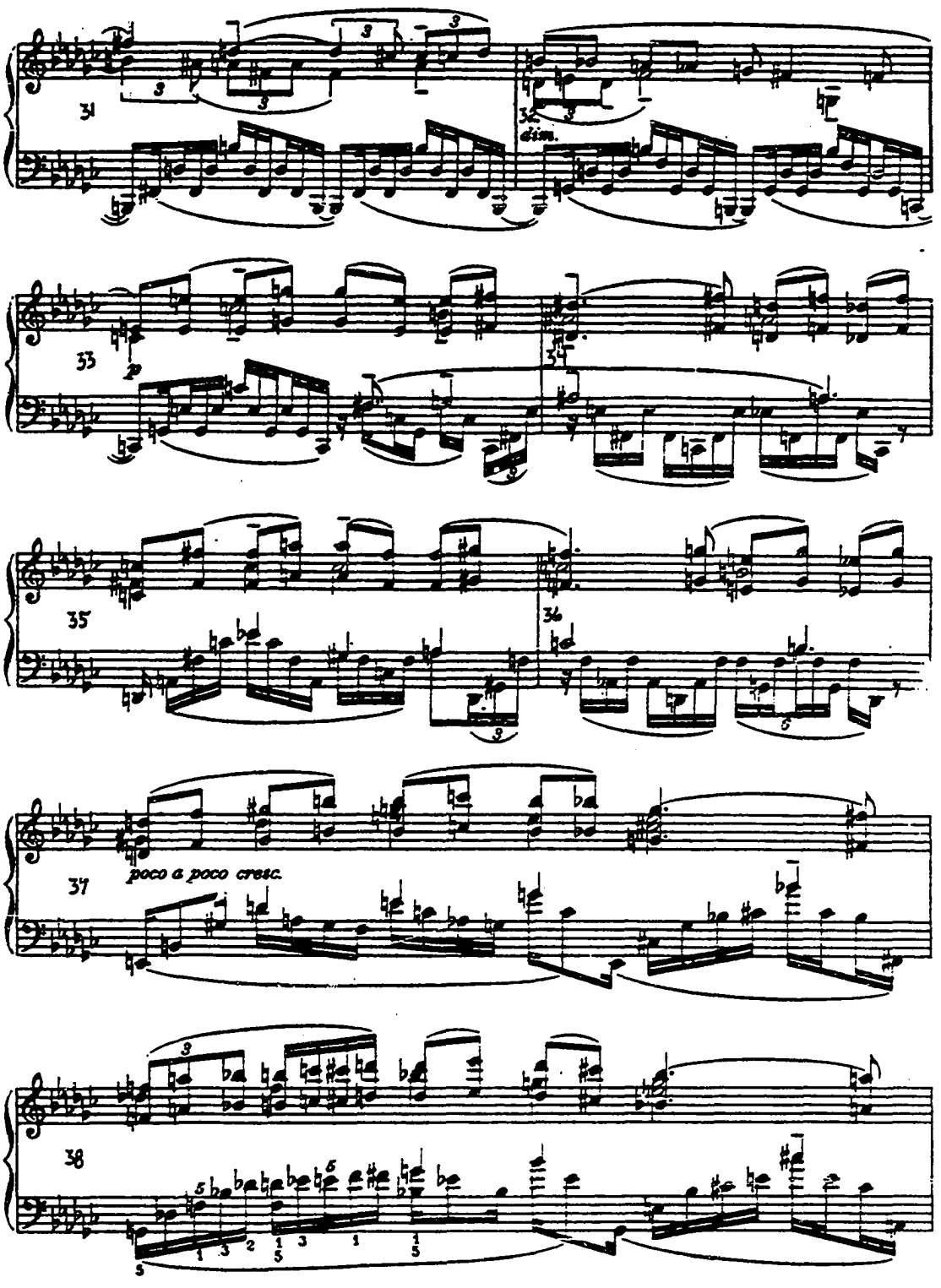
EXAMPLE 22

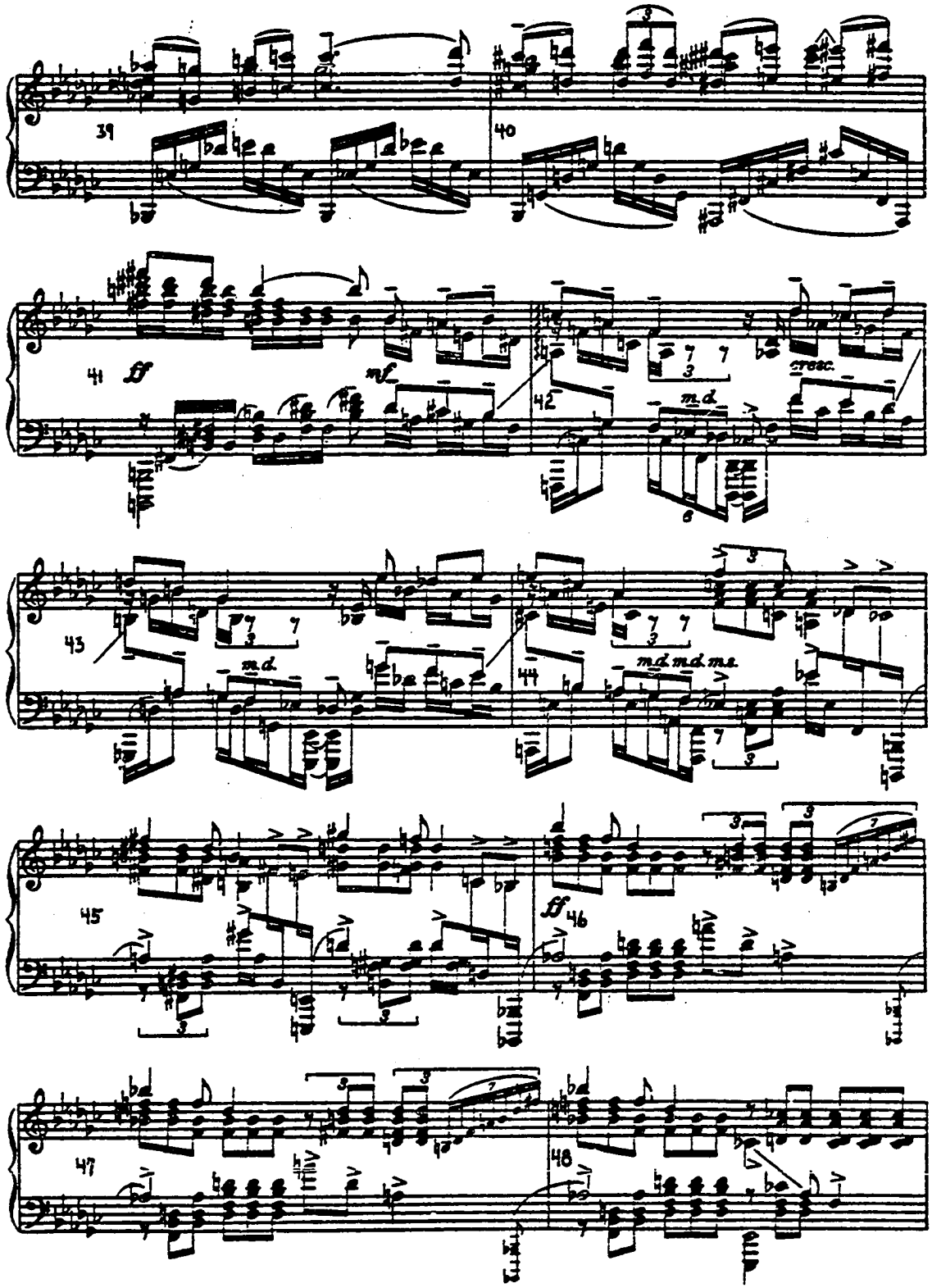
Op. 39 No. 5

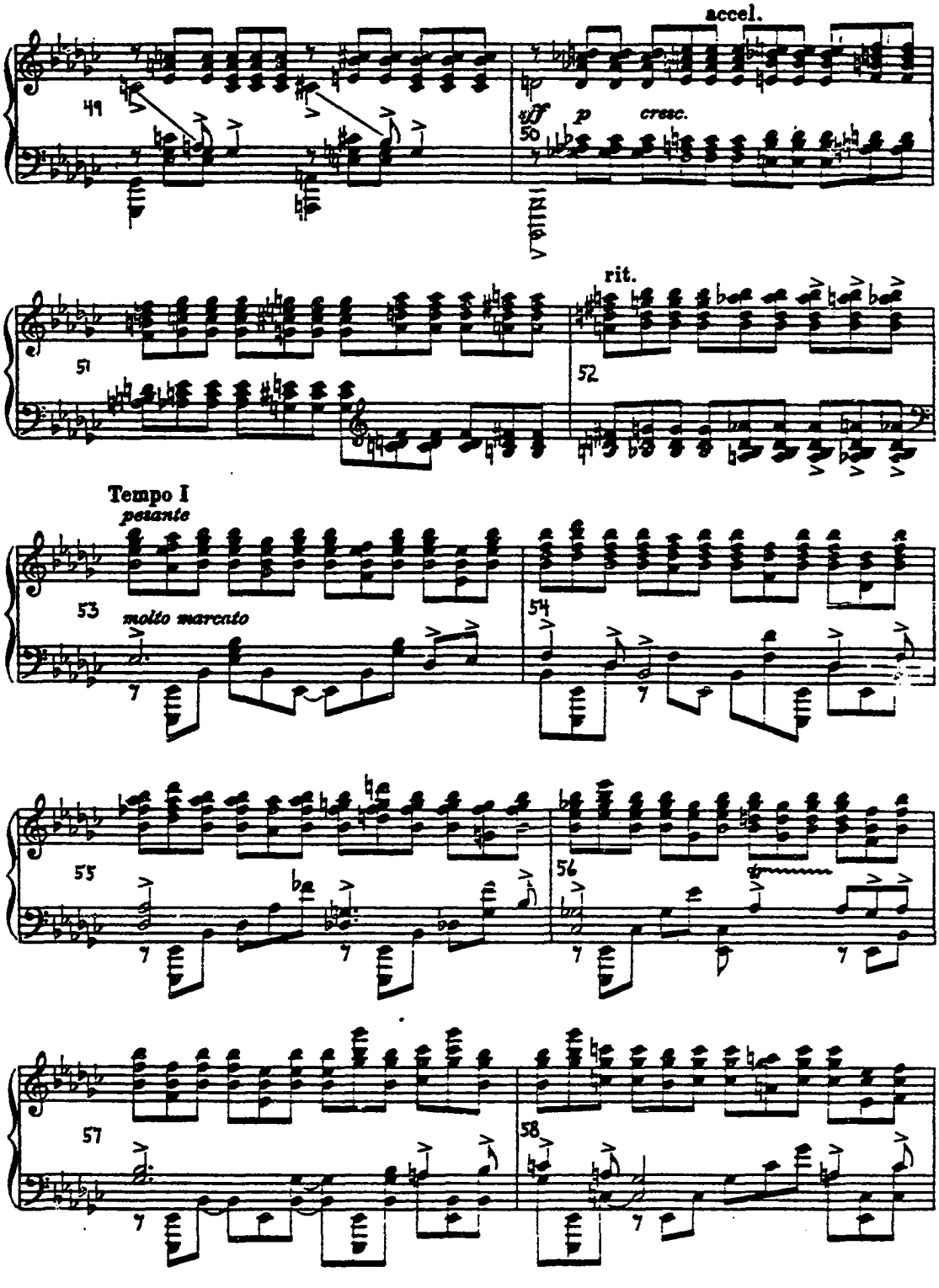


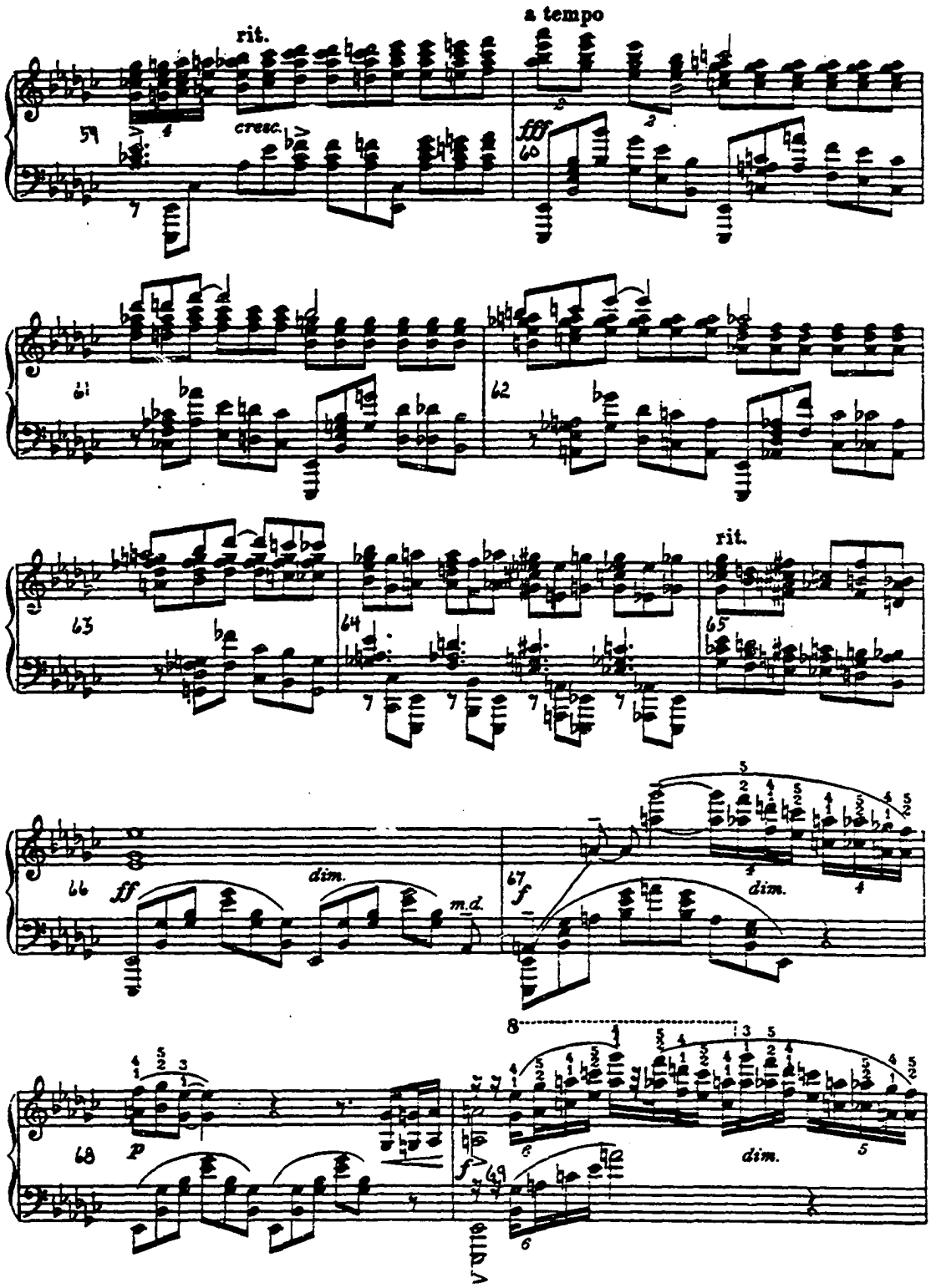

Conclusion of Section I
and beginning of Section II
sempre marcato
cresc.
Ger. 6th
on Cb
11
12
13
14
15
16
17
18
19
20

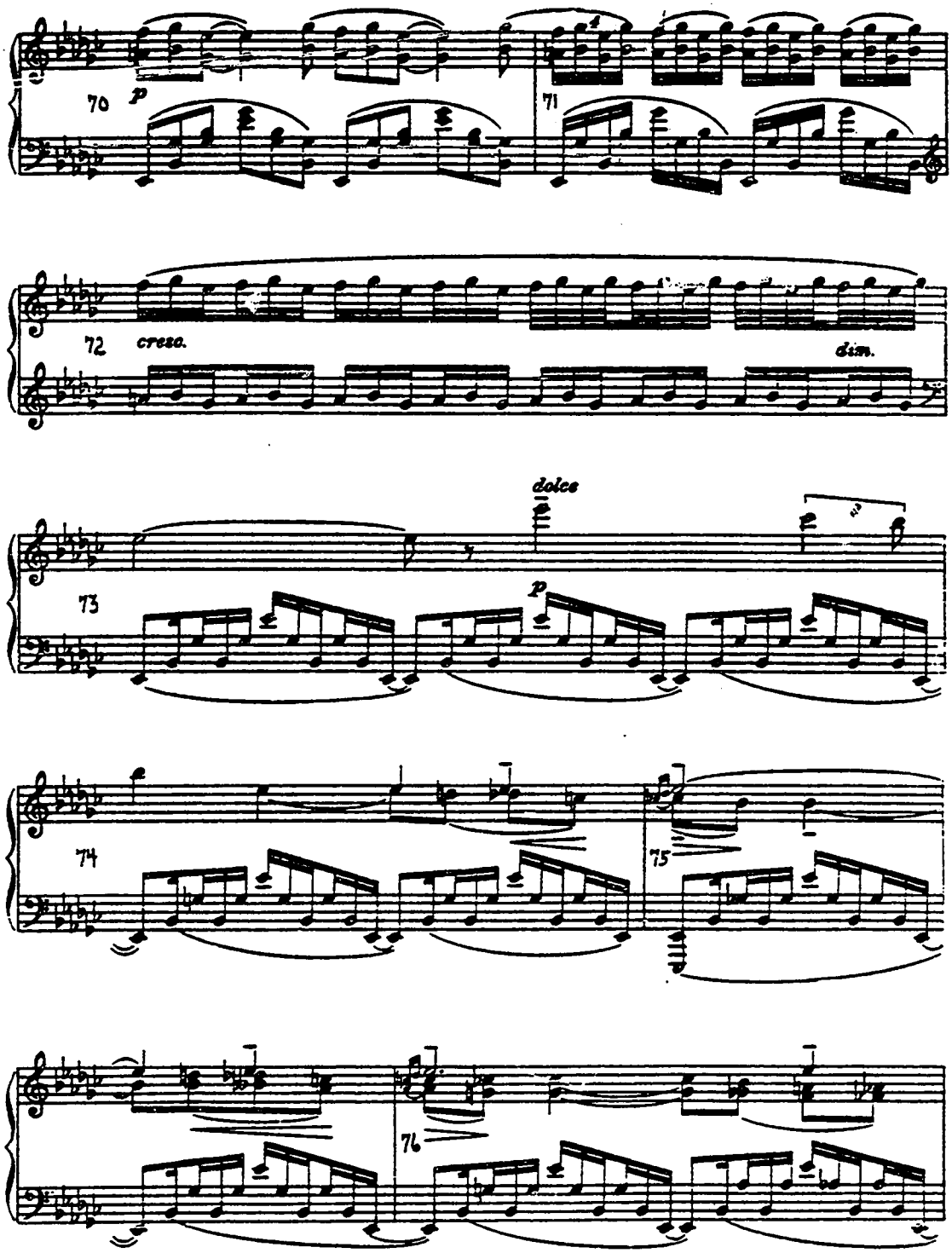

21
22
ff
23
dim.
24
25
p
27
poco cresc.
28
mf
29
mf
30

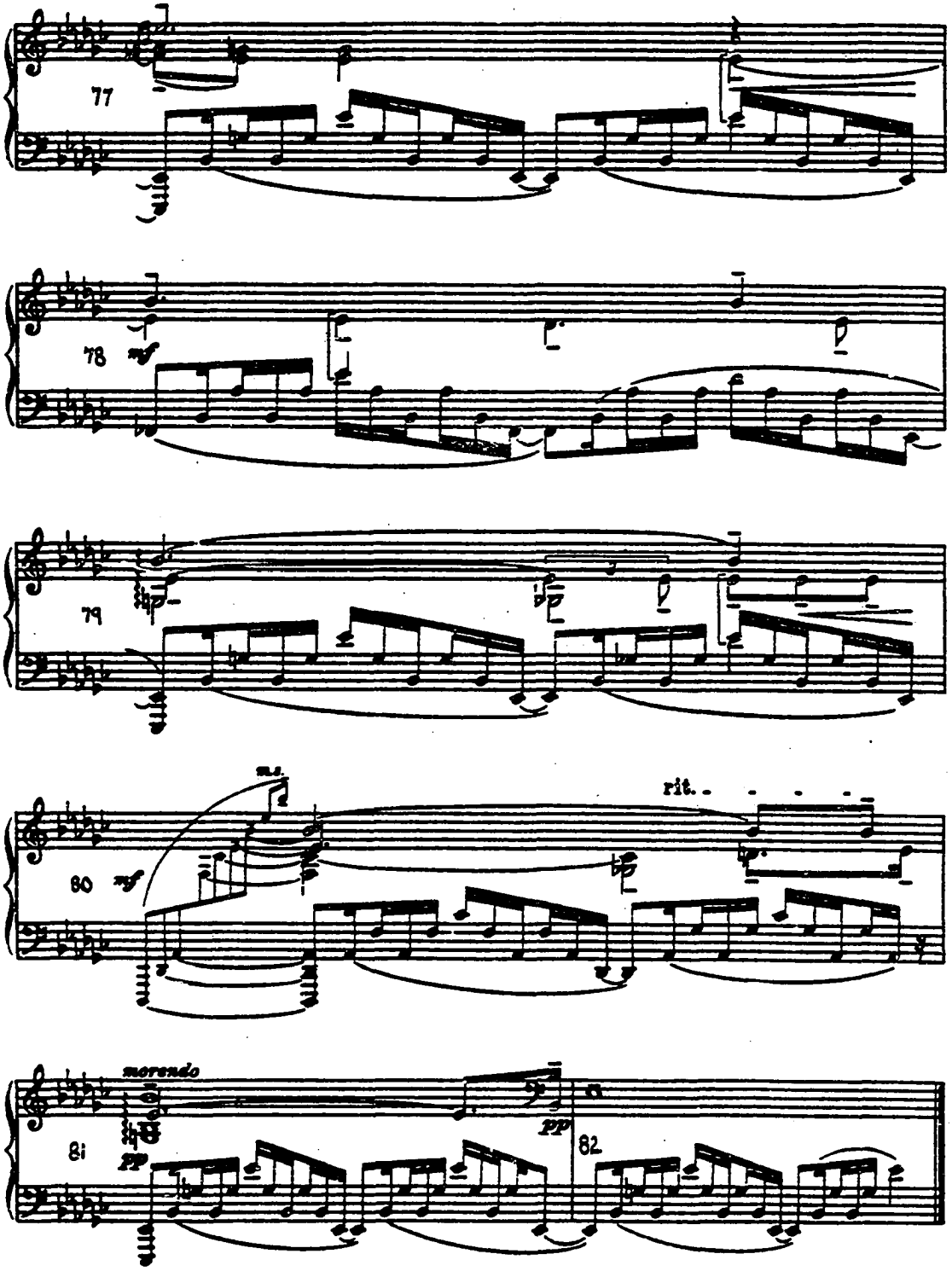

31
32
dim.
33
p
34
35
36
37
poco a poco cresc.
38


39
40
41
ff
mf
42
cresc.
m.d.
43
m.d.
44
m.d. m.d. m.s.
45
ff
46
47
48


accel.
49
50
ff
p
cresc.
rit.
51
52
Tempo I
pesante
53
molto marcato
54
55
56
57
58


rit.
a tempo
cresc.
fff
rit.
ff
dim.
m.d.
f
dim.
p
f
dim.


70
p
71
72
cresc.
dim.
dolce
73
p
74
75
76


77
78
mf
79
80
mf
rit.
morendo
81
pp
pp
82

Chapter 5

SUMMARY AND CONCLUSIONS

Purpose of the Study

The purpose of the study was to delineate and establish program objectives for private piano study. Specifically, the study was concerned with the development of an instructional approach referenced to these program objectives and existing knowledge of the developmental teaching and learning process as articulated in selected writings of Mursell, Piaget, Bruner, and others. An additional purpose of the study included the formulation and application of a guiding set of philosophical concepts which would serve as a theoretical framework for the development of all degrees of performance capacities.

Design of the Study

The study was initiated with an extensive philosophical inquiry into the nature of piano instruction as reflected in pedagogical writings, theories of developing piano technique, and an assessment of existing piano method series. Chapter 2 presented an historical perspective on early keyboard instruction to 1900 and selected aspects of pedagogical thought in the twentieth century. These writings

served as a basis for an analysis of the evolvement in pedagogical thought from the beginning of keyboard instruction to the present. This analysis disclosed that there was a need for the delineation and establishment of program objectives referenced to how cognition/learning takes place within piano study. Further research revealed substantial evidence that tenets of developmental theories of learning offer the most conclusive insights into the cognitive/learning process as applied to piano study. Chapter 3 investigated selected aspects of developmental theories of learning as articulated in the writings of Mursell, Piaget, Bruner, and others.

With Chapters 2 and 3 serving as a reference, inferences were drawn for the delineation and establishment of program objectives for piano study. Referenced to these program objectives and knowledge of the developmental teaching and learning process, an instructional approach was formulated and applied to twenty-two examples of music literature appropriate for piano study at the elementary, intermediate, and advanced levels.

Conclusions

On the basis of the present study, these conclusions may be drawn:

1. Leading twentieth century artists and pedagogues concur that piano instruction should foster a synthesis of aural, rhythmic, and technical controls essential to estimable piano performance, including the understanding of the

elements of a musical composition and the physical manifestation of these elements through the piano.

2. The objectives of present instructional materials emphasize proficiency in separate skills rather than an integrated approach for developing piano performance capacities. There is a dichotomy between the general philosophy of developing piano performance capacities, as articulated in the writings of leading twentieth century artists and pedagogues, and the objectives of existing piano instructional materials.

3. The evolving sphere of knowledge concerning the teaching and learning process suggests the nullification of the nineteenth century axiom that proficiency in separate skills solves any problems a pianist may encounter.

4. An instructional approach to piano study, referenced to developmental theories of learning, can provide optimum conditions and effective guidance for the development of all performance capacities.

5. An instructional approach referenced to the developmental teaching and the learning process can best provide a philosophical foundation upon which piano teachers can base systematic pedagogical procedures and students can derive self-learning techniques.

6. An instructional approach needs to respond to the individual needs, performance capacities, and interest of each student without any self-contained units or time limits

for any given learning level.

7. An instructional approach needs to allow for active student involvement in interpretive decisions and the promotion of musical independence in the learning/performing process. This permits the development of musical intelligence and aesthetic responsiveness for musical judgment in self-actualization or professional situations.

This development can best be achieved through an instructional approach which promotes the continuous broadening and extension of musical concepts in terms of the formal elements or complexities inherent in piano music.

8. The understanding and execution of the architectonic qualities of the rhythmic structure within the hierarchic groupings in a musical composition, both at the mensural and intermensural metric levels, provide avenues for perception and conception of the formal elements of music as a coherent "whole." Psychological ownership of the "whole" may be acquired through the gradual understanding of small-unit groupings or experiential components.

9. An instructional approach should stress the repetition of entire procedures as learning is fostered by the integration of successive structures which continually build upon what has previously been experienced. Based on this premise, the beginner and expert should experience the same type of learning process, the difference being only in degree of detail and efficiency.

10. The role of the teacher is to provide an instructional sequence where concepts are understood and new ones experienced and subsequently reorganized at a more complex level. This role includes the responsibility of evaluating a student's learning readiness and providing a sequential ordering of materials in direct relationship to an individual's present and future performance capacities.

Recommendations for Additional Research

1. A study to investigate the utilization of developmental theories of learning as a philosophical foundation for the structuring of pedagogy courses in all instrumental areas at the undergraduate and graduate levels.

2. A study to investigate the application of a piano instructional approach to vocal and other instrumental instruction.

3. A study to compare program objectives of piano instruction with the rising interest in competency-based behavioral objectives in other areas of music education.

4. A study to formulate guidelines for the sequential ordering of piano teaching materials.

5. A study to develop piano teaching materials referenced to developmental theories of learning.

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