

A SELECTED BIBLIOGRAPHY OF SOURCE MATERIALS FOR CURRENT MUSIC- THEORETICAL SYSTEMS

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PREFACE

I. Purpose

In recent decades, several music-theoretical notions have gained widespread currency. Scholarly discussion has continuously refined these ideas (hereafter loosely called “systems”) and clarified some of the fundamental issues that bear on them. In turn, this process has enhanced the ability of nonspecialists to benefit from the insights afforded by the systems. As Jonathan Dunsby and Arnold Whittall have implied, there seems to be a growing number of “musicians who do not expect to specialize in theory and analysis, but who are prepared to explore the possibility that some general knowledge of the subject might nevertheless do them more good than harm.”¹

This bibliography cites several introductory sources for some of these systems; its intent is to aid students in becoming familiar with the systems. Such students include the non-theorist musicians mentioned by Dunsby and Whittall, but also can include undergraduate or beginning graduate music theory students (these constitute the majority of the students in the class for which I initially began to compile the bibliography), non-music specialists interested in music theory (e.g., as it compares to other types of systematic thought), or even music-theory specialists who are less familiar with some systems than with others. It is particularly intended for use in courses that survey several of these systems, but also provides enough sources to support narrower studies of individual systems (perhaps in a seminar or independent-study setting).

The nature of the sources listed for each system varies: some are important primary writings, others are summaries or condensations written much later, others place a system in its historical context, and still others offer important critical remarks, whether these serve as corrections, refinements, clarifications, limitations, or extensions. Finally, for several systems,

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I have included bibliographies that list many more sources for further study.

The kind of source that is most helpful for a given reader will depend to some extent on the nature of the system and to some extent on his purposes in studying it. The following remarks about each system indicate ways of pursuing some of these purposes. But, in most cases, a combination of sources is desirable to provide an appropriate introduction to a system. In any event, the annotations contained in the bibliography are intended to clarify the nature of each source as it applies to the understanding of a system. In addition, where appropriate, the annotations show some direct relationships between sources, caution about biases or idiosyncratic perspectives, or cite reviews or other additional sources.

II. Contents

The bibliography contains only sources available in English. The systems are listed under the following general headings: "Schenker and followers," "Thematic analysis techniques," "Serialism," "Set theory," "Systems as compositional tools," and "Miscellaneous." These sections are preceded, however, by three important general sections.

The first of these, "Overview sources," lists several works that discuss several or many of the systems in the bibliography. Throughout the bibliography, sections on individual systems are prefaced by citations of appropriate passages in these works, facilitating the use of the overviews as references or textbooks. (One might add to this list the publication in *Music Theory Spectrum* XI/1 (Spring 1989) of the bibliographies and remarks from the 1987 plenary session of the national Society for Music Theory conference; several of the topics addressed there apply directly to the systems in this bibliography.) This section is followed by one on "References" that lists well-known works of interest to the theorist.

The third section addresses the idea of analysis. This idea, obviously not a "system," seems to belong here nonetheless. This is because the majority of the systems in the bibliography have analysis as a primary objective (the exceptions being "Serialism" and the other compositional systems), so it is important for the student to have grappled with the purposes of analysis before studying some of the systems. And I have found that many students who have successfully completed courses that include analysis remain unable to articulate clearly what it is and why it is done.

Use of the remaining sections of the bibliography may be facilitated by a few remarks about the most profitable kinds of approaches to each system.

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First, in teaching Schenker, one might actually desire for students to learn how to do Schenkerian analysis. At present, this seems to be a formidable task, perhaps possible with a text such as Forte/Gilbert (1982), but much more feasible in a tutorial situation with a teacher who has learned the technique well.

On the other hand, it is often quite possible for a student to gain an understanding of the purpose of the system (without necessarily becoming skilled in the analytical technique) by studying, in addition to some of the "Overview" excerpts, such sources as Babbitt (1959) and Forte (1959) (as introductions), some of Schenker's writings ("*Organic Structure . . .*," some of *Der Freie Satz*, and at least one of the *Five Graphic Analyses* (I have used that of Chopin's op. 10, no. 8 with some success)), and later, for various perspectives, Rosen (1971), Kerman (1980-81), Rothstein (1986), Forte (1988), and Proctor/Riggins (1988).

In the "Thematic analysis techniques" section I have grouped ideas of demonstrating organic unity by showing motivic/thematic connections across traditional sectional boundaries. Several of the "Overview" sources follow a similar grouping in their introductions to these ideas. In studying Keller's "functional analysis" I have found the four-hand playing of "FA No. 1" (while listening to a recording of the piece) to be a useful exercise.

Serialism is, of course, primarily a compositional system, and many teachers have favorite ways of teaching the rudiments of serial composition without using sources such as those listed here. For this purpose, though, Schoenberg's "Composition with Twelve Tones" and Wuorinen (1979) can be useful; some compositional extensions can be found in Winham (1970), Stockhausen (1959), Ligeti (1960), and the Babbitt articles listed under "primary" and "extensions beyond pitch" (several of these are rather difficult); advanced students might also use Morris (1987), listed under "Set theory" (II.D.3.). Some analytical articles are Beach (1976), Lewin (1962 and 1966), and Babbitt's "Since Schoenberg," as well as many others listed in Vander Weg (1979).

A more general historical/philosophical approach, though, might use the following outline: I. One or more of the "Overview" sources; II. Introduction: Schoenberg's "Composition with Twelve Tones" (I have found playing his example-excerpts from the Wind Quintet, op. 26, to be very helpful in conveying the intervallic relationships established by the row); III. Development of ideas: Boulez (1952), Babbitt ("Some Aspects . . .," "Twelve-Tone Invariants . . .," "Set Structure . . ."); IV. Extensions to non-pitch aspects of music: Stockhausen (1959), Ligeti (1960), Babbitt ("Twelve-Tone Rhythmic . . ."); V. Philosophical discussion and reaction: Levi-Strauss (1969), Meyer (1967), Ruwet & Pousseur (1964), Rochberg (all in "extensions beyond pitch" and "supplementary reading"), Cone (1961), and the Stadlen discussion.

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Teaching students the basic operations of set-theoretical analysis is much simpler than teaching them the basics of Schenkerian analysis (although teaching them to incorporate set-theory principles into a sensitive musical interpretation is quite another matter!). One might start with one of the "Overview" sources, or Rahn (1980), but I have found Beach (1979) to be a very useful introduction. Students can start with some short pre-serial Webern pieces (as Beach does), seeing what conclusions can be drawn about intervallic relationships, as well as what elements are not explicitly addressed (such as rhythmic development, contour similarities, set relationships operating through time, etc.).

On the other hand, if one wants to incorporate a historical development and rationale into the study of musical set-theory, the following rough outline might be followed: I. Forerunners: these are summarized in Schmalfeldt (1983), originally pursuing compositional purposes; they are exemplified by the discussion of Gerhard (1952) and Hanson (1960), as well as Martino (1961) and implicitly in much of Lewin (1959, 1960, and 1965) (these last two authors can be quite difficult for students); II. Primary statements: following Forte (1963 and 1964) Clough (1965), Forte (1965), and Howe (1965) came Forte (1973); III. Responses: Benjamin (1974 and 1979), Browne (1974), Regener (1974), Howe (1974-5) (all tempering and adjusting the theory); IV. Refinement (mostly concerned with intervallic similarity issues): Teitelbaum (1965), Lewin ("Forte's Interval . . ."), Morris (1979-80) & Lord (1981), and Rahn (1979-80). Other sources develop these ideas in various directions (e.g., the diatonic developments of Clough (1979 and 1979-80) and Browne (1981)).

The section on "Systems as Compositional Tools," like that on "Serialism," contains examples of pre-compositional systems that can also provide an important foundation for analysis of the music that results from the systems. The composers represented have all done a lot of public, personal systematizing (with the exception of Bartok, who has had the public systematizing done for him after the fact).

The final categories (listed under the inevitable "Miscellaneous") require few comments. Information theory seems to have gone out of fashion, perhaps to be replaced by semiotics, but the articles listed can provide good fodder for classroom discussion anyway. There is a shortage of material in English on semiotics, and, as Dunsby and Whittall have said, "Much of the research in this area has been carried out with no concession to pedagogical needs."² But the "Overview" sources can be helpful.

The last section, on "Phenomenology," may provide a welcome antidote to and/or philosophical perspective on many of the other topics; Clifton's work, in particular, provides an interesting response to many of the systems that are discussed elsewhere in this bibliography.

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The concluding section of the bibliography lists several journals of interest to the music theorist.

Several significant related fields of study are not included in their own right in this bibliography, although many articles in these fields appear here under other headings. Some of these fields are listed here, along with bibliographies or other sources for more information:

1) history of theory (see Palisca, "Theory, theorists," in *The New Grove*; Mark Lindley, "Preface to a Graduate Course in the History of Music Theory," *College Music Symposium* XXII/2 (Fall 1982): 83-102; David Russell Williams, *A Bibliography of the History of Music Theory*, 2nd ed. (Accura Music, 1971), and the major expansion of the latter portion of this work, *Music Theory from Zarlino to Schenker: A Bibliography and Guide*, by Russell Williams and David Damschroder (forthcoming from Pendragon Press); and the bibliographies prepared by Benito Rivera and William E. Caplin, for the 1987 Society for Music Theory plenary session, on "Studies in Analysis and History of Theory: Sixteenth and Seventeenth Centuries" and "History of Theory in the Eighteenth and Nineteenth Centuries, respectively (*Music Theory Spectrum* XI/1, 1989, pp. 24-28 and 29-34, respectively)).

2) rhythm (see Jonathan Kramer, "Studies of Time and Music: A Bibliography," in *Music Theory Spectrum* VII, 1985, pp. 72-106).

3) music theory pedagogy (see Michael Rogers, *Teaching Approaches in Music Theory: A Overview of Pedagogical Philosophies* (cited in the bibliography, section I.B.), pp. 185-218, for a lengthy bibliography; and see the contents of this journal as well).

4) general analysis articles; for sixteenth- and seventeenth-century music, see Rivera (cited above) and the bibliography in Robert Gauldin's *Sixteenth-Century Counterpoint*, Englewood Cliffs, N.J.: Prentice-Hall, 1985, pp. 293-303 (esp. 302-3); for nineteenth- and twentieth-century music, see Arthur Wenk, comp., *Analyses of Nineteenth- and Twentieth-Century Music: 1940-1985* (cited and described in section I.B.).

III. Annotations

Most of the entries in this bibliography are annotated to clarify the

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specific way they shed light on a particular system. Exceptions occur when a) the content is made clear by the title (as in an analysis of a specific piece using a specific system, or a bibliography); b) the source is clearly secondary (as in some of the serialism commentaries and set-theory extensions); or c) the source is one of a very few introductions to a system of very specific or limited interest (as in some of the "Systems as compositional tools," and "Miscellaneous" sections) and thus does not need to be distinguished from other sources. I have surveyed some of the leading journals for reviews of many of the (especially more recent) books, and these are cited in the annotations. Often such a review, especially when treating a very significant work, will have considerable value in its own right; this has been reflected in the separate citation of some of the reviews of Allen Forte's *The Structure of Atonal Music*, but it applies in other cases as well (e.g., the reviews of the translation of Schenker's *Der Freie Satz*). All quotations within annotations are taken from the source being annotated.

IV. Scope and intent

The bibliography is by definition a work in progress. It is obviously not exhaustive; neither, surely, does it contain *all* the best sources on any given topic. On the other hand, I hope the bibliography gathers basic references to help those who would teach or learn about these topics, whether as a survey or as a specific investigation of a particular system. It is offered, therefore, to aid pedagogy, rather than to present a detailed critique or evaluation of the sources. However, it will no doubt reveal many of my own biases and those of the publishing theory community in general. Finally, I hope the bibliography can form a fairly comprehensive basis for further additions, corrections, and revisions, and to that end I welcome any suggestions, improvements, or comments.

NOTES

¹Jonathan Dunsby and Arnold Whittall, *Music Analysis in Theory and Practice* (London: Faber Music Ltd., 1988), p. vi.

²*Ibid.*, p. 218.

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I. GENERAL, INTRODUCTION

A. Overview sources

Bent, Ian. "Analysis." *The New Grove Dictionary of Music and Musicians*, 6th ed., Stanley Sadie, ed. London: Macmillan Publishers Ltd., 1980.

Opens by discussing what musical analysis is or might be; section II contains a historical survey of analysis; section III outlines current analytical methods. Contains an extensive (six pages of tiny print) bibliography that is good for browsing but limited by its chronological order (and its 1977 termination date). N.B.: The book version, "a revision and expansion" of this article, is *Analysis*, by Ian Bent with William Drabkin (New York: W. W. Norton & Co., 1987) and is improved in the following three ways: 1) discussions have been brought up to date, including the addition of a section on set theory; 2) Drabkin has added a very helpful 34-page "Glossary of Analytical Terms," and 3) the bibliography is updated and better organized (by author, except that some clearly secondary literature is placed under the appropriate primary sources). Reviewed by Bryan Simms, *MA* II/1 (March 1983): 105-7; Judith Lochhead, *College Music Symposium* XXVIII (1988): 121-9; and, briefly, by Michael Rogers, *Journal of Music Theory Pedagogy*, II/2 (Fall 1988): 297-310.

Cook, Nicholas. *A Guide to Musical Analysis*. London: J. M. Dent & Sons, Ltd., 1987.

The author describes this book as "primarily a practical guide to musical analysis as it is." Part I reflects topics similar to those found in this bibliography (e.g., traditional methods of analysis, Schenkerian analysis, psychological approaches to analysis (including Meyer and Reti); "formal" approaches to analysis (including set theory and semiotics); techniques of comparative analysis, and "What does musical analysis tell us?"; Part II demonstrates some analyses, including serial music. No bibliography is included. Reviewed by Matthew Brown and Douglas Dempster, *JMT* XXXII/1 (Spring 1988): 148-58; and Michael Rogers, *Journal of Music Theory Pedagogy* II/2 (Fall 1988): 297-310.

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Dunsby, Jonathan, and Arnold Whittall. *Music Analysis in Theory and Practice*. London: Faber Music Ltd., 1988.

This book, according to the authors, is "not a textbook: it is an attempt to provide a background to the study of theory and analysis [for] those musicians who do not expect to specialize in theory and analysis." Like Cook's book, its topics are similar to those in this bibliography: after an introduction and survey of the history of theory and analysis, a section on tonal analysis treats Schenker, Tovey, Schoenberg, Reti, and Meyer (among others); a section on atonal analysis includes set theory and serialism; and a closing section treats semiotics. The eight-page bibliography includes those sources cited, and is not annotated. Reviewed by Judith Lochhead, *College Music Symposium XXVIII* (1988): 121-9; and, briefly, by Michael Rogers, *Journal of Music Theory Pedagogy* II/2 (Fall 1988): 297-310.

Forte, Allen. "Theory." *Dictionary of Contemporary Music*, John Vinton, ed., pp. 753-61. New York: E. P. Dutton & Co., Inc., 1971.

Develops a historical account of music theory in the twentieth century, discussing new approaches to the theory and analysis of tonal music (Schenker, etc.); "non-traditional (non-major/minor) music" (Busoni, Schoenberg, etc., and later Salzer, Perle, Howe, etc.); the construction of new pitch systems; the imposition of principles of number and proportion (Lendvai, Hindemith); twelve-tone set theory (Babbitt, etc.); information theory; logical-linguistic approaches; and the use of computers. Thus the article summarizes, from one perspective, many of the categories contained in this bibliography.

Kerman, Joseph. "Analysis, Theory, and New Music," chapter 3 (pp. 60-112) of *Contemplating Music*. Cambridge, Mass.: Harvard University Press, 1985.

This chapter is an extended description and critique of the discipline of "music theory" in the United States as of its writing; gives a historical perspective on many of the streams of thought.

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Palisca, Claude. "Theory, theorists." *The New Grove Dictionary of Music and Musicians*, 6th ed., Stanley Sadie, ed. London: Macmillan Publishers Ltd., 1980.

Begins with a discussion of the areas of current musical knowledge that are commonly categorized as part of music theory today, then embarks on a chronological survey of the work that is commonly considered to be historical music theory (the subject matter of History of Theory courses; not necessarily fitting the categories commonly accepted as music theory today).

B. References

Browne, Richmond, supervising editor. "Index of Music Theory in the United States 1955-1970." *In Theory Only* III/7-11 (October 1977-February 1978).

A "comprehensive index." Not annotated, but the subject index at the end can serve to supplement the categories in this bibliography nicely; also useful are the listings of pieces analyzed and theorists discussed. The obvious limitation is the chronological one, as many writings have been superseded in the years since 1970.

Randel, Don, ed. *The New Harvard Dictionary of Music*. Cambridge, Mass.: Belknap Press, 1986.

Contains many entries of theoretical interest, on a much smaller scale than the *New Grove* (listed below).

Rogers, Michael. *Teaching Approaches in Music Theory: A Overview of Pedagogical Philosophies*. Carbondale, Ill.: Southern Illinois University Press, 1984.

While primarily oriented toward pedagogical issues, this source contains a bibliography (organized according to pedagogical concerns) that is a browser's delight; the section on "Musical Analysis" (pp. 198-205) is of particular interest here. Reviewed by Dorothy Payne, *MTS IX* (1987): 200-204.

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Sadie, Stanley, ed. *The New Grove Dictionary of Music and Musicians*, 6th ed. London: Macmillan Publishers Ltd., 1980.

Contains many articles of interest and value to the contemporary music theorist.

Wenk, Arthur, comp. *Analyses of Nineteenth- and Twentieth-Century Music: 1940-1985*. Boston: Music Library Association, Inc., 1987.

A bibliography, alphabetized by composer, genre or work, author, and title (in that order), that "contains 5664 entries by some 2400 authors drawn from 132 periodicals and 93 Festschriften, covering 779 composers." The book is supposed to be regularly republished; it includes an author index.

C. Analysis in general; its relation to theory, criticism, composition

1. About analysis

Browne, Richmond, Allen Forte, Carlton Gamer, Vernon Kliever, Carl Schachter, and Peter Westergaard. "Music Theory: The Art, the Profession, and the Future." *College Music Symposium* XVII/1 (Spring 1977): 135-62.

A collection of short papers on the proper role and function of music theory and music theorists. These tend to be somewhat personal in approach and purpose, but they reflect the situation of theorists at an important point of self-awareness—right about the time of the formulation of the Society for Music Theory. While each contribution includes valuable and interesting insights, perhaps Browne's and Forte's most directly address this last-mentioned situation.

Cone, Edward T. "Analysis Today." *Musical Quarterly* XLVI (1960): 172-88. (Also in *Problems of Modern Music*, ed. Lang, and Rosand, vol. 13.)

Sets forth a definition of "analysis," as specifically opposed to "prescription" and "description." The body of the article seeks to show how some twentieth-century works can be analyzed in ways analogous to the analysis of tonal music. This, with Morgan (1977-78) can represent the valid work done in twentieth-century music that is underrepresented in this bibliography because it doesn't

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necessarily use a "system," for example, Cone's famous article on Stravinsky's *Symphonies of Wind Instruments* in *PNM* I. This article, some of the others listed immediately below, and other important writings by Cone on analysis and criticism can also be found in *Music: A View from Delft: Selected Essays*, edited by Robert P. Morgan, University of Chicago Press, 1989.

_____. "The Authority of Music Criticism." *JAMS* XXXIV/1 (Spring 1981): 1-18.

Describes the job of the critic as "to broaden and deepen appreciation, in the best sense of the word." Discusses the way this endeavor combines the musicological, technical (including theory and analysis), and experiential.

_____. "Beyond Analysis." *PNM* VI/1 (Fall-Winter 1967): 33-51.

Discusses aspects of musical value that seem to be beyond the realm of internal relationships that can be shown within a composition. Many of these involve connections between events in the piece and phenomena external to the piece.

_____. "Mr. Cone Replies." *PNM* VII/2 (Spring-Summer 1969): 70-72.

A response to Lewin. More on theory, analysis, criticism, and composition.

_____. "Three Ways of Reading a Detective Story—or a Brahms Intermezzo." *Georgia Review* XXXI (1977): 554-74.

An insightful discussion of the ways that analysis ought to inform appreciation, as the synoptic view afforded by analysis can influence the diachronic experience of rehearsing (or performing).

Kerman, Joseph. "How We Got into Analysis, and How to Get Out." *Critical Inquiry* VII (1980-81): 311-31. (Also in *Rosand*, vol. 13.)

Criticizes limitations of present theoretical approaches, calling for a more broadly-based critical procedure. In particular, discusses the analysis presented in Forte (1959) (see Schenker section, II.A.2.).

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Kielian-Gilbert, Marianne and Marion Guck, eds. "Reflections on Music Theory." *PNM* XXII/1 & 2 (1983-84): 560-630.

Twenty eight responses from ("mostly younger") theorists to a letter soliciting information about current research topics, influences, and perspectives on important musical issues; the letters range from the very personal to the broadly philosophical.

Lewin, David. "Behind the Beyond." *PNM* VII/2 (Spring-Summer 1969): 59-69.

A response to Cone (1967). Delineates the realms of "theory," "analysis," and "criticism," indicating, as well, the ways these interact with one another and with composition.

Maus, Fred Everett. "Music as Drama." *MTS* X (1988): 56-73.

A discussion of the relationship between what have been called musical "structure" and its "affect" or "expression"; Maus describes a musical passage in dramatic terms and suggests that this dramatic structure incorporates the above elements without distinguishing between them.

Meyer, Leonard. *Explaining Music*. Berkeley: University of California Press, 1973, chapter 1, pp. 3-25.

Focuses on "critical analysis," distinguishing it from Meyer's definition of "music theory" and "style analysis."

Morgan, Robert P. "On the Analysis of Recent Music." *Critical Inquiry* IV (1977-78): 33-53. (Also in Rosand, vol. 13.)

Follows Cone (1960), showing how "analysis" may be applied to recent works that Morgan does not find to be susceptible to the kind of modified-tonal-analysis approaches used by Cone.

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_____. "Theory, Analysis, and Criticism." *Journal of Musicology* I/1 (January 1982): 15-18.

Discusses the three disciplines in turn, cautioning along the way that "theory" rarely addresses questions of "meaning"; "analysis" should appropriately avoid an overemphasis on the location of normative features in a piece, and should deal as well with questions of social context, intentionality, etc.; and that criticism should embody a synthesis of description, analysis, interpretation, and evaluation within the broadest context possible.

Rosand, Ellen, general ed. *The Garland Library of the History of Western Music*, esp. vols. 10 (Twentieth-Century Music), 13 (Criticism and Analysis), and 14 (Approaches to Tonal Analysis). New York: Garland Publishing, Inc., 1985.

A fourteen-volume set that consists exclusively of reprints of significant writings in music scholarship; the topics of the first ten volumes progress chronologically from medieval music to the twentieth century, vols. 11 and 12 deal with opera, and 13 and 14 address analytical concerns.

Treitler, Leo. "Music Analysis in an Historical Context." *College Music Symposium* VI (1966): 75-88.

Discusses the possible uses of analysis, as defined by the author, in the study of music history.

2. Sample book-length analytical approaches

Berry, Wallace. *Structural Functions in Music*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976. (Now available in Dover reprint.)

A book-length treatment of three central issues as manifested at various stages of Western music history: "tonality," "texture," and "rhythm and meter." While acknowledging an extensive influence of others' previous work in the first area, the author comments that "the studies in texture and rhythm have few if any significant, direct antecedents; the work in these two areas . . . is largely in original formulation."

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Boretz, Benjamin. "Meta-Variations." Ph.D. dissertation, Princeton University, 1970. (Also appears in a serialized version in *PNM*: I. *PNM* VIII/1 (Fall-Winter 1969): 1-74; II. *PNM* VIII/2 (Spring/Summer 1970): 49-111; III. *PNM* IX/1 (Fall-Winter 1970): 23-42 and *PNM* IX/2 & X/1 (1971): 232-70; and IV. *PNM* XI/1 (Fall-Winter 1972): 146-223 and *PNM* XI/2 (Spring-Summer 1973): 156-203.)

A lengthy study that draws on many sources, both music-theoretical and more general philosophical and linguistic, to discuss "ways of thinking about music that would accurately reflect and explicate the content, and ultimately feed back to the advantage, of that thinking in music which is the essential content of every musical activity, compositional, analytic, theoretical, or merely auditional."

Browne, Richmond, ed. *Music Theory: Special Topics*. New York, Academic Press, 1981.

Not a single book-length treatment, but a collection of six essays on various topics: "Pitch-Class Counterpoint in Tonal Music" by William Benjamin; "Poetic and Music Rhythm: One More Time" by Barney Childs; "ET Setera: Some Temperamental Speculations" by Carlton Gamer; "Music as Metalanguage: Rameau's Fundamental Bass" by Allan R. Keiler; "Some Investigations into Foreground Rhythmic and Metric Patterning" by David Lewin; and "Prolongations and Progressions as Musical Syntax" by Charles J. Smith. Much of the material here offers unusual or off-the-beaten-track insights into analytical and theoretical issues. Reviewed by Wilson Coker, *MTS* IV (1982): 125-30.

Cogan, Robert and Pozzi Escot. *Sonic Design*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1976.

Works from a broad range of Western style periods, as well as a few outside the Western tradition, are analyzed in this book under such headings as "musical space," "musical language," "time and rhythm: dimensions and activity," "the color of sound," and "gesture, form, and structure." A pedagogical stance is adopted throughout. Reviewed by William Thomson, *JMT* XXIII/1 (Spring 1979): 125-34.

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Lewin, David. *Generalized Musical Intervals and Transformations*. New Haven: Yale University Press, 1987.

A study of musical relationships, distance and motion across various abstract and concrete musical spaces (in pitch and time). Such intervals and transformations are rigorously formalized throughout with a mathematical model called a Generalized Interval System. A broad range of composers is treated, including Bach, Mozart, Beethoven, Brahms, and Wagner, as well as many of the twentieth century. Reviewed by John Rahn, *JMT* XXXI/2 (Fall 1987): 305-18; Dan Tudor Vuza, *PNM* XXVI/1 (Winter 1988): 258-87; and John Clough, *MTS* XI/2 (Fall 1989), in press.

Rahn, Jay. *A Theory for All Music*. Toronto: University of Toronto Press, 1983.

Attempts to develop guidelines that make possible the interpretation of all music, Western and non-Western (with perhaps an emphasis on the latter), taking as a point of departure Benjamin Boretz's "Meta-Variations" (cited above).

Tovey, Donald Francis. *Essays in Musical Analysis* (five volumes plus supplement). London: Oxford University Press, 1936.

Classic essays on the mainstays of London turn-of-the-century concert fare; excellent examples of form-oriented analysis.

II. PRINCIPAL SYSTEMS

A. Schenker and followers

1. Overviews: Bent article: pp. 356-57, 361-63, 370-71; Bent book: 38-41, 49-52, 81-85; Kerman: 79-90; Dunsby/Whittall: 23-61; Cook: 27-66.

2. Schenker

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Babbitt, Milton. "Review of *Structural Hearing* by Felix Salzer." *JAMS* V/3 (Fall 1952): 260-65.

Contains an early overview of some of the essential elements of Schenker's system.

Beach, David. "A Schenker Bibliography." *JMT* XIII/1 (Spring 1969): 2-37. (Also in Yeston.)

In addition to the bibliography (which lists many valuable early sources not mentioned here because of their difficulty or lack of availability), this source contains an informative overview of the Schenker situation at the time of writing; be aware, though, that several of the writings listed as not readily available in English have since been translated and/or made widely available, e.g., Jonas and Schenker (1979).

_____. "A Schenker Bibliography: 1969-1979." *JMT* XXIII/2 (Fall 1979): 275-86.

_____, ed. *Aspects of Schenkerian Theory*. New Haven: Yale University Press, 1983.

Bergquist, Peter; William Mitchell; and Felix Salzer. "A Glossary of the Elements of Graphic Analysis." *Music Forum* I (1967): 260-68.

Browne, Richmond. "Initial Readings in Schenker." *In Theory Only* I (April 1975): 4-5.

While outdated because of the number of sources that have become available since its appearance, this brief article contains some interesting thoughts on a neophyte's most profitable approach to Schenker.

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Forte, Allen. "Schenker's Conception of Musical Structure." *JMT* III/1 (Spring 1959): 1-30. (Also in Yeston.)

Provides a good introduction; a small-scale analysis by Schenker is presented and discussed. Forte concludes by enumerating five problems for theorists to address in the future.

_____, and Steven Gilbert. *Introduction to Schenkerian Analysis*. New York: W. W. Norton & Co., Inc., 1982.

A lengthy textbook designed to lead the student from the most basic concepts underlying Schenker's theories (prolongation, species counterpoint, etc.) to an understanding of Schenkerian analysis. Reviewed by James Marra, *MA* II/3 (October 1983): 281-90; Roger Kamien, *JMT* XXVII/2 (Spring 1984): 113-23; Larry Laskowski, *MTS* VI (1984): 110-20; and Joseph Dubiel, *Musical Quarterly* LXX/2 (Spring 1984): 269-78.

Jonas, Oswald. *Introduction to the Theory of Heinrich Schenker*, trans. & ed. by John Rothgeb. New York: Longman, 1982.

Reviewed by Bruce Campbell, *MTS* V (1983): 127-31; and William Rothstein, *JMT* XXVII/2 (Fall 1983): 273-81.

Katz, Adele T. "Heinrich Schenker's Method of Analysis." *Musical Quarterly* XXI/3 (July 1935): 311-29.

A very early account of Schenker's theories.

Laskowski, Larry. *Heinrich Schenker: An Annotated Index to His Analyses of Musical Works*. New York: Pendragon Press, 1978.

Reviewed by Harald Krebs, *JMT* XXIII/2 (Fall 1979): 304-7.

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Mann, Michael. "Schenker's Contribution to Music Theory." *Music Review* X/1 (February 1949): 3-26.

An early discussion of Schenker's innovations compared with the ideas of other theorists.

Morgan, Robert. "Schenker and the Theoretical Tradition." *College Music Symposium* XVIII (1978): 72-96.

Traces some precursors of Schenkerian reduction in "three principal areas: 1) diminution technique; 2) *musica poetica*, or the theory of musical figures; and 3) functional harmonic theory."

Proctor, Gregory and Herbert Lee Riggins. "Levels and the Reordering of Chapters in Schenker's Free Composition." *MTS* X (1988): 102-26.

Discusses and distinguishes among the concepts of background, middle-ground, foreground, and levels, developing a theory of foreground diminution and laying the groundwork for future, pedagogically-oriented work (see follow-up article in this issue of *JMTP*).

Riggins, Herbert Lee. "Heinrich Schenker's Graphic Notation and Contemporary Variants." Ph.D. dissertation, University of Texas, 1981.

Explicates the prolongational techniques shown in *Der Freie Satz* and *Five Graphic Musical Analyses*, discussing the notation of each technique. This is followed by a critique of the presentation of similar techniques in Salzer's *Structural Hearing*, Bergquist/Mitchell/Salzer's "Glossary" (above), and Gerald Warfield's *Layer Analysis*.

Schenker, Heinrich. *Five Graphic Musical Analyses*, ed. Felix Salzer. New York: Dover Publications, 1969.

Full-blown analyses of five compositions or significant sections, demonstrating the entire range of *Schichten* for each. One in particular, the Bach chorale harmonization "Ich bin's, Ich sollte büßen," is discussed in several of the "Overview" and secondary sources listed here.

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_____. *Free Composition (Der freie Satz)*, trans. and ed. by Ernst Oster. New York: Longman, in cooperation with the American Musicological Society, 1979.

The concluding portion of Schenker's lifework, *Neue musikalische Theorien und Phantasien* (1906-1935). Many portions of analyses are seen here, but it should be remembered that the purpose of this work is an exposition of the theory (as opposed to the *Five Graphic Musical Analyses*), so analytical examples here do not purport to be complete analyses, only illustrations of particular compositional phenomena and/or analytical concepts. Reviewed by Roger Kamien, *Musical Quarterly* LXVII/1 (January 1981): 113-18; Carl Schachter, David Epstein, and William Benjamin, *JMT* XXV/1 (Spring 1981), pp. 115-73; Michael Musgrave, *MAI* 1 (March 1982): 101-7; and Edward Laufer, *MTS* III (1984): 158-84.

_____, trans. John Rothgeb. "The Largo of J. S. Bach's Sonata No. 3 for Unaccompanied Violin (BWV 1005)." *Music Forum* IV (1976): 141-59 (also in Rosand (I.C.), vol. 14).

_____, trans. Orin Grossman. "Organic Structure in Sonata Form." *JMT* XII/2 (Fall 1968): 164-83. (Also in Yeston.)

An argument against traditional thematic approaches to sonata form (based on sectionalization and contrast) and for Schenker's approaches (based on unity and organic growth); this epitomizes the revolutionary nature of his ideas.

Sessions, Roger. "Heinrich Schenker's Contribution." *Modern Music* XII/4 (May-June 1935): 170-78.

An almost-contemporary summation and critique of Schenker's ideas.

Yeston, Maury, ed. *Readings in Schenker Analysis and Other Approaches*. New Haven: Yale University Press, 1977.

Contains Beach (1969), Forte (1959), Schenker (1968), and three other fundamental articles, as well as four "Analysis Symposia," each of which brings together Schenkerian approaches and others with respect to a particular piece. All of the contents originally appeared in *JMT*.

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3. Followers and respondents

Forte, Allen. "New Approaches to the Linear Analysis of Music." *JAMS* XLI/2 (Summer 1988): 315-48.

Provides some applications of Schenker's ideas to later music, making reference along the way to previous, similar studies, and giving some guidelines for such endeavors.

Kerman, Joseph. (see section I.C.)

Criticizes limitations of present theoretical approaches, calling for a more broadly-based critical procedure. In particular, discusses the analysis presented in Forte (1959).

Narmour, Eugene. *Beyond Schenkerism*. Chicago: University of Chicago Press, 1977.

Eschews some of the premises of Schenkerism in favor of an "implication-realization" model. Reviewed by Allan Keiler and Henry Martin, *PNMXVII*/1 (Fall-Winter 1978): 161-95 and 196-210, respectively; Steven Haflich, *JMT* XXIII/2 (Fall 1979): 287-304; and Jan LaRue, *JAMS* XXXII/3 (Fall 1979): 586-91.

Rosen, Charles. "Art Has Its Reasons." *New York Review of Books* XVI/11 (17 June 1971): 32-38. (Also in Rosand (I.C.), vol. 13.)

A review of Schenker (1969); gives a good overview of the theory; then goes on to compare the "hidden meaning" implicit in the system with those that may be present in various examples of poetry.

Rothstein, William. "The Americanization of Heinrich Schenker." *In Theory Only* IX/1 (March 1986): 5-17.

An "insider's" view of the spread of Schenkerism in America and its state at the time of writing.

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Salzer, Felix. *Structural Hearing*. New York: Dover Publications, 1952.

Intended as an early textbook-introduction to Schenker; notable especially for its attempts to apply the theories to music much earlier and later than that dealt with (or even approved of!) by Schenker himself.

B. Thematic analysis techniques

1. Overviews: Bent article: pp. 365-66, 371-74; Bent book: 54-55, 85-88; Kerman: 75-79; Dunsby/Whittall: 82-85, 88-94; Cook: 89-115.

2. Thematic analysis

Reti, Rudolph. *Thematic Patterns in Sonatas of Beethoven*. New York: Macmillan, 1967.

Application of Reti (1951) to selected sonatas of Beethoven.

_____. *The Thematic Process in Music*. New York: Macmillan, 1951.

Develops a theory (summarized in pp. 3-30) intended to show thematic connections throughout a work, even among "contrasting" themes and movements.

3. "Functional analysis"

Keller, Hans (in chronological order). "K.503: The Unity of Contrasting Themes and Movements." *Music Review* XVII (1956): 48-58, 120-129. (Also in Rosand (I.C.), vol 14.)

Pursues the same goals as Reti (1951), leading up to Keller's development of "wordless functional analysis," detailed in his articles cited below. (This article and Tovey, vol. III, pp. 3-27 (see section I.C. above) are reprinted in the Norton critical edition of the score to K.503, edited by Joseph Kerman.)

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_____. "Functional Analysis: its pure Application." *Music Review* XVIII (1957): 202-6.

This and the remainder of Keller's articles listed here discuss and demonstrate his technique of "wordless functional analysis," in which the thematic connections throughout a piece are demonstrated by specially composed interludes that can be performed, by the forces the piece uses, between movements of a performance of the piece.

_____. "FA No. 1: Mozart, K.421." *The Score* 22 (February 1958): 56-64.

_____. "Wordless functional Analysis: the first Year." *Music Review* XIX (1958): 192-200.

_____. "Wordless functional Analysis: the second Year and Beyond." *Music Review* XXI (1960): 73-6, 237-39.

_____. "Functional Analysis of Mozart's G Minor Quintet." *MA* IV/1 & 2 (March/July 1985): 73-94.

Walker, Alan. *A Study in Musical Analysis*. London: Barrie and Rockcliff, 1962.

A student of Keller's looks for thematic unity (including mirror forms of themes), in the spirit of Reti, Schoenberg, and Keller, and attempts to demonstrate the psychological rationale for this unity.

4. Grundgestalt and Schoenberg

a. Primary

Epstein, David. *Beyond Orpheus: Studies in Musical Structure*. Cambridge, Mass.: MIT Press, 1979.

Includes a discussion of Schoenberg's ideas and an attempt to combine them analytically with those of Schenker. Reviewed by Jonathan Dunsby, *Journal of*

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the Arnold Schoenberg Institute 3 (October 1979): 194-202; Gary Wittlich, *MTS* III (Spring 1981): 150-58; Arnold Whittall, *JMT* XXV/2 (Fall 1981): 319-26; and Jonathan Harvey, *MA* II/2 (July 1983): 225-27.

Phipps, Graham. "Schoenberg's Grundgestalt Principle: A New Approach with Particular Application to the Variations for Orchestra, op. 31." Ph.D. dissertation, University of Cincinnati, 1976.

In addition to the twelve-tone application implied by the title, includes a Grundgestalt-type analysis of the fourth movement of Beethoven's Third Symphony, cutting across the traditional theme-and-variations organization of the movement. See also the letter written by Phipps as a contribution to "Reflections on Music Theory," a collection of responses to a survey of theorists, in *PNM* XXII (1983-84): 601-3 (cited in section I.C.1.).

Rufer, Josef. *Composition with Twelve Tones Related only to One Another*, trans. Humphrey Searle, chap. 3, pp. 24-45. New York: Macmillan, 1954.

This chapter within a book-length treatment of Schoenberg's compositional ideas by one of his students applies the Grundgestalt idea to all three movements of Beethoven's sonata, op. 10, no. 1.

b. Secondary

Carpenter, Patricia. "Grundgestalt as Tonal Function." *MTS* V (1983): 15-38.

An application of the Grundgestalt idea to tonal construction in Beethoven's sonata, op. 57.

Frisch, Walter. *Brahms and the Principle of Developing Variation*. Berkeley: University of California Press, 1984.

An application of a related Schoenbergian principle to Brahms' music. Reviewed by Michael Musgrave, *JAMS* XXXVIII/3 (Fall 1985): 628-36; William Rothstein, *JMT* XXX/2 (Fall 1986): 284-95; John Rothgeb, *MTS* IX (Spring 1987): 204-15; and V. Kofi Agawu, *MA* VII/1 (March 1988): 99-105.

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C. Serialism

1. Overviews: "Serialism" in *New Grove*; Kerman: pp. 90-106; Dunsby/Whittall: 186-200; Cook: 294-334.

2. Primary

Babbitt, Milton. "Set Structure as a Compositional Determinant." *JMT* V/1 (Spring 1961): 72-94.

More about combinatoriality, viewed within the context of group theory; Babbitt details properties of rows as they affect compositional possibilities. Other concerns are mentioned as they relate to Schoenberg's composition: pitch invariance, "aggregate rhythm," etc.

_____. "Some Aspects of Twelve-Tone Composition." *The Score and I. M. A. Magazine* 12 (June 1955): 53-61. (Also in Rosand (I.B.), vol. 10.)

In this early discussion of the system, Babbitt sets forth principles of combinatoriality and derivation, suggesting the importance of these principles in musical structure (including the organization of non-pitch aspects).

_____. "Twelve-Tone Invariants as Compositional Determinants." *Musical Quarterly* XLVI/2 (April 1960): 246-59.

The twelve-tone system is described here as a mathematical group. Ways that pitch classes can be held invariant are shown. Inversion, retrograde, and retrograde inversion are defined mathematically, and implications of these methods are shown.

Basart, Ann. *Serial Music: A Classified Bibliography of Writings on Twelve-Tone and Electronic Music*. Berkeley: University of California Press, 1961.

Although obviously dated by now, contains references to many sources, in particular some that discuss some of the earlier serial composers (like Ernst Krenek).

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Perle, George. *Serialism and Atonality*, 5th ed, rev. Berkeley: University of California Press, 1981.

A standard work, first published in 1962; begins (after an overview of "tonality, atonality, dodecaphony") with "'free' atonality" and works through serial procedures to twelve-tone serialism, finally considering advanced twelve-tone manipulations.

Schoenberg, Arnold. "Composition with Twelve Tones (1)," in *Style and Idea*. London: Faber & Faber Ltd., 1975, pp. 214-45.

A classic exposition of the rudiments of his system, including a view of the evolution of musical style leading to the system, the way the system takes the place of tonal approaches to structure and unity, and some insights into compositional aesthetic and technique; Op. 26, Op. 25, and Op. 31 are discussed in particular.

_____. "Composition with Twelve Tones (2)," in *Style and Idea*. London: Faber & Faber Ltd., 1975, pp. 245-49.

More observations on twelve-tone music and its structure and form are included in this brief essay.

Vander Weg, John D. "An Annotated Bibliography of Articles on Serialism 1955-1980." *In Theory Only* V/1 (April, 1979): iii-36.

A useful tool, although somewhat limited by inclusion of only journal articles (and therefore not books). Includes cross-references, an author index, and a piece index.

Wuorinen, Charles. *Simple Composition*. New York: Longman, 1979.

A textbook-style introduction to twelve-tone composition; very clearly introduces most important concepts up to the time of its writing. An interesting feature is the exclusive use of specially-composed examples for each concept. Reviewed by Conrad Pope, *JMT* XXIV/2 (Fall 1980): 253-68; and Nicola Le Fanu, *MA* I/1 (March 1982): 108-12.

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3. Extensions beyond pitch

Babbitt, Milton. "Twelve-Tone Rhythmic Structure and the Electronic Medium." *PNM I* (Fall 1962): 49-79.

Sets forth the timepoint system.

Boulez, Pierre. "Schoenberg is Dead." *The Score and I. M. A. Magazine* 6 (May 1952): 18-22. (Also in Rosand, (I.B.), vol. 10.)

Insists that the twelve-tone system demands new, self-determined forms, saying that Webern points the way to the discovery and use of these.

Cone, Edward. "Music: a View from Delft." *Musical Quarterly* XLVII/4 (1961): 439-53 (also in *Perspectives on Contemporary Music Theory*, New York: Norton, 1972 and Cone, *A View from Delft*).

In the context of a discussion of art as it strives toward a maximal integration of all elements, this article discusses Schoenberg's, Webern's, and Berg's abilities to integrate their musical elements (as compared with the synthesis achieved during the "Golden Age of functional tonality," Bach, Handel, Mozart, Haydn, Beethoven, Schubert), and considers skeptically some of the more recent attempts at deriving rhythmic structure from twelve-tone pitch structure.

Levi-Strauss, Claude. *The Raw and the Cooked*, trans. by John and Doreen Weightman, esp. pp. 14-32. New York: Harper & Row, 1969.

A critique of "total serialism" from an anthropological point of view.

Ligeti, Gyorgy. "Pierre Boulez," in *Die Reihe*, vol. 4: Young Composers, pp. 36-62. Bryn Mawr, Pa.: Theodore Presser Co., 1960.

A description of twelve-tone techniques applied to pitch and non-pitch aspects of Boulez' Structures Ia.

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Meyer, Leonard. *Music, the Arts, and Ideas*. Chicago: University of Chicago Press, 1967, Part III, pp. 233-316.

A lengthy consideration of serial music, including discussions of four arguments for its value, and of the difficulty of aurally processing this music, given its frequent lack of redundancy.

Pousseur, Henri. "Music, Form, and Practice." *Die Reihe*, vol. 6 (1964): Speech and Music, 77-93.

A response to Ruwet (below).

Rochberg, George. "Indeterminacy in the New Music." *The Score* 26 (1960): 9-19, reprinted in *The Aesthetics of Survival*, also by Rochberg (Ann Arbor: University of Michigan Press, 1984, pp. 3-15).

Presents the argument that highly "organized" serial music will be perceived as indeterminate.

Ruwet, Nicolas. "Contradictions Within the Serial Language," in *Die Reihe*, vol. 6 (1964): Speech and Music, 65-76.

Here Ruwet uses the analogy of language to explain his perception that much serial music is unsuccessful in "building up a pattern of growth."

Stockhausen, Karlheinz. "How Time Passes," in *Die Reihe*, vol. 3: Musical Craftmanship, pp. 10-40. Bryn Mawr, Pa.: Theodore Presser Co., 1959.

An exposition of Stockhausen's system of applying twelve-tone techniques to duration.

4. Supplementary reading

Babbitt, Milton. "Mr. Babbitt Answers." *PNM* II/1 (Fall-Winter 1963): 127-32.

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_____. "Past and Present Concepts of the Nature and Limits of Music." *International Musicological Society: Proceedings of the Eighth Congress I* (1961): 398-403.

_____. "Since Schoenberg." *PNM XII* (1973-4): 3-28.

_____. "The Structure and Function of Music Theory: I." *College Music Symposium V* (Fall 1965): 49-60.

Beach, David. "Segmental Invariance and the Twelve-Tone System." *JMT XX/2* (Fall 1976): 157-184.

Cohen, David. "Anton Webern and the Magic Square." *PNM XIII* (1974): 213-15.

Lewin, David. "On Certain Techniques of Re-ordering in Serial Music." *JMT X/2* (Winter 1966): 276-87.

_____. "A Theory of Segmental Association in Twelve-Tone Music." *PNM I/1* (Fall-Winter 1962): 89-116.

Perle, George. "Babbitt, Lewin, and Schoenberg: a Critique." *PNM II/1* (Fall-Winter 1963): 120-27.

_____. *Twelve-Tone Tonality*. Berkeley: University of California Press, 1977.

Rochberg, George. *The Aesthetics of Survival*, esp pp. 24-45, "Tradition and Twelve-Tone Music," and 46-68, "Reflections on Schoenberg" (the latter originally appeared in *PNM XI/2* (Spring-Summer 1973): 56-83). Ann Arbor: University of Michigan Press, 1984.

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Schoenberg, Arnold. "Schoenberg's Tone-Rows," in *Style and Idea*. London: Faber & Faber Ltd., 1975, pp. 213-14.

_____. "Twelve-Tone Composition," in *Style and Idea*. London: Faber & Faber Ltd., 1975, pp. 207-08.

Stadlen, Peter. "Serialism Reconsidered." *The Score* 22 (February 1958): 12-27.

A pianist calls into question some basic assumptions of serial composition. The following issue of *The Score* (vol. 23) contains responses by Walter Piston, Roberto Gerhard, and Roger Sessions, while the next one (vol. 24) contains Stadlen's responses to the respondents.

Winham, Godfrey. "Composition with Arrays." *PNM* IX/1 (Fall-Winter 1970): 43-67.

D. Set theory

1. Overviews: Bent article: pp. 366-67; Bent book: 62-64, 100-108; Dunsby/Whittall: 130-53; Cook: 124-51.

2. Generalizations from twelve-tone theory

Eschman, Karl. *Changing Forms in Modern Music* (chapter VI). Boston: E. C. Schirmer Music Co., 1945.

Discusses Hauer's Tropes (as set forth in Hauer's *Vom Melos zur Pauke; eine Einführung in die Zwölftonmusik*, Vienna, New York: Universal-Edition a.G., 1925).

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Gerhard, Roberto. "Tonality in Twelve-Tone Music." *The Score and I. M. A. Magazine* 6 (May 1952): 23-35.

Builds on Schoenberg and Hába in establishing new kinds of "tonality"; lists the "possible chords," after Hába. Then George Perle, in "The Possible Chords in Twelve-Tone Music" (*The Score and I. M. A. Magazine* 9 (September 1954): 54-58), corrected Gerhard's table, and brought Hauer's work into the discussion; finally Gerhard, in "Reply to George Perle" (*The Score and I. M. A. Magazine* 9 (September 1954): 59-60), made a last adjustment to the table.

Hanson, Howard. *Harmonic Materials of Modern Music*. New York: Appleton-Century-Crofts, 1960.

Develops a system for naming any group of notes based on interval content.

Rochberg, George. "The Harmonic Tendency of the Hexachord." *JMT* III/2 (Fall 1959): 208-30.

Discusses Schoenberg's hexachordal techniques in terms of Hauer's tropes and Babbitt's source sets, finding possibilities for new forms of tonality in the interval structures of these collections.

Schmalfeldt, Janet. *Berg's Wozzeck*, chapter 1, pp. 1-28. New Haven: Yale University Press, 1983.

Provides a historical survey of the evolution of set theory as applied to 20th-century music.

Schoenberg, Arnold. "Hauer's Theories," in *Style and Idea*. London: Faber & Faber Ltd., 1975, pp. 209-13.

A short collection of writings that attack Hauer.

3. Primary

Clough, John. "Pitch-Set Equivalence and Inclusion (A Comment on Forte's Theory of Set-Complexes)." *JMT* IX/1 (Spring 1965): 163-71.

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A response to Forte's 1964 article; in particular, Clough argues in favor of assigning different names to set classes with the same interval content that are not related by transposition or inversion; Forte adopted this amendment in *The Structure of Atonal Music*.

Forte, Allen. "The Domain and Relations of Set-Complex Theory." *JMT* IX/1 (Spring 1965): 173-80.

A response to Clough.

_____. "Pitch-Class Set Analysis Today." *MA* IV/1 & 2 (March-June 1985): 29-58.

A twenty-year retrospective of the field, discussing the varying uses to which set theory has been put, as well as some related issues.

_____. *The Structure of Atonal Music*. New Haven: Yale University Press, 1973.

The first book-length treatment of set theory in music; includes mathematical developments of the concepts and analytical applications.

_____. "A Theory of Set-Complexes for Music." *JMT* VIII/2 (Fall 1964): 136-83.

The first statement of Forte's formulation of set theory as applied to music.

Howe, Hubert S., Jr. "Some Combinational Properties of Pitch Structures." *PNM* IV/1 (Fall-Winter 1965): 45-61.

An early approach to set theory from a non-serial perspective; deals with many of Forte's concerns, and also discusses multiplicative aspects of set relationships.

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Lewin, David. "Communication." *PNM* IV/1 (Fall-Winter 1965): 182-83.

This and the following three short discussions deal with some topics of continuing interest for Lewin: relationships between collections of notes as defined by the intervals found within and between collections. An early application of these ideas was to invertible hexachords (e.g., in Schoenbergian combinatorial twelve-tone rows), but the principles bear on the intervallic identity of sets in general.

_____. "The Intervallic Content of a Collection of Notes." *JMT* IV/1 Spring 1960): 98-101.

_____. "Intervallic Relations Between Two Collections of Notes." *JMT* III/2 (Fall 1959): 298-301.

_____. "On the Interval Content of Invertible Hexachords." *JMT* XX/2 (Fall 1976): 185-88.

Martino, Donald. "The Source Set and its Aggregate Formations." *JMT* V/2 (Fall 1961): 224-73.

In the context of a discussion of serial music, Martino focuses on sets within a given row. This leads him to an early, detailed examination of the properties of these sets.

Rahn, John. *Basic Atonal Theory*. New York: Longman, 1980.

A pedagogically-oriented text, with careful introductions to mathematical concepts and many exercises; designed for varied learners and learning situations. Contains a substantial bibliography which is cross-referenced but not categorized or annotated. Reviewed by Steven Gilbert, *JMT* XXVI/1 (Spring 1982): 205-07; Robert Morris, *MTS* IV (1982): 138-54; and David Smyth, *PNM* XXII/1 & 2 (1983-4): 549-55.

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4. Secondary, reviews, critiques, extensions

Beach, David. "Pitch Structure and the Analytic Process in Music: An Interpretation of the Theory of Sets." *MTS I* (1979): 7-22.

A very helpful summary and commentary, with suggestions for the application of the theory to analysis.

Benjamin, William. "Ideas of Order in Motivic Music." *MTS I* (1979): 23-34.

An early discussion of the most fruitful ways of applying set-theoretical concepts to analysis; in particular, Benjamin goes beyond the level of surface phenomena in finding significant long-range sets.

_____. "The Structure of Atonal Music by Allen Forte." *PNM XIII/1* (Fall-Winter 1974): 170-90.

A review that critiques various formal and analytical aspects of Forte's book; discusses the extent to which the system is exhaustive and/or applicable as well as such issues as octave equivalence, the set complex, "R" relations, "bip's," segmentation, large-scale (non-surface) sets, and register.

Browne, Richmond. "Review of *The Structure of Atonal Music* by Allen Forte." *JMT XVIII/2* (Fall 1974): 390-415.

Focuses on assumptions of generalization inherent in the system, especially octave equivalence; many important characteristics seem to be generalized out by the system, which favors number-relationships and their derivative (e.g., the set-complex) over more important ways of hearing pieces.

Howe, Hubert S., Jr. "Review of *The Structure of Atonal Music*." *American Society of University Composers Proceedings IX-X* (1974-75): 118-24.

Questions some of the constructs in the book, including the use of the term "set" to mean both a pitch-class set and what is now commonly called a set class or collection class. More generally, questions the whole segmentation-oriented approach.

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Lewin, David. "Forte's Interval Vector, My Interval Function, and Regener's Common-Note Function." *JMT* XXI/2 (Fall 1977): 194-237.

Generalizes and distinguishes among these three overlapping but distinct concepts. While Regener's construct deals with potential common-note relationships, Forte's and Lewin's address intervallic characteristics from harmonic and contrapuntal perspectives, respectively.

Lord, Charles. "Intervallic Similarity Relations in Atonal Set Analysis." *JMT* XXV/1 (Spring 1981): 91-111.

This source and Morris, "A Similarity Index . . ." (see below) are almost identical attempts to quantify relationships between sets based on interval content.

Morris, Robert. *Composition with Pitch-Classes: A Theory of Compositional Design*. New Haven: Yale University Press, 1987.

In this book the author's concerns are integrated with those of the other leading writers in this field to form an extensive discussion of compositional structure based on pitch-class relationships. Review by John Roeder, *MTS* XI/2 (Fall 1989), in press.

_____. "A Similarity Index for Pitch-Class Sets." *PNM* XVIII (1979-80): 445-60.

See Lord, above.

Rahn, John. "Gentle Reminder #1: Two Common-Tone Theorems." *In Theory Only* I/2 (May 1975): 10-11.

An account of mathematical formulae that show how many common pitch classes will result when a given set is transposed or inverted at various levels.

_____. "Relating Sets." *PNM* XVIII (1979-80): 483-98.

An elegant generalization of the Lord-Morris effort (above) in which all subsets of two sets are taken into account in quantifying a relationship between them.

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Regener, Eric. "On Allen Forte's Theory of Chords." *PNM* XIII/1 (Fall-Winter 1974): 191-212.

In this impressive mathematical assessment, various ways of generalizing the theory are demonstrated, some mathematical errors are corrected, and the significance of the "R" relation is questioned. The common-note function and the partition vector are developed, and the set-complex idea is further developed with the use of graph theory. Finally, Regener warns against overconstructing the theory to the exclusion of solving simple problems of application to music.

Teitelbaum, Richard. "Intervallic Relations in Atonal Music." *JMT* IX/1 (Spring 1965): 72-127.

An early, computer-aided study of intervallic characteristics based on segmentation; style conclusions are reached as well as observations about individual works.

5. Supplementary, further extensions, etc.

Browne, Richmond. "Tonal Implications of the Diatonic Set." *In Theory Only* V/6-7 (July-August 1981): 3-22.

Chapman, Alan. "Some Intervallic Aspects of Pitch-Class Set Relations." *JMT* XXV/2 (Fall 1981): 275-90.

Chrisman, Richard. "Describing Structural Aspects of Pitch-Sets Using Successive-Interval Arrays." *JMT* XXI/1 (Spring 1977): 1-28.

_____. "Identification and Correlation of Pitch-Sets." *JMT* XV/1 & 2 (1971): 58-83.

Clough, John. "Aspects of Diatonic Sets." *JMT* XXIII/1 (Spring 1979): 45-61.

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_____. "Diatonic Interval Sets and Transformational Structures." *PNM* XVIII (1979-80): 461-82.

_____. "Use of the Exclusion Relation to Profile Pitch-Class Sets." *JMT* XXVII/2 (Fall 1983): 181-201.

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Hoover, Mark. "Set Constellations." *PNM* XXIII/1 (Fall-Winter 1984): 164-79.

Lansky, Paul. "Pitch-Class Consciousness." *PNM* XIII/2 (Spring-Summer 1975): 30-56.

Lewin, David. "A Label-Free Development for 12-Pitch-Class Systems." *JMT* XXI/1 (Spring 1977): 29-48.

_____. "On Generalized Intervals and Transformations." *JMT* XXIV/2 (Fall 1980): 243-51.

_____. "A Response to a Response: On PCSet Relatedness." *PNM* XVIII (1979-80): 498-502.

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Morris, Robert D. "Set Groups, Complementation, and Mappings Among Pitch-Class Sets." *JMT* XXVI/1 (Spring 1982): 101-44.

Starr, Daniel. "Sets, Invariants, and Partitions." *JMT* XXII/1 (Spring 1978): 1-42.

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III. OTHERS

A. Systems as compositional tools (in addition to many of the set theory and serialism articles; these are generally more personal systems). Some overviews and additional bibliographical information may be found in the *New Grove* articles on the individual composers.

1. General

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2. Bartok

Antokoletz, Elliott. *The Music of Bela Bartok*. Berkeley: University of California Press, 1984.

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Lendvai, Erno. *Bela Bartok: An Analysis of His Music*. London: Kahn & Averill, 1971.

3. Carter

Bernard, Jonathan. "The Evolution of Elliott Carter's Rhythmic Practice." *PNM* XXVI/2 (Summer 1988): 164-203.

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4. Hindemith

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5. Messiaen

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Messiaen, Olivier. *The Technique of My Musical Language*, trans. John Satterfield. Paris: A. Leduc, 1956.

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Samuel, Claude. *Conversations with Olivier Messiaen*, trans. Felix Aprahamian. London: Stainer & Bell, 1976.

6. Partch

Partch, Harry. *Genesis of a Music*, 2nd ed., enl. New York: Da Capo Press, 1974.

Reviewed by Richard Wernick, *JMT* XX/1 (Spring 1976): 133-7.

7. Xenakis

Matossian, Nouritza. *Xenakis*. London: Kahn & Averill, 1986.

Reviewed by Ellen Rennie Flint, *PNM* XXVI/2 (Summer 1988): 308-16.

Xenakis, Iannis. *Formalized Music*. Bloomington: Indiana University Press, 1971.

Zaplitny, Michael. "Conversation with Iannis Xenakis." *PNM* XIV/1 (Fall-Winter 1975): 86-103.

B. Miscellaneous

1. Style analysis (in addition to these sources, many exist that discuss the stylistic traits of individual periods (e.g., Leonard Ratner and Charles Rosen on classical music); some of these may be found in the appropriate volumes of *The Garland Library of the History of Western Music* (cited in section I.C.1.).

Godt, Irving. "Style Periods of Music Considered Analytically." *College Music Symposium* XXIV/1 (Spring 1984): 33-48.

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LaRue, Jan. *Guidelines for Style Analysis*. New York: W. W. Norton & Co., 1970.

Meyer, Leonard. *Music, the Arts, and Ideas*. Chicago: University of Chicago Press, 1967, Part II, pp. 85-232.

_____. *Style and Music: Theory, History, and Ideology*. Philadelphia: University of Pennsylvania Press, 1989.

Discusses how and why styles change; includes a history of 19th-century music and the persistence of Romanticism into the 20th century.

Reti, Rudolph. *Tonality, Atonality, Pantonality*. New York: Macmillan, 1958.

2. Information theory

Coons, Edgar and David Kraehenbuhl. "Information as a Measure of Structure in Music." *JMT* II/2 (November 1958): 127-61.

Hiller, Lejaren and Calvert Bean. "Information Theory Analyses of Four Sonata Expositions." *JMT* X/1 (Spring 1966): 96-137.

Kraehenbuhl, David. "Information as a Measure of the Experience of Music." *Journal of Aesthetics and Art Criticism* XVII/4 (June 1959): 510-22.

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Youngblood, Joel. "Style as Information." *JMT* II/1 (April 1958): 24-46.

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3. Linguistics (some other approaches are cited in the Forte article, "Theory," in the Dictionary of Contemporary Music [see section I.A. of this bibliography], where Forte links linguistic and logical methods)

Lerdahl, Fred, and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge: MIT Press, 1983.

Reviewed by Joseph Swain, *JAMS* XXXVII/1 (Spring 1984): 196-205; John Peel and Wayne Slawson, *JMT* XXVIII/2 (Fall 1984): 271-94; Edwin Hantz, *MTS* VII (Spring 1985): 190-202; and David Harvey, *MA* IV/3 (October 1985): 292-303.

_____. "Toward a Formal Theory of Tonal Music." *JMT* XXI/1 (Spring 1977): 111-74.

4. Semiotics

Overviews: Cook: pp. 151-82; Dunsby/Whittall: 211-31; Bent article: 368, 377-78; Bent book: 66, 96-100.

Coker, Wilson. *Music and Meaning*. New York: The Free Press, 1972.

Reviewed by John Rahn, *PNM* XI/1 (Fall-Winter 1972): 255-7; Frank Howes, *Music and Letters* LIII/4 (October 1972): 437-8; and Forest Hansen, *JMT* XVII/1 (Spring 1973): 172-4.

Dunsby, Jonathan. "Editorial: A Hitch Hiker's Guide to Semiotic Music Analysis." *MA* I/3 (October 1982): 235-42.

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Nattiez, Jean-Jacques. "Varèse's 'Density 21.5': A Study in Semiological Analysis." *MA* I/3 (October 1982): 243-340.

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5. Phenomenology

Batstone, Philip. "Musical Analysis as Phenomenology." *PNM* VII/2 (Spring-Summer 1969): 94-110.

Carpenter, Patricia. "The Musical Object." *Current Musicology* V (1967): 56-87.

Chatterjee, Margaret. "Towards a Phenomenology of Time Consciousness in Music." *Diogenes* LXXIV (Summer 1971): 49-56.

Clifton, Thomas. "Music and the A Priori." *JMT* XVII/1 (1973): 66-85.

_____. *Music as Heard: A Study in Applied Phenomenology*. New Haven: Yale University Press, 1983.

Reviewed by Nicholas Cook, *MA* II/3 (October 1983): 291-94; James Tenney, *JMT* XXIX/1 (Spring 1985): 197-213; Charles J. Smith, *MTS* VII (1985): 207-13; and Frederick Mauk, *JAMS* XXXIX/1 (Spring 1986): 205-9.

_____. "Some Comparisons between Intuitive and Scientific Descriptions of Music." *JMT* XIX/1 (1975): 66-110.

Ferrara, Lawrence. "Phenomenology as a Tool for Musical Analysis." *Musical Quarterly* LXX (1984): 355-73.

Smith, F. Joseph. *The Experiencing of Musical Sound: Prelude to a Phenomenology of Music*. New York: Gordon and Breach Science Publishers, Inc., 1979.

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IV. JOURNALS

Each journal is (usually) followed by the abbreviation used for it in this bibliography (if any), the group(s) responsible for its publication, the starting date of the journal (which can sometimes be indicative of its stability, reputation, degree to which its contents can be reliably described or evaluated, etc.), frequency of appearance per year (which is sometimes variable; the current norm is listed), and comments on its interests, contents, quality, etc. Quotations are taken from the journal itself.

CURRENT TOP-LEVEL THEORY JOURNALS IN ENGLISH

Journal of Music Theory, (JMT) Yale University, 1957-, 2x, attempts broad coverage of music-theory topics; has particularly provided a place for early Schenker and set-theory studies, as well as history of theory and other topics (the twenty-fifth anniversary editorial is of particular interest).

Music Analysis (MA), Basil Blackwell Publisher Ltd. (England), 1982-, 3x, a recent English publication, with many American contributors; leans toward analysis (as the title suggests).

Music Theory Spectrum (MTS), Society for Music Theory, 1979-, 1x (2x starting in 1989), the title reflects this journal's aim at a broad spectrum of topics.

Perspectives of New Music (PNM), initiated at Princeton, now partly sponsored by Princeton, UC-San Diego, University of Washington, and Eastman, 1962-, 2x, traditionally thought of as a voice for composers, at least of certain stripes (the twenty-fifth anniversary Boretz-Berger interview is of interest).

CURRENT MUSIC-THEORETICAL SYSTEMS

HIGHLY SPECIALIZED, LIMITED READERSHIP, OR FOREIGN LANGUAGE

Computers in Music Research, University of Wisconsin and The Wisconsin Center for Music Technology, forthcoming, not limited to theory, but many (perhaps the majority) of its subject areas will relate to theory.

Contemporary Music Review, Harwood Academic Publishers (England), 1984-, variable, a forum for the discussion of "new tendencies in composition."

ex tempore, University of Alberta (Canada), 1981-82, 1985-, 2x, "compositional and theoretical research in music."

Interface, Swets Publishing Service (Netherlands) (but usually English language), 1972-, 4x, "devoted to discussion of all questions which fall into the borderline areas between music on the one hand, and physical and human sciences or related technologies on the other."

Journal of Music Theory Pedagogy, University of Oklahoma, 1987-, 2x, focuses on issues related to the teaching and learning of music theory; review by Robert Batt forthcoming in *MTS*.

Music Forum, Columbia University Press, 1967, irregular issue (six volumes, so far, spanning 1967-1987); has particularly championed Schenker.

Music Perception, University of California at Berkeley, 1983-, 4x, sports an impressive multidisciplinary editorial board; concerned with problems of perception.

Musiktheorie, Laaber-Verlag (West Germany—in German), 1986-, 3x, varied topics.

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GRADUATE-STUDENT-RUN, AND/OR REGIONAL SOCIETY PUBLICATIONS

These journals are produced at schools with large graduate programs in theory. While they often contain valuable articles, they also provide a place for some studies and essays that are offbeat, casual, experimental, works-in-progress, etc. Usually the journal appears in a photocopied, typescript form, presumably to keep expenses low as well as to expedite publication.

Indiana Theory Review, Indiana, 1979-, 2x, varied topics.

Intégral, Eastman, 1987-, 1x, "to address the practical applications of music theory."

In Theory Only, Michigan, 1975-, 8x, probably the best-known of this category at this point. •

Theoria, North Texas State, 1985-, 1x, concentrates on history of theory.

Theory and Practice, City University of New York and the Music Theory Society of New York State, 1975-, 2x, varied topics.

IMPORTANT BUT DISCONTINUEDs

American Society of University Composers Proceedings, about twelve years' worth from 1966 on.

Die Reihe, eight volumes in English translation; originally published 1955-62; a voice for the ultra-serialist viewpoint (the title translates as "the series").

CURRENT MUSIC-THEORETICAL SYSTEMS

These are the most important journals with a specifically theoretical purpose; others (especially small graduate-student-type) surely exist. However, it is important to remember that many articles that are valuable from the theorist's perspective can be found in journals of somewhat broader scope. Some of the leading ones of these are *Musical Quarterly*, *Journal of the American Musicological Society* (JAMS), *Journal of Musicological Research*, *19th-Century Music*, *Symposium*, *Music & Letters*, *The Score* and *I. M. A. Magazine*, *MLA Notes*, *Music Review*, *Acta Musicologica*, *Critical Inquiry*, *Journal of Aesthetics and Art Criticism*, etc. One might also check a directory of periodicals, such as *Ulrich's International Periodicals Directory* (25th ed: 1986-7, or whatever the latest edition is, New York: R. R. Bowker Co., 1986) or Bill Katz and Linda Sternberg's *Magazines for Libraries* (5th ed., New York: R. R. Bowker Co., 1986).