Third Edition

Tonal Harmony

With an Introduction to Twentieth-Century Music

Stefan Kostka & Dorothy Payne

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Stefan Kostka holds degrees in music from the University of Colorado and the University of Texas and received his Ph.D. in music theory from the University of Wisconsin. He was a member of the faculty of the Eastman School of Music from 1969 to 1973. Since that time he has been on the faculty of the University of Texas at Austin. Dr. Kostka initiated courses in computer applications in music at both the Eastman School and the University of Texas. More recently he has specialized in courses in atonal theory and contemporary styles and techniques, interests that have led to a second book, *Materials and Techniques of Twentieth-Century Music.* Dr. Kostka is active in various professional organizations and currently serves on the editorial board of *College Music Symposium.*

Dorothy Payne presently serves as Director of the School of Music at the University of Arizona. A graduate of the Eastman School of Music, she holds bachelor's and master's degrees in piano performance, and a Ph.D. in music theory. Before assuming her duties in Tucson, she occupied the position of Music Department Head at the University of Connecticut. Previous faculty appointments were held at the University of Texas at Austin, the Eastman School of Music, and Pacific Lutheran University. She has been the recipient of teaching excellence awards at both the Eastman School and the University of Texas. In addition to remaining active as a performer, Payne has presented lectures and workshops on theory pedagogy at meetings of professional societies. She presently serves as an elected member of the National Association of Schools of Music Accreditation Commission.

Preface

Tonal Harmony with an Introduction to Twentieth-Century Music is intended for a two-year course in music theory/harmony. It offers a clear and thorough introduction to the resources and practice of Western music from the seventeenth century to the present day. Its concise, one-volume format and flexible approach make the book usable in a broad range of theory curricula.

APPROACH

The text provides students with a comprehensive but accessible and highly practical set of tools for the understanding of music. Actual musical practice is stressed more than rules or prohibitions. Principles are explained and illustrated, and exceptions are noted.

In its presentation of harmonic procedures, the text introduces students to the most common vocal and instrumental textures encountered in tonal music. Traditional four-part chorale settings are used to introduce many concepts, but three-part instrumental and vocal textures are also presented in illustrations and drill work, along with a variety of keyboard styles. To encourage the correlation of writing and performing skills, we have included musical examples in score and reduced-score formats, as well as charts on instrumental ranges and transpositions. Some of the assignments ask the student to write for small ensembles suitable for performance in class. Instructors may modify these assignments to make them most appropriate for their particular situations.

PEDAGOGICAL FEATURES

The text employs a variety of techniques to clarify underlying voice leading, harmonic structure, and formal procedures. These include textural reductions, accompanying many of the examples, which highlight chordal motion. Our goal has been to elucidate tonal logic at the phrase and section level as well as from one chord to the next. Abundant musical illustrations,

many with commentaries, serve as a springboard for class discussion and individual understanding.

The book provides an extensive series of review material. A large portion of the text is devoted to Self-Tests, consisting of student-graded drills in chord spelling, part writing, and analysis, with suggested answers given in Appendix B. The Self-Tests can be used for in-class drill and discussion, in preparation for the Workbook exercises, or for independent study. Periodic Checkpoints enable students to gauge their understanding of the preceding material. Chapter summaries highlight the key points of each chapter.

ORGANIZATION

Part One (Chapters 1-4) begins the text with a thorough but concise overview of the fundamentals of music, divided into one chapter each on pitch and rhythm. Chapters 3 and 4 introduce the student to triads and seventh chords in various inversions and textures, but without placing them yet in their tonal contexts.

Part Two (Chapters 5-12) opens with two chapters on the principles of voice leading, with practice limited to root position triads. Chapter 7 follows with a systematic discussion of normative harmonic progressions. Subsequent chapters deal with triads in inversion (Chapters 8 and 9), basic elements of musical form (Chapter 10), and non-chord tones (Chapters 11 and 12).

Part Three (Chapters 13-15) is devoted entirely to diatonic seventh chords, moving from the dominant seventh in root position and inversion (Chapter 13) through the supertonic and leading-tone sevenths (Chapter 14) to the remaining diatonic seventh chords (Chapter 15).

Part Four begins the study of chromaticism with secondary functions (Chapters 16-17) and modulation (Chapters 18-19), concluding in Chapter 20 with a discussion of binary and ternary forms. Chromaticism continues to be the main topic in Part Five (Chapters 21-26), which covers mode mixture, the Neapolitan, augmented sixth chords, and enharmonicism. Some further elements, ninth chords and altered dominants among them, are the subject of the final chapter of this section.

Part Six, "Late Romanticism and the Twentieth Century," begins in Chapter 27 with a discussion of the developments and extensions in tonal practice that occurred in later nineteenth-century music. The concluding chapter provides an extensive introduction to major twentieth-century practices.

SUPPLEMENTARY MATERIALS

Workbook

Exercises in the Workbook are closely correlated with the corresponding chapters of the text. In each chapter, the Workbook exercises begin with problems similar to those found in the Self-Tests, but also incorporate more creative types of compositional problems for those instructors who include this type of work.

Cassettes

This third edition is accompanied by a new listening program, designed to make it easier to hear the text and Workbook's numerous examples. A set of two cassettes is available for the text (text cassettes order code: 911862-3), and one cassette is available with the Workbook (Workbook cassette order code: 911864-X), offering 400 selections in all. All examples were recorded using the same instrumentations seen in text and Workbook examples.  A headset icon, as shown at left, indicates that a piece is contained on the cassettes.

Instructor's Manual

The Instructor's Manual follows the organization of the text and provides teaching notes, a key to "objective" exercises from the Workbook, sources from the literature for part writing exercises and composition assignments, and chapter quizzes.

NEW TO THIS EDITION

Chapter 2, "Elements of Rhythm," has been expanded, and two new sets of exercises have been added.

Because of its length, Chapter 5, "Principles of Voice Leading," has been divided into two chapters (5 and 6) in the present edition, with an expanded discussion of instrumental ranges and transpositions at the end of the new Chapter 6.

The chapter on triads in first inversion is now followed immediately by the chapter on triads in second inversion. These are followed by Chapter 10, "Cadences, Phrases, and Periods," which used to separate them.

The chapter entitled "Levels of Harmony," has been withdrawn from this edition. However, teachers interested in obtaining copies of this chapter from the second edition may do so by writing to McGraw-Hill.

Explanations and discussions have been improved and clarified throughout, with additional examples and Self-Tests. There have been some minor adjustments in terminology, such as the substitution of "major-minor seventh" for "dominant seventh" when referring to chord quality.

New summaries have been added to the end of each chapter to assist the student in reviewing the material.

The Workbook contains a number of new analytical exercises.

The Instructor's Manual has been expanded considerably. Each chapter now includes a chapter quiz (in some cases more than one) which the instructor may duplicate and use in class.

Most exciting, perhaps, is the availability in recorded form of many of the musical examples in the third edition. These recordings are, in most cases, of fine student musicians, and they should add considerably to the effectiveness of this text.

ACKNOWLEDGMENTS

Many colleagues and friends provided assistance and encouragement during the development of the first edition of this text, notably Professors Douglass Green, Jerry Grigadean, and Janet McGaughey. Reviewers of the manuscript contributed many helpful suggestions; our sincere thanks are extended to Judith Allen, University of Virginia; Michael Arenson, University of Delaware; B. Glenn Chandler, Central Connecticut State College; Herbert Colvin, Baylor University; Charles Fligel, Southern Illinois University; Roger Foltz, University of Nebraska, Omaha; Albert G. Huetteman, University of Massachusetts; William Hussey, University of Texas at Austin; Hanley Jackson, Kansas State University; Marvin Johnson, University of Alabama; Frank Lorince, West Virginia University; William L. Maxson, Eastern Washington University; Leonard Ott, University of Missouri; John Pozdro, University of Kansas; Jeffrey L. Prater, Iowa State University; Russell Riepe, Southwest Texas State University; Wayne Scott, University of Colorado; Richard Soule, University of Nevada; James Stewart, Ohio University; William Toutant, California State University at Northridge; and John D. White, University of Florida.

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Finally, we would express gratitude to Mary Robertson for her love and inspiration, and to Bill Penn for his unfailing encouragement.

Stefan Kostka
Dorothy Payne

To the Student

HARMONY IN WESTERN MUSIC

One thing that distinguishes Western art music from many other kinds of music is its preoccupation with harmony. In other words, just about any piece that you are apt to perform will involve more than one person playing or singing different notes at the same time–or, in the case of a keyboard player, more than one finger pushing down keys. There are exceptions, of course, such as works for unaccompanied flute, violin, and so on, but an implied harmonic background is often still apparent to the ear in such pieces.

In general, the music from cultures other than our own European-American culture is concerned less with harmony than with other aspects of music. Complexities of rhythm or subtleties of melodic variation, for example, might serve as the focal point in a particular musical culture. Even in our own music, some compositions, such as those for nonpitched percussion instruments, may be said to have little or no harmonic content, but they are the exception.

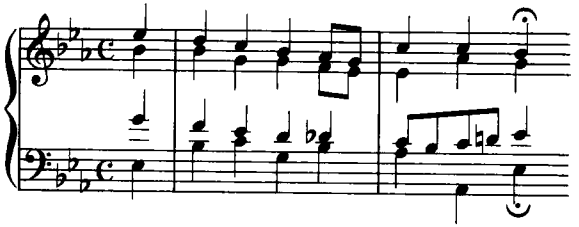
If harmony is so important in our music, it might be a good idea if we agreed on a definition of it. What does the expression *sing in harmony* mean to you? It probably conjures up impressions of something on the order of a barbershop quartet, or a chorus, or maybe just two people singing a song, one with the melody, the other one singing the harmony. Since harmony began historically with vocal music, this is a reasonable way to begin formulating a definition of harmony. In all of these examples, our conception of harmony involves more than one person singing at once, and the *harmony* is the sound that the combined voices produce.

> Harmony is the sound that results when two or more pitches are performed simultaneously. It is the vertical aspect of music, produced by the combination of the components of the horizontal aspect.

While this book deals with harmony and with chords, which are little samples taken out of the harmony, it would be a good idea to keep in mind that musical lines (vocal or instrumental) produce the harmony, not the reverse.

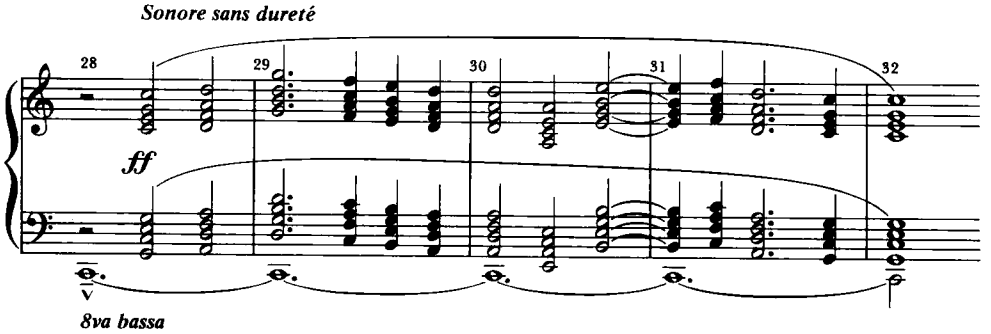
Sing through the four parts in Example 1. The soprano and tenor lines are the most melodic. The actual melody being harmonized is in the soprano, while the tenor follows its contour for a while and then ends with an eighth-note figure of its own. The bass line is strong and independent but less melodic, while the alto part is probably the least distinctive of all. These four relatively independent lines combine to create harmony, with chords occurring at the rate of approximately one per beat.

Example 1. Bach, "Herzlich lieb hab' ich dich, o Herr"



The relationship between the vertical and horizontal aspects of music is a subtle one, however, and it has fluctuated ever since the beginnings of harmony (about the ninth century). At times the emphasis has been almost entirely on independent horizontal lines, with little attention paid to the resulting chords—a tendency easily seen in the twentieth century. At other times the independence of the lines has been weakened or is absent entirely. In Example 2 the only independent lines are the sustained bass note and the melody (highest notes). The other lines merely double the melody at various intervals, creating a very nontraditional succession of chords.

Example 2. Debussy, "La Cathédrale engloutie," from *Preludes*, Book I

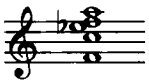


TONAL HARMONY DEFINED

The kind of harmony that this book deals with primarily is usually called *tonal harmony.* The term refers to the harmonic style of music composed during the period from about 1650 to about 1900. This would include such composers as Purcell, Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Schumann, Wagner, Brahms, Tchaikovsky, and all of their contemporaries.

Much of today's popular music is based on tonal harmony, just as Bach's music was, which means that both types have a good deal in common. First, both make use of a *tonal center,* a pitch class* that provides a center of gravity. Second, both types of music make use almost exclusively of major and minor scales. Third, both use chords that are tertian in structure. *Tertian* means "built of thirds," so a tertian chord might be C-E-G, a nontertian one C-F-B. Fourth, and very important, is that the chords built on the various scale degrees relate to one another and to the tonal center in fairly complex ways. Because each chord tends to have more or less standard roles, or functions, within a key, this characteristic is sometimes referred to as *functional* harmony. The details of these relationships between chords will be discussed more fully in the text; but to get an idea of what it's all about, play the chord of Example 3 on the piano.†

Example 3.

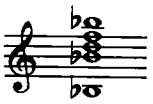


Play it several times. Arpeggiate it up and down. The "function" of this chord is clear, isn't it? Somehow, you know a lot about this chord without having to read a book about it. Play it again, and listen to where the chord "wants" to go. Then play Example 4, which will seem to follow Example 3 perfectly. This is an example of what is meant by the relationships between chords in tonal harmony and why we sometimes use the term *functional harmony.*

*Pitch class: Notes an octave apart or enharmonically equivalent belong to the same pitch class (all C's, B♯'s, and D𝄫's, for example). There are twelve pitch classes in all.

†If you cannot arrange to be at a piano while reading this book, try to play through the examples just before or right after reading a particular section or chapter. Reading about music without hearing it is not only dull, it's uninformative.

Example 4.



Tonal harmony is not limited to the period 1650-1900. It began evolving long before 1650, and it is still around today. Turn on your radio, go to a nightclub, listen to the canned music in the supermarket—it's almost all tonal harmony. Then why do we put the demise of tonal harmony at 1900? Because from about that time, most composers of "serious," or "legitimate," or "concert" music have been more interested in nontonal harmony than in tonal harmony. This does not mean that tonal harmony ceased to exist in the real world or in music of artistic merit. Also, it is important to realize that not all music with a tonal center makes use of functional harmony—especially a good deal of the music of the twentieth century—music by composers such as Bartók and Hindemith, for example.

From our discussion we can formulate this definition of tonal harmony:

> Tonal harmony refers to music with a tonal center, based on major and/or minor scales, and using tertian chords that are related to one another and to the tonal center in various ways.

USING THIS TEXT

The information in this text is organized in the traditional chapter format, but there are several additional features of which you should be aware.

Self-Tests.

All chapters contain one or more such sections. These Self-Tests contain questions and drill material for use in independent study or classroom discussion. Suggested answers to all Self-Test problems appear in Appendix B. In many cases more than one correct answer is possible, but only one answer will be given in Appendix B. If you are in doubt about the correctness of your answer, ask your instructor.

Exercises.

After each Self-Test section, we refer to a group of Exercises to be found in the Workbook. Most of the Workbook Exercises will be similar to those in the preceding Self-Test, so refer to the Self-Test if you have questions concerning completion of the Exercises. However, the Workbook will also often contain more creative compositional problems than appeared in the Self-Test, since it would be impossible to suggest "answers" to such problems if they were used as Self-Tests.

Checkpoints.

You will occasionally encounter a Checkpoint section. These are intended to jog your memory and to help you review what you have just read. No answers are given to Checkpoint questions.

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