

Music Theory Resource Book



Harold Owen

School of Music The University of Oregon

江苏工业学院图书馆 藏 书 章

New York Oxford OXFORD UNIVERSITY PRESS 2000

Oxford University Press

Oxford New York
Athens Auckland Bangkok Bogotá Buenos Aires Calcutta
Cape Town Chennai Dar es Salaam Delhi Florence Hong Kong Istanbul
Karachi Kuala Lumpur Madrid Melbourne Mexico City Mumbai
Nairobi Paris São Paulo Singapore Taipei Tokyo Toronto Warsaw

and associated companies in Berlin Ibadan

Copyright © 2000 by Oxford University Press, Inc.

Published by Oxford University Press, Inc. 198 Madison Avenue, New York, New York 10016 http://www.oup-usa.org

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Oxford University Press.

Library of Congress Cataloging-in-Publication Data

Owen, Harold.

Music theory resource book / Harold Owen.
p. cm.
ISBN-13 978-0-19-511539-0
ISBN 0-19-511539-2
1. Music—Theory. I. Title.

MT6.088M87 2000

781—dc21

99-21158 CIP

Printing (last digit): 9 8 7 6 5 4

Printed in the United States of America on acid-free paper

Preface

This book is offered as a resource of musical examples, information, and exercises for first- and second-year college music theory courses and for graduate courses in theory review. The musical examples at the beginning of each chapter are for the most part complete compositions. They can serve as a basic anthology and as the focus for the discussion questions that follow them. The information is given succinctly in outline form, which can serve as a point of departure for the instructor's own style of explanation and demonstration. The outline format will be useful to the students for reference and review. The exercises at the end of each chapter offer a variety of tasks ranging in difficulty from easier ones, designed for all students, to others marked with an asterisk, intended for students with more extensive background, higher skills, and talent. Some are analytical, while others offer problems in scoring, arranging, or simple composition.

Several features not normally found in basic theory texts are a summary of basic acoustics, standard notation practices, music in two and three parts (including the basic principles of counterpoint), jazz harmony, techniques borrowed from musics of non-Western cultures, and two chapters on techniques developed in the twentieth century (Chapter 19 deals with music from 1900–1950; Chapter 20 deals with music since 1950). The musical examples represent a wide variety of periods and genres, including, for example, a mass movement by Josquin des Prez, a Russian folk tune, the lead sheet of a popular song, a humorous choral piece by William Billings, a North Indian raga, variations by Beethoven and Brahms, a chromatic motet by Lassus, and an organ work from the 1980s by Messiaen. Bach, Schumann, Chopin, Mozart, Franck, Debussy, Bartók, Hindemith, Dallapiccola, Stravinsky, Crumb, and Pärt also are represented, as well as several examples I composed especially for this book.

While *Music Theory Resource Book* is not intended as a primary resource in the area of music history, it discusses styles of various periods and examines types of music from all major periods, jazz and folk music, and musics of non-Western cultures. The Style Profiles in Appendix A can provide students with a historical perspective of styles in terms of the musical dimensions of pulse, rhythm and meter, melody, harmony, tonality, genres and structures, texture, and color. For those interested in figured bass realization, Appendix B gives details on this subject using as an example a continuo realization of the opening of the Trio Sonata from *The Musical Offering*, done by a student of Bach.

Analysis is generally limited to the basic building blocks of "musical grammar," but also extends to structural units (motive, subphrase, phrase, period, and small forms). A summary of the basic configuration of larger forms is included. Analytical techniques such as those developed by Schenker, LaRue, and Forte are not discussed, since students will meet them in courses on form and analysis.

xii Preface

Suggestions for the Student

Before a chapter is to be taken up by the class, study each of the examples carefully. Play them on the piano or sing the various parts if you can. See how many of the discussion questions you can answer. Then study the *Definitions, Principles, and Observations* given, and jot down items you wish to have explained more fully in class. Take an active part in the class discussions, and don't be afraid to ask questions. Take part in the class performances of the examples and exercises. Before you hand in your assigned work, make sure you have checked it carefully for clear and proper notation (or good English when asked for prose responses).

Suggestions for the Instructor

Whenever possible, have the class perform, or play recordings of the examples at the beginning of each chapter. Be prepared with additional examples. Use the discussion questions to focus the students on the principles exemplified in the music. The information in the *Definitions, Principles, and Observations* sections have been kept concise, inviting you to explain, amplify, and demonstrate in your own way. Make careful and appropriate assignment of exercises. You may wish to choose from those given. Those marked with an asterisk are for those students ready for special challenges. You may wish to invite students to do them for extra credit. I have found that students appreciate a touch of humor from time to time, and you will find it in several of the exercises.

If you are using this book as a secondary text, you will find the musical examples, discussion questions, and exercises useful. The text information can be used for review and summary. Since the chapters are relatively self-contained, you can select materials in whatever order works best with your primary text and your own preferences.

If you are using this book for a graduate theory review course, a comprehensive diagnostic test given at the beginning of the course will indicate the students' strengths and weaknesses. Some chapters can be covered quickly, and some will need in-depth study. Assignments can be a sampling of the easier and the more challenging exercises. Your students are likely to have very diverse skills and knowledge; you may wish to assign different exercises to different students. A lively discussion among the students, each contributing his or her own knowledge and experience, can be much more valuable than pure lecture.

Contents

Preface xi

PART ONE Chapter 1 THE NATURE OF MUSIC 3 **Questions for Discussion** Definitions, Principles, and Observations 6 A. Definitions B. Dimensions 6 C. Style D. Texture 6 E. Sources **Exercises** 7 Chapter 2 THE PHYSICAL PROPERTIES OF MUSIC 9 **Questions for Discussion** 9 Definitions, Principles, and Observations 9 A. Sound generation and propagation B. Properties of waves 10 C. Amplification, resonance, and reverberation 10 D. Tone quality or timbre 11 E. Envelope 11 F. Beats, interference, difference tones 12 G. Intervals and chords 12 H. Temperament and tuning 12 I. Octave designation Exercises 14

Chapter 3 THE NOTATION OF MUSIC		16
Questions for Discussion 17		10
Principles and Practices 17		
A. Basic conventions for Western music nota	tion eveteme	
past and present 18	don systems,	
B. Summary of present standard practices in	Western	
music notation 18		
Exercises 21		
Chapter 4		
THE TEMPORAL DIMENSION		24
Questions for Discussion 29		
Definitions, Principles, and Observations	29	
A. Definitions 30		
B. Mechanics of meter 30		
C. Time signatures 30		
D. Symbols 31 E. Beams and ties 32		
F. Tuplets 34		
G. Anacrusis 34		
H. Metric displacement devices 34		
I. Some special cases 35		
Exercises 36		
Chapter 5		
THE PITCH DIMENSION		38
Questions for Discussion 40		
Definitions, Principles, and Observations	40	
A. Tonality 40		
B. Pitch naming and notation 41		
C. Scale structures 42		
Notes on the Scale Structures Chart 44		
D. Clefs 45		
E. Signatures 46		
F. Intervals 47		
Interval Chart 47		
G. Nontonal pitch organization 49		
Exercises 49		
Chapter 6		
THE STRUCTURAL DIMENSION:		
Characteristics of Melody		51
Questions for Discussion 52		
Definitions, Principles, and Observations	52	
A. Definitions 52		
B. Melodic contour in Western music 53		

CONTENTS

C. Unifying and diversifying elements 53	
D. Common melodic structures 54	
E. Structure and tonality 54	
F. Basic and decorative pitches 54	
G. Melodic reduction and elaboration 57	
Exercises 58	
Chapter 7	
THE ANATOMY OF CHORDS	59
Questions for Discussion 62	
Definitions, Principles, and Observations 62	
A. Definitions 62	
B. Types and construction of chords in root position 63	
C. The inversion of chords 64	
D. Identifying chords in a figured bass 65	
E. Suggestions for identifying vertical sonorities in musical scores	66
F. Interpretation of chord symbols used in jazz and popular music	66
Exercises 67	
Chapter 8	
MUSIC IN TWO PARTS	70
Questions for Discussion 72	
Definitions, Principles, and Observations 73	
A. Definitions 74	
B. Summary of basic principles in two-part counterpoint 76	
C. Compound melody 78	
D. Elaboration of a simple two-voice theme 78	
E. Choosing chords for a lead sheet 79	
F. Reduction to a two-voice framework 80	
Exercises 81	
Chapter 9	
MUSIC IN THREE OR MORE PARTS	84
Questions for Discussion 87	
Definitions, Principles, and Observations 87	
A. The roman numeral system 87	
B. Primary, secondary, and modal chords 89	
C. Root movement 89	
D. Cadences 90	
E. Principles of part writing 91	
Exercises 94	
Chapter 10	
ALTERED CHORDS I: Secondary Dominants	97
Questions for Discussion 102	
Definitions, Principles, and Observations 102	
A. Secondary dominant chords 102	
Exercises 104	

PART TWO

Chapter 11 TEXTURE AND VARIATION	109
Questions for Discussion 111	103
Definitions, Principles, and Observations 112	
A. Terms used to describe musical textures 112	
B. Other factors that affect texture 113	
C. Variation types and techniques 113	
Exercises 114	
Exercises 114	
Chapter 12	
ALTERED CHORDS II: The Augmented Sixth	110
Chords and the Neapolitan Sixth Chord	116
Questions for Discussion 119	
The Augmented Sixth Chords 119	
A. Harmonic function 119	
B. Construction 119	
C. Resolution 120	
D. Where to find them 121	
The Neapolitan Sixth Chord 121	
A. Harmonic function 121	
B. Construction 122	
C. Resolution 122	
D. Where to find them 123	
Exercises 123	
Chapter 13	
ALTERED CHORDS III: Third Relation,	
Borrowed Chords, and Irregular Resolution	125
Questions for Discussion 128	
Definitions, Principles, and Observations 129	
Third Relation 129	
A. Third relations with two common tones 129	
B. Third relations with one common tone 129	
C. Third relations with no common tones 130	
D. Dominant seventh chords may be used in third relation	130
E. Voice leading and doubling 130	
Borrowed Chords 131	
A. In minor keys 131	
B. In major keys 131	
Irregular Resolution of Dominant Seventh Chords and Diminished Seventh Chords 132	
A. Irregular resolution of dominant seventh chords 132 B. Irregular resolution of diminished seventh chords 133	
Exercises 134	

Chapter 14 MODULATION—LARGER FORMS	137
Questions for Discussion 139	101
Definitions, Principles, and Observations 140	
Modulation 140	
A. Definition of terms 140	
B. Permanence of the key change 140	
C. Key relationships 140	
D. Requirements for smooth modulation 141	
E. Types of modulation 141	
Larger Forms 142	
A. Forms based on the ternary scheme 142	
B. Sonata forms 142	
C. Rondo forms 143	
D. Sonata-rondo 143	
E. Fugue 144	
Exercises 145	
Chapter 15	
EXTENDED CHORDS, ADDED TONES,	
AND JAZZ HARMONY	149
Questions for Discussion 152	
Definitions, Principles, and Observations 153	
Extended Chords 153	
A. Ninth chords 153	
B. Eleventh chords 153	
C. Thirteenth chords 154	
Chords with Added Tones 155	
A. Added sixth 155	
B. Added second 155	
C. Added minor third 156	
Jazz Harmony 156	
A. Chord vocabulary 156	
B. Common jazz chord progressions and patterns 157	
C. Chord substitution and harmonic elaboration 158	
Exercises 162	
Chapter 16	
CHROMATIC HARMONY	165
Questions for Discussion 167	
Definitions, Principles, and Observations 168	
A. The modulating sequence 168	
B. Deceptive progressions 170	
C. Progression by chord alteration 170	
Exercises 172	

Chapter 17 THE MUSIC OF RAVEL AND DEBUSSY	174
Questions for Discussion 178	* * *
Definitions, Principles, and Observations 178	
A. Sonorities 179	
B. Harmonic progression 180	
C. Melody 180	
D. Tonality 181	
E. Temporal characteristics 181	
F. Texture 181	
Exercises 181	
Datitises 101	
Chapter 18 TECHNIQUES BORROWED FROM THE MUSICS OF NON-WESTERN CULTURES	183
Questions for Discussion 190	
Definitions, Principles, and Observations 190	
Techniques in the Temporal Dimension 190	
A. Polyrhythm 190	
B. Pulse and meter 191	
Techniques in the Pitch Dimension 191	
A. Scale structures 191	
B. Melody 192	
Color and Texture 193	
A. Vocal and instrumental color 193	
B. Texture 193	
C. Unique traits of Western music before the twentieth century 193	
Exercises 194	
Chapter 19	
TECHNIQUES DEVELOPED IN THE FIRST	
HALF OF THE TWENTIETH CENTURY	199
Questions for Discussion 203	
Definitions, Principles, and Observations 204	
Alternatives to the Major-Minor Tonal System 204	
A. Polytonality 204	
B. Degree inflection 205	
C. Pandiatonicism 205	
D. Pitch collections other than major and minor 206	
E. Quartal harmony 206	
F. Free atonality 207	
G. Twelve-tone serialism 207	
New Techniques 208	
A. In the pitch dimension 208	
B. In the temporal dimension 210	
C. Other techniques 210	
Exercises 211	

Chapter 20 TECHNIQUES DEVELOPED IN THE SECOND HALF OF THE TWENTIETH CENTURY

214

Questions for Discussion 223

Definitions, Principles, and Observations 223

- A. Developments in serial technique 224
- B. Variety in the degree of control by composer and performers 224
- C. Electronic and computer-generated music 224
- D. Infusion of jazz, pop, folk, and non-Western musics 225
- E. Texture and timbre 225
- F. Minimalist music 226
- G. "The New Romanticism" 226

Exercises 227

Appendix A: Style Profiles 231

Appendix B: A Guide to Figured Bass Realization 244

Glossary 251

Index 255

Part One

			-
			· in the second
			_
			-
			_
			_
			4
			4
			4
			4
			•
			4
			•
			4
			•
			4
			•
			•
			·
			_
			_
			4
			4
			4
			4
			•
			•
		*	•
			`
			(
			ı
			1

CHAPTER 1

THE NATURE OF MUSIC

Study these scores as you consider the questions that follow them.

Example 1-1 Von fremden Ländern und Menschen from *Kinderszenen*, Op. 15 by Robert Schumann (1810–1856).

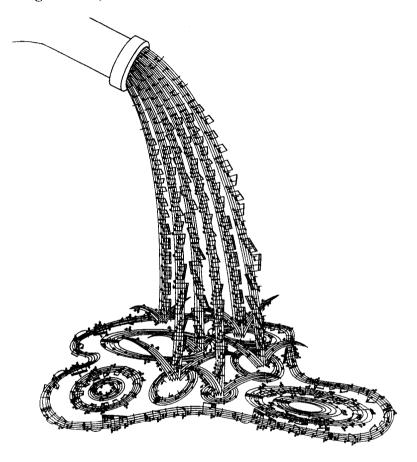


Example 1-2 Jazz solo on "Cherokee" by Charlie Parker (1920–1955), transcribed by Carl Woideck. (Used by permission of Carl Woideck.)



THE NATURE OF MUSIC 5

Example 1-3 "to the last drop" from visible musics by William Hellerman (b. 1939) (© 1973 by William Hellermann—All rights reserved. Parts available through American Composers Alliance, 170 W. 74th St., NY, NY 10023. "to the last drop" for six mallet instruments by William Hellermann. This piece is one of a series of works with the group title, *Eye Scores*. First performed at the Kitchen performance space in New York City, 1978, by six vibraphones positioned around the perimeter of the space. A realization of the score can include taped sounds of water and visuals relating to water.)



QUESTIONS FOR DISCUSSION

- 1. What is music? How would you describe it to an English-speaking alien?
- 2. Name as many kinds of music as you can. What kinds are written down and what kinds are not?
- 3. What kinds of music are made up on the spot?
- 4. What is an arrangement?
- 5. What is music made of—what are its elements or dimensions?
- 6. What is meant by musical style?
- 7. What is meant by musical texture?
- 8. How do we know what music was like before our own century?
- 9. Most music we know requires three types of musicians: a composer, one or more performers, and an audience. Can you think of music that alters this formula?