

## Learn the fundamentals of harmony by furthering your music theory background.

When you can read basic music notation and recognize common scales, as presented in the first book of this series, *Berklee Music Theory 1*, you'll be ready to learn the fundamentals of harmony.

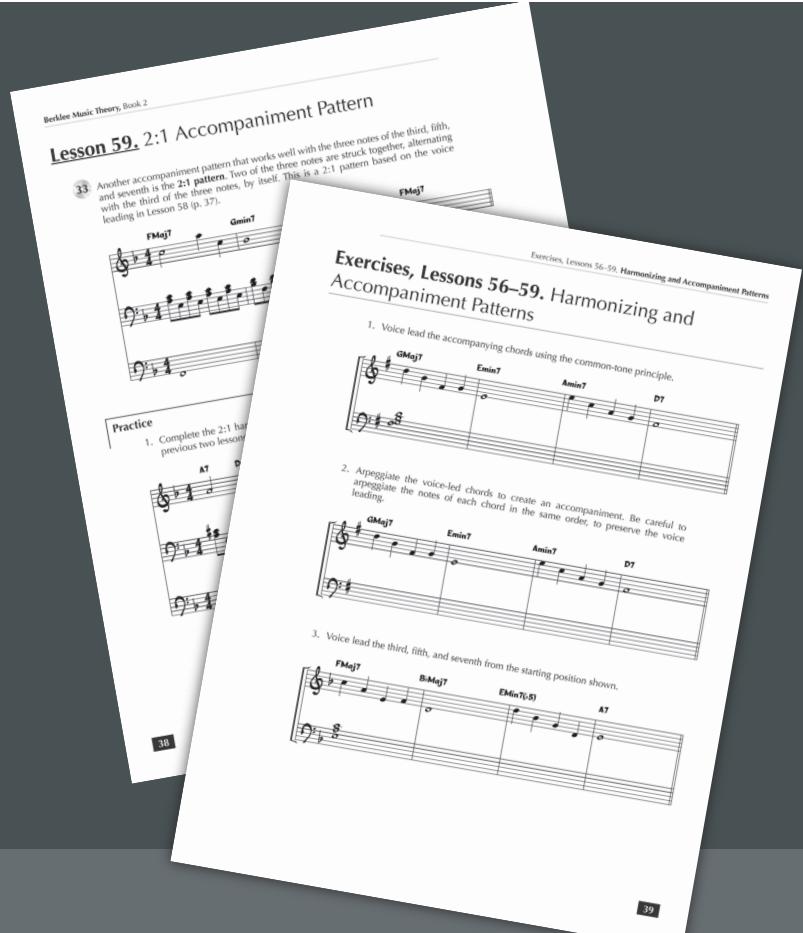
*Berklee Music Theory 2* features hands-on exercises and ear-training activities to help you use chords effectively. You will learn basic triads and seventh chords, inversions, voice-leading, how to use chords to accompany melodies, and how to create melodies that grow out of chord progressions.

Learn to:

- Interpret chord symbols so that you can create grooves, melodies, and accompaniments
- Understand the harmonic building blocks of contemporary harmony, as used in contemporary, jazz, and popular music styles
- Train your ear to distinguish between different chord types
- Use different voicings to create professional-sounding harmonic progressions
- Create singable, memorable melodies

The *Berklee Music Theory* series is essential for anyone who wants to play better, learn how to read, write and understand the elements of music, and create their own songs and arrangements. It is based on contemporary, jazz, and popular music styles.

**PAUL SCHMELING**, Chair Emeritus of the Piano Department at Berklee College of Music, is a master pianist, interpreter, improviser, and arranger. He has inspired countless students, and has performed or recorded with such jazz greats as George Coleman, Herb Pomeroy, and Slide Hampton. He is the co-author of *Instant Keyboard* and the *Berklee Practice Method: Keyboard*.



"If you've been looking for a basic music theory book, your search is over. **Berklee Music Theory** is the 'go to' volume — clear, concise, and complete. Paul Schmeling's explanations of the fundamentals of music provide a strong foundation for the aspiring musician, and is a valuable resource for teachers as well. **Berklee Music Theory** effectively integrates examples with exercises and ear training. This essential volume should be required reading in music schools and universities. Highly recommended!"

—Andy LaVerne, Jazz Pianist, Composer, Author, Educator, *Keyboard* magazine contributor

Cover design: David Ehlers

U.S. \$19.95



8 84088 00576 4

HL50448062



Berklee Press, a publishing activity of Berklee College of Music, is a not-for-profit educational publisher. Available proceeds from the sales of our products are contributed to the scholarship funds of the college.

Want more books and DVDs like this?  
[BERKLEEPRESS.COM](http://BERKLEEPRESS.COM)

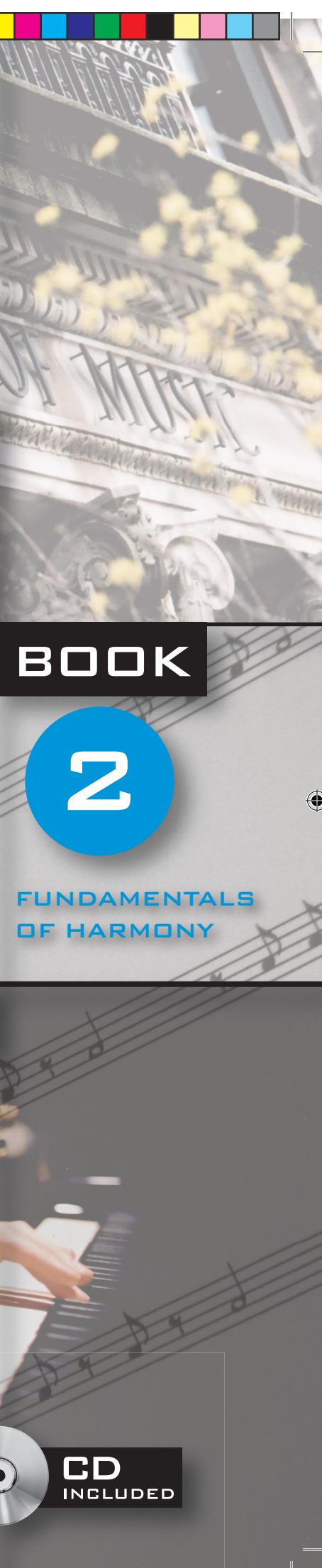
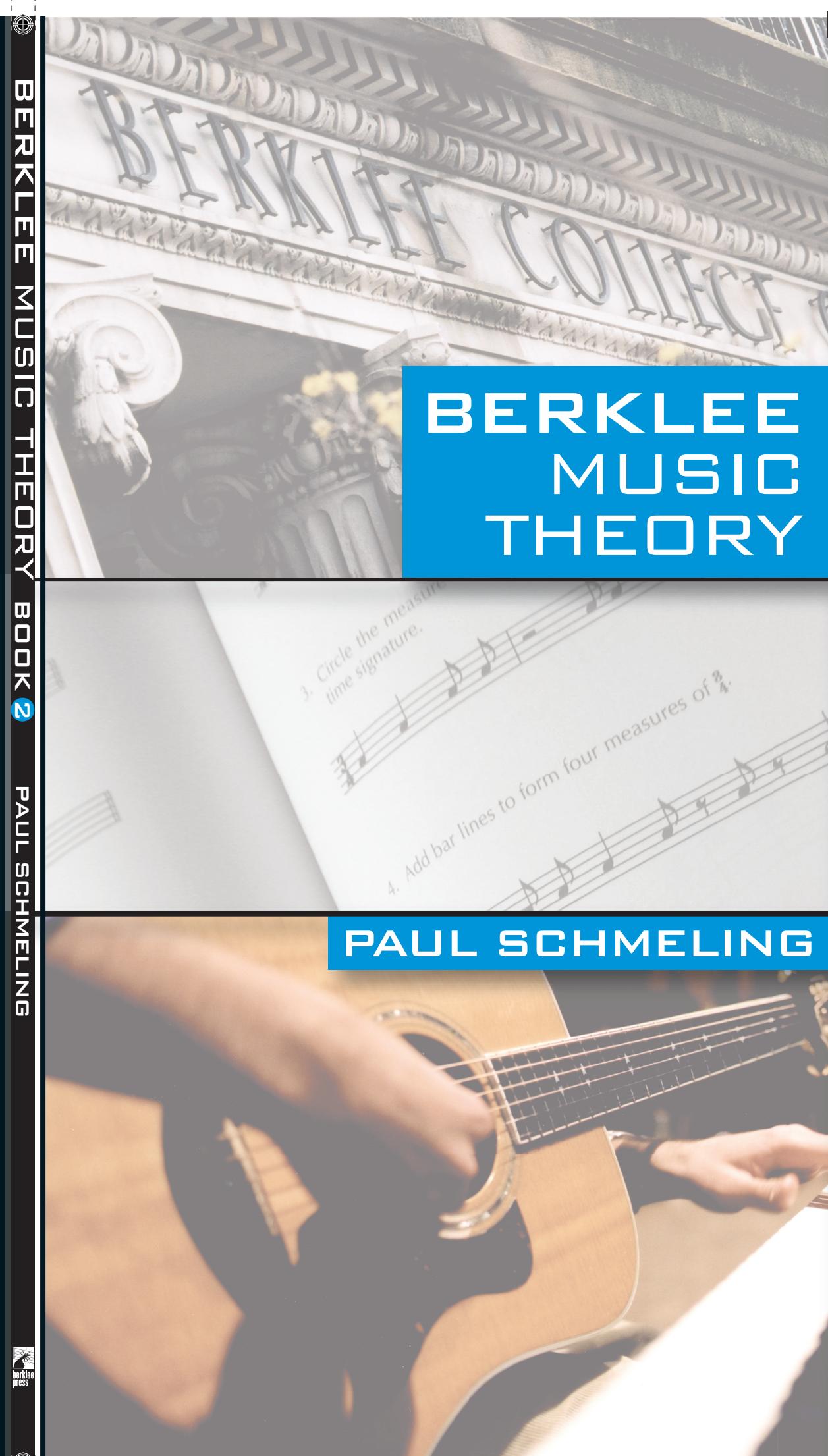
LEARN MORE AT  
[BERKLEEMUSIC.COM](http://BERKLEEMUSIC.COM)

DISTRIBUTED BY  
**HAL LEONARD®**

ISBN 0-87639-066-1



9 780876 390665



---

# Contents

<b>CD Track List</b> .....	iv
<b>Introduction</b> .....	v
<b>Lesson 37.</b> Major Triads .....	1
<b>Lesson 38.</b> Minor Triads .....	3
<b>Lesson 39.</b> Augmented Triads.....	4
<b>Lesson 40.</b> Diminished Triads .....	5
<b>Lesson 41.</b> Chord Symbols.....	6
<b>EXERCISES, LESSONS 37–41. TRIADS AND CHORD SYMBOLS</b> .....	
<b>Lesson 42.</b> Triad Inversions .....	9
<b>Lesson 43.</b> Bass/Chord Theory .....	10
<b>Lesson 44.</b> Voice Leading .....	12
<b>Lesson 45.</b> Open-Position Voice Leading and Chorale Notation.....	14
<b>Lesson 46.</b> Contrary/Parallel Motion Voice Leading.....	15
<b>EXERCISES, LESSONS 42–46. INVERSIONS AND VOICE LEADING</b> .....	
<b>Lesson 47.</b> Major 7 Chords .....	19
<b>Lesson 48.</b> Dominant 7 Chords.....	20
<b>Lesson 49.</b> Minor 7 Chords.....	21
<b>Lesson 50.</b> Minor 7(♭5) Chords.....	22
<b>Lesson 51.</b> Diminished 7 Chords .....	23
<b>EXERCISES, LESSONS 47–51. SEVENTH CHORD TYPES AND SYMBOLS</b> .....	
<b>Lesson 52.</b> Inversions of Seventh Chords.....	26
<b>Lesson 53.</b> Voice Leading Seventh Chords .....	27
<b>Lesson 54.</b> Contrary and Parallel Voice Leading of Seventh Chords .....	29
<b>Lesson 55.</b> Third, Fifth, and Seventh over the Bass .....	30
<b>EXERCISES, LESSONS 52–55. SEVENTH-CHORD INVERSIONS AND VOICE</b>	
<b>LEADING</b> .....	32
<b>Lesson 56.</b> Harmonic Accompaniment from a Lead Sheet .....	34
<b>Lesson 57.</b> Arpeggiating Accompaniment Chords .....	36
<b>Lesson 58.</b> Using the Third, Fifth, and Seventh over the Root as Accompaniment Chords .....	37
<b>Lesson 59.</b> 2:1 Accompaniment Pattern .....	38
<b>EXERCISES, LESSONS 56–59. HARMONIZING AND ACCOMPANIMENT</b>	
<b>PATTERNS</b> .....	39
<b>Lesson 60.</b> Melodic Motion .....	41
<b>Lesson 61.</b> Writing a Chord-Tone Melody .....	42
<b>EXERCISES, LESSONS 60–61. MELODY</b> .....	
<b>Lesson 62.</b> Melodic Motion over Change of Harmony .....	44
<b>Lesson 63.</b> Repeating a Melodic Phrase on Different Chords.....	45
<b>Lesson 64.</b> The Melodic Sequence.....	46
<b>EXERCISES, LESSONS 62–64. MELODY WRITING</b> .....	
<b>What's Next?</b> .....	49
<b>About the Author</b> .....	50

---

# **CD Track List**

<b>Track Number</b>		<b>Page</b>
<b>1</b>	Major Triads .....	1
<b>2</b>	Minor Triads .....	3
<b>3</b>	Augmented Triads.....	4
<b>4</b>	Diminished Triads .....	5
<b>5</b>	Exercises, Lessons 37–41: Ear Training 1 .....	7
<b>6</b>	Exercises, Lessons 37–41: Ear Training 2 .....	7
<b>7</b>	Exercises, Lessons 37–41: Ear Training 3 .....	8
<b>8</b>	Exercises, Lessons 37–41: Ear Training 4.....	8
<b>9</b>	Triad Inversions .....	9
<b>10</b>	Triads with Bass.....	10
<b>11</b>	Close and Open Position Triads .....	10
<b>12</b>	Voice Leading of Triads .....	12
<b>13</b>	Comparing Not-Voice-Led with Voice-Led Triads.....	12
<b>14</b>	Voice Leading in Contrary/Parallel Motion .....	15
<b>15</b>	Exercises, Lessons 42–46: Ear Training 1 .....	18
<b>16</b>	Exercises, Lessons 42–46: Ear Training 2 .....	18
<b>17</b>	Major 7 Chord .....	19
<b>18</b>	Dominant 7 Chord .....	20
<b>19</b>	Minor 7 Chord .....	21
<b>20</b>	Minor 7(♭5) Chord .....	22
<b>21</b>	Diminished 7 Chord.....	23
<b>22</b>	Exercises, Lessons 47–51: Ear Training 1 .....	24
<b>23</b>	Exercises, Lessons 47–51: Ear Training 2 .....	24
<b>24</b>	Exercises, Lessons 47–51: Ear Training 3 .....	25
<b>25</b>	Exercises, Lessons 47–51: Ear Training 4.....	25
<b>26</b>	7 Chord Inversions .....	26
<b>27</b>	Voice Leading 7 Chords in Contrary/Parallel Motion .....	29
<b>28</b>	7 Chords with 3, 5, and 7 over Bass .....	30
<b>29</b>	Exercises, Lessons 52–55: Ear Training 1 .....	33
<b>30</b>	Harmonic Accompaniment from Chord Symbols .....	34
<b>31</b>	Arpeggiated Chords as Accompaniment .....	36
<b>32</b>	3, 5, and 7 over Bass as Accompaniment .....	37
<b>33</b>	2:1 Pattern as Accompaniment .....	38
<b>34</b>	Exercises, Lessons 56–59: Ear Training 1 .....	40
<b>35</b>	Exercises, Lessons 56–59: Ear Training 2 .....	40
<b>36</b>	Chord Tone Melody.....	42
<b>37</b>	Exercises, Lessons 60–61: Ear Training 1 .....	43
<b>38</b>	Exercises, Lessons 60–61: Ear Training 2 .....	43
<b>39</b>	Exercises, Lessons 60–61: Ear Training 3 .....	43
<b>40</b>	Melodic Resolutions over Change of Harmony.....	44
<b>41</b>	Melodic Phrases.....	45
<b>42</b>	Melody Note Adjustments for Different Chords .....	45
<b>43</b>	Melodic Sequence .....	46
<b>44</b>	Exercises, Lessons 62–64: Ear Training 1 .....	48
<b>45</b>	Exercises, Lessons 62–64: Ear Training 2 .....	48
<b>46</b>	Exercises, Lessons 62–64: Ear Training 3 .....	48

---

# Introduction

*Berklee Music Theory Book 2: Fundamentals of Harmony* focuses on harmony, including triads, seventh chords, inversions, and voice leading, using an approach I've developed through more than forty years of teaching at Berklee College of Music. Unlike most books on music theory, this book teaches the chords and inversions that you will encounter in jazz, blues, and popular music, and then gives you the tools you need to be able to create effective harmonic accompaniment from a lead sheet. We'll finish up by writing our own melodies.

Whether you are a beginner or a more experienced musician who wants to learn more, you'll develop harmonic and melodic listening, reading, and writing skills through exercises and ear training practice. I encourage you to work with a real keyboard.

By the end of the book, you'll be able to create accompaniments from a lead sheet and write your own melody based on any common chord progression.

Paul Schmeling  
Chair Emeritus, Piano Department  
Berklee College of Music

## Lesson 37. Major Triads

1

A **chord** is a set of three or more notes sounded simultaneously. If the notes are played one after the other, it is called an **arpeggio**.

**Triads** are three-note chords. They are built upwards in thirds from a fundamental note called a **root**. The major triad includes the tonic (root), third, and fifth notes of the major scale built on the triad's root.

A musical staff in G clef. It shows a C major scale (C, D, E, F#, G, A, B) followed by its arpeggio (C, E, G) and then the C major chord (C, E, G). Below the staff, horizontal lines group the notes: the first six notes are labeled "Scale", the next two are labeled "Arpeggio", and the final three are labeled "Chord".

A musical staff in G clef. It shows a G major scale (G, A, B, C#, D, E, F#) followed by its arpeggio (G, B, D) and then the G major chord (G, B, D). Below the staff, horizontal lines group the notes: the first six notes are labeled "Scale", the next two are labeled "Arpeggio", and the final three are labeled "Chord".

A musical staff in G clef. It shows a C major scale (C, D, E, F#, G, A, B) followed by its arpeggio (C, E, G) and then the C major chord (C, E, G). Below the staff, horizontal lines group the notes: the first six notes are labeled "Scale", the next two are labeled "Arpeggio", and the final three are labeled "Chord".

Each of these notes is described by a number corresponding to the scale degree above the root. These numbers are “functions,” as in, “E functions as the third of a C major triad.”

A musical staff in G clef. It shows the notes of a C major triad: C (labeled "Root (1)"), E (labeled "3rd"), and G (labeled "5th").

Another way to think of triads is in terms of intervals. From the root, the major triad has a major third and a perfect fifth. It can also be seen as a major third (C to E) below a minor third (E to G).

A musical staff in G clef. It shows the intervals of a C major triad: a major third (M3) between C and E, a minor third (m3) between E and G, and a perfect fifth (P5) between C and G.

## Practice

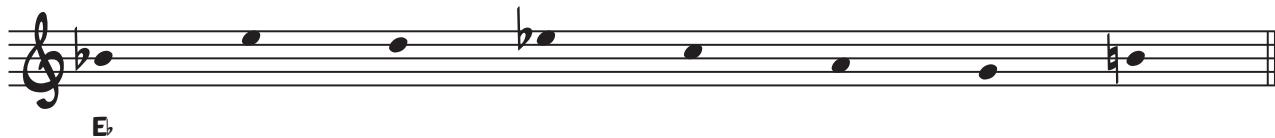
1. Build a major triad on each of the following notes.



2. Each of these notes is the third of what major triad?



3. Each of these notes is the fifth of what major triad?



## Lesson 38. Minor Triads

2

**Minor triads** can be formed by lowering the third of a major triad by a half step. From the root, the intervals are a minor third and a perfect fifth, or a minor third below a major third.

The image displays three pairs of musical staves, each pair illustrating a major triad and its corresponding minor triad. The first pair shows C Major and C Minor. The second pair shows D Major and D Minor. The third pair shows B-flat Major and B-flat Minor. Each staff has a treble clef and a key signature. The notes are represented by dots on the staff. Intervals between notes are labeled: M3 (Major Third) for the interval between the root and the third, m3 (Minor Third) for the interval between the root and the lowered third (a half step below the major third), and P5 (Perfect Fifth) for the interval between the root and the fifth. In the minor triads, the third note is lowered by a half step compared to the major triad.

### Practice

1. Make minor triads out of the following major triads. The first one is done for you.

2. Each of the following notes is the third of what minor triad?

## Lesson 39. Augmented Triads

- 3 Augmented triads** can be formed by raising the fifth of a major triad by a half step. From the root, the intervals are a major third and an augmented fifth, or one major third beneath another.

**C Major Triad**

M3      m3

P5

**C Augmented Triad**

M3      M3

+5

**D Major Triad**

M3      m3

P5

**D Augmented Triad**

M3      M3

+5

**E Major Triad**

M3      m3

P5

**E Augmented Triad**

M3      M3

+5

## Practice

1. Make augmented triads out of the following major triads by using the appropriate accidental to raise the fifth by a half step.

A musical staff in treble clef and common time. It features five measures. The first measure contains a G major chord (three vertical stems pointing down). The second measure contains an A major chord (two vertical stems pointing up, one vertical stem pointing down). The third measure contains a B minor chord (one vertical stem pointing up, two vertical stems pointing down). The fourth measure contains an E minor chord (one vertical stem pointing up, two vertical stems pointing down). The fifth measure contains a G major chord (three vertical stems pointing down).

2. Each of the following notes is the fifth of what augmented triad?

A musical staff in treble clef with a sharp sign below it, indicating G major. The staff contains seven notes: a dotted half note on the A line, followed by six eighth notes on the G, B, D, F, A, and C lines respectively. Below the staff, the bass clef is shown with a sharp sign, and the letter 'B' with a flat sign is written below it.

## Lesson 40. Diminished Triads

4

The **diminished triad** can be formed by lowering the third and fifth of a major triad by a half step. The intervals are a minor third and a diminished fifth, or one minor third below another.

The image contains four musical staves, each showing a major triad followed by its corresponding diminished triad. The first row shows C Major and C Diminished. The second row shows E Major and E Diminished. The third row shows B Major and B Diminished. Each staff has a treble clef and a key signature. The notes are labeled with intervals: M3 (Major Third) and m3 (Minor Third) for the major triad, and P5 (Perfect Fifth) and °5 (Diminished Fifth) for the diminished triad. The diminished triad is formed by lowering the third and fifth notes of the major triad by a half step.

### Practice

1. Make diminished triads out of the following major triads by lowering the third and fifth by a half step. The first one is done for you.

A musical staff in 4/4 time with a treble clef. It shows a sequence of major triads: G major, B major, D major, F major, A major, and C major. The goal is to form diminished triads by lowering the third and fifth notes of each major triad by a half step.

A musical staff in 4/4 time with a bass clef. It shows a sequence of major triads: D major, G major, C major, F major, B major, and E major. The goal is to form diminished triads by lowering the third and fifth notes of each major triad by a half step.

2. Each of the following notes is the fifth of what diminished triad?

A musical staff in 4/4 time with a treble clef. It shows a sequence of notes: B, A, G, F, E, D, C, and B. The task is to identify the diminished triad that each note is the fifth of.

## Lesson 41. Chord Symbols

Chords are often expressed with **chord symbols**. Chord symbols are usually made up of a letter that indicates the note that the chord is built on, and other symbols that indicate additional notes in the chord. If there is no other symbol, the chord is major. In chord symbols, min is for minor, o is for dim, and + is augmented. (Chord symbols may be written many different ways. For example, C major may also be written as CM or Cmaj, and C minor as C–, Cm, or Cmi.)

Four musical staves are shown, each with a bass clef and four vertical bar lines. Above the first staff is the letter 'C'. Above the second staff is 'Cmin'. Above the third staff is 'C°'. Above the fourth staff is 'C+'. Each staff contains two vertical stems with black dots at the top, representing the bass notes G and B.

### Practice

1. Write the following triads. The first one is done for you.

Four blank musical staves are provided for practice. Above the first staff is 'Amin', above the second is 'Bb+', above the third is 'E', and above the fourth is 'G°'. Each staff has a bass clef and four vertical bar lines.

Four blank musical staves are provided for practice. Above the first staff is 'Bbmin', above the second is 'B°', above the third is 'F+', and above the fourth is 'A♭'. Each staff has a bass clef and four vertical bar lines.

2. Analyze each triad by writing its chord symbol.

Four musical staves are shown for analysis. Above the first staff is 'E', above the second is 'Bb', above the third is 'G', and above the fourth is 'D'. Each staff has a bass clef and four vertical bar lines. The first staff contains a bass note E and a harmonic note G. The second staff contains a bass note Bb and a harmonic note D. The third staff contains a bass note G and a harmonic note B. The fourth staff contains a bass note D and a harmonic note F#.

Four musical staves are shown for analysis. Each staff has a bass clef and four vertical bar lines. The first staff contains a bass note Bb and a harmonic note D. The second staff contains a bass note G and a harmonic note B. The third staff contains a bass note D and a harmonic note F#.

# Exercises, Lessons 37–41. Triads and Chord Symbols

1. Write the following triads.

A musical staff with a treble clef and four measures. The first measure is labeled **D<sub>b</sub>**, the second **Emin**, the third **F+**, and the fourth **G°**.

A musical staff with a bass clef and four measures. The first measure is labeled **A**, the second **Fmin**, the third **B,+\***, and the fourth **B°**.

2. Analyze each triad with its chord symbol name. Write the chord symbol above the chord.

A musical staff with a treble clef showing four chords for analysis: C major (G, B, D), F minor (C, E, G), B minor (D, F#, A), and E major (B, D, G).

A musical staff with a bass clef showing four chords for analysis: G major (E, G, B), C minor (A, C, E), F major (D, F, A), and B diminished (G, B, D).

## Ear Training

5

1. Listen to the major and minor triad. Then, identify each example as either a major or minor triad.
- major      minor
  - major      minor
  - major      minor
  - major      minor

6

2. Listen to the minor and diminished triad. Then, identify each example as either a minor or diminished triad.
- minor      diminished
  - minor      diminished
  - minor      diminished
  - minor      diminished

7

3. Listen to the major and augmented triad. Then, identify each example as either a major or augmented triad.
- a. major augmented
  - b. major augmented
  - c. major augmented
  - d. major augmented

8

4. Listen to each triad. Then, identify each example as a major, minor, diminished, or augmented triad.
- a. major minor diminished augmented
  - b. major minor diminished augmented
  - c. major minor diminished augmented
  - d. major minor diminished augmented
  - e. major minor diminished augmented
  - f. major minor diminished augmented
  - g. major minor diminished augmented
  - h. major minor diminished augmented

## Lesson 42. Triad Inversions

9

Triads built upwards in thirds from the root are said to be in **root position**. The individual notes of a triad can be rearranged (*inverted*) so that the third or fifth is on the bottom.

The diagram shows a musical staff with a treble clef. Three triads are shown, each consisting of three black dots representing note heads. 
 - The first triad (Root position) has its lowest dot labeled "Root". Above it is a dot labeled "3rd" and above that is a dot labeled "5th". Below the staff, the text reads "Root position: Root (1) on bottom".
 - The second triad (1st inversion) has its lowest dot labeled "3rd". Above it is a dot labeled "Root" and above that is a dot labeled "5th". Below the staff, the text reads "1st inversion: 3rd on bottom".
 - The third triad (2nd inversion) has its lowest dot labeled "5th". Above it is a dot labeled "3rd" and above that is a dot labeled "Root". Below the staff, the text reads "2nd inversion: 5th on bottom".

### Practice

1. Write the following triads in their first and second inversions.

Three sets of blank musical staves for practice:
 - Set 1: Treble clef staff with a key signature of one flat. The label "Cmin" is above the staff. Below the staff, the text reads "1st inv. 2nd inv.".
 - Set 2: Treble clef staff with a key signature of one sharp. The label "Bflat" is above the staff. Below the staff, the text reads "1st inv. 2nd inv.".
 - Set 3: Treble clef staff with a key signature of no sharps or flats. The label "D" is above the staff. Below the staff, the text reads "1st inv. 2nd inv.".

2. Complete each of the inverted chords on the staff below by building upwards from the given note.

Six sets of blank musical staves for completion:
 - Set 1: Treble clef staff with a key signature of two flats. The label "Eflat" is above the staff.
 - Set 2: Treble clef staff with a key signature of no sharps or flats. The label "Emin" is above the staff.
 - Set 3: Treble clef staff with a key signature of one flat. The label "Aflat" is above the staff.
 - Set 4: Treble clef staff with a key signature of no sharps or flats. The label "Bmin" is above the staff.
 - Set 5: Bass clef staff with a key signature of one sharp. The label "A" is above the staff.
 - Set 6: Treble clef staff with a key signature of one sharp. The label "Fsharp" is above the staff.
 - Set 7: Treble clef staff with a key signature of no sharps or flats. The label "F+" is above the staff.
 - Set 8: Treble clef staff with a key signature of one sharp. The label "Csharp" is above the staff.

3. Analyze each chord with chord symbols for each of the inverted triads. The first one is done for you.

Two sets of blank musical staves for analysis:
 - Set 1: Treble clef staff with a key signature of one flat. The label "Fmin" is above the staff.
 - Set 2: Treble clef staff with a key signature of no sharps or flats. The label "F+" is above the staff.

## Lesson 43. Bass/Chord Theory

- 10** Complete harmony includes a **bass note** (bottom note) in addition to the three notes of the triad. It is usually the lowest note of the harmony and is usually the triad's root. In harmony, a chord is considered to be in root position as long as the root is the bass, regardless of the positioning of the rest of the notes in the chord. The bass is usually notated in bass clef.

**C**

**F<sub>min</sub>**

**Chord**

**Bass**

- 11** Chord members (excluding the bass) spread out over more than one octave are said to be in **open position**. Chord members within the same octave are said to be in **close position**. Again, chords are considered to be in root position as long as the root is in the bass. All of these chords, whether close or open, are in root position.

**C**

**Close      Open**

**Close      Open**

**Close      Open**

**Bass**

### Practice

1. Complete the harmony by adding the root of each chord in the bass.

**Bass**

2. Rewrite the following close-position chords in open position by reversing the top and bottom notes. Notate all three notes on the treble staff.

The musical staff contains four measures. Measure 1: Chord Fmin (F-A-C) in G major. Measure 2: Chord G+ (G-B-D) in G major. Measure 3: Chord B (B-D-G) in G major. Measure 4: Chord B° (B-D-F#) in G major.

3. Rewrite the following open-position chords in close position by reversing the top and bottom notes.

The musical staff contains four measures. Measure 1: Chord Fmin (F-A-C) in G major. Measure 2: Chord G+ (G-B-D) in G major. Measure 3: Chord B (B-D-G) in G major. Measure 4: Chord B° (B-D-F#) in G major.

4. Add the bass to complete the harmony of these open-position chords.

The musical staff contains four measures. Measure 1: Chord Fmin (F-A-C) in G major. Measure 2: Chord G+ (G-B-D) in G major. Measure 3: Chord B (B-D-G) in G major. Measure 4: Chord B° (B-D-F#) in G major.

## Lesson 44. Voice Leading

- 12** **Voice leading** refers to the way that individual voices (notes of the chord) move in a series of chords (**chord progression**). The goal of voice leading is to have each voice move as little as possible in a melodically interesting way from chord to chord. To voice lead a chord progression, first look for the **common tone**—a note found in two successive chords. Keeping common tones in the same voice is referred to as **common-tone voice leading**. Common tones are highlighted here:

The musical example shows a bass line (C, C, C) and two upper voices. The top voice starts on G, moves to E, and then to D. The middle voice starts on A, moves to G, and then to F. The common tone between the C chord and the F chord is highlighted in both voices.

- 13** Note that different inversions of each chord are used to make this movement smooth, melodic, and linear. The bass plays the root of the chord, and moves independently of the upper voices.

This section compares chord inversions. The top row shows the chords in their standard root position. The bottom row shows the same chords in various positions, demonstrating how different inversions can be used to achieve smoother voice leading while the bass remains constant.

Starting in root position, the top voice (voice 1) would move as illustrated to the left (below) if the chords were not voice-led, and as illustrated to the right (below) if voice-led.

This comparison illustrates the difference in movement for the top voice (voice 1) between not being voice-led and being voice-led. In the 'not voice led' scenario, the top voice moves down to E and then up to D. In the 'voice led' scenario, the top voice moves down to E and then up to C, maintaining the common tone.

**Practice**

1. Write out the movement of the middle voice (voice 2) from the voice-leading example on page 12, both voice-led and not voice-led.

A musical staff with a treble clef. Above the staff, the notes C, F, and B-flat are written. Below the staff, the text "Not voice led:" is centered under the first two notes, and "Voice led:" is centered under the last note.

2. Write out the movement of the bottom voice (voice 3), both voice-led and not voice-led.

A musical staff with a treble clef. Above the staff, the notes C, F, and B-flat are written. Below the staff, the text "Not voice led:" is centered under the first two notes, and "Voice led:" is centered under the last note.

3. Voice lead the following chords, observing the common-tone principle.

A musical staff with a treble clef. Above the staff, the notes F, D<sub>min</sub>, B-flat, G<sub>min</sub>, E<sup>o</sup>, C, and F are written. Below the staff, the bass line consists of a dotted half note on the A-line, a whole note on the G-line, a half note on the F-line, a whole note on the E-line, a half note on the D-line, a whole note on the C-line, and a half note on the B-line.

## Lesson 45. Open-Position Voice Leading and Chorale Notation

Chords are sometimes notated in **chorale notation**, which places the two higher voices in the treble clef and the two lower voices in the bass clef. To easily distinguish the voices, the stems of the higher voices in each clef go upward and the stems of the lower voices go downward.

### Practice

- Rewrite these chords in chorale notation.

Regular notation:	Chorale notation:

- Voice leading open-position chords works the same way as close-position: find the common tone, and keep it in the same voice. Voice lead the following open-position chords, observing the common-tone principle. Use chorale notation.

**F      D<sup>min</sup>      B<sub>b</sub>      G      E<sup>o</sup>      C      F**

# Lesson 46. Contrary/Parallel Motion Voice Leading

- 14** When successive chords do not have a common tone, such as an F major triad moving to a G major triad, traditional voice-leading technique dictates that chord voices should move in the opposite direction as the bass. This movement is known as **contrary motion**. A more contemporary sound, as found in pop and jazz, is **parallel motion**, in which voices move in the same direction as the bass. Either way, each voice should move to the next closest position.

**Contrary Motion:**  
Upper voices move down,  
bass moves up

**Parallel Motion:**  
Upper voices and  
bass move in same direction

## Practice

- Move the upper voices as indicated. Each example moves from an F major to a G major triad.

Contrary	Parallel	Contrary	Parallel
F      G	F      G	F      G	F      G

- Voice lead the following chords. Use the common-tone principle when available, and contrary or parallel as indicated, when not.

Contrary	Parallel
C      F      G      C      C	F      G      C

3. Voice lead the following chords, first in parallel motion to the bass, then in contrary motion.

**Parallel**

B<sub>b</sub> Amin Gmin F

A musical staff with two staves. The top staff has a treble clef and a key signature of one flat. It contains four notes: B-flat, A-minor, G-minor, and F. The bottom staff has a bass clef and a key signature of one flat. It also contains four notes corresponding to the same chord progression: B-flat, A-minor, G-minor, and F.

**Contrary**

B<sub>b</sub> Amin Gmin F

A musical staff with two staves. The top staff has a treble clef and a key signature of one flat. It contains four notes: B-flat, A-minor, G-minor, and F. The bottom staff has a bass clef and a key signature of one flat. It contains four notes corresponding to the same chord progression: B-flat, A-minor, G-minor, and F.

# Exercises, Lessons 42–46. Inversions and Voice Leading

1. Voice lead this progression of triads from the starting position shown. Follow the common-tone principle, but use contrary motion if there is no common tone between chords.

E♭ Cmin A♭ B♭ E♭ E♭ Cmin A♭ B♭ E♭ E♭ Cmin A♭ B♭ E♭

2. Voice lead this progression of triads using chorale notation from the starting position shown. Follow the common-tone principle, but use contrary motion if there is no common tone between chords.

D Bmin G A D D Bmin G A D D Bmin G A D

3. Analyze each chord with its chord symbol name.

4 4 4 4 4 2

## Ear Training

15

1. Listen to the demonstration triads. Then, identify each example as a major, minor, diminished, or augmented triad.

A musical staff with two staves. The top staff starts with a treble clef, a common time signature, and no key signature. The bottom staff starts with a bass clef, a common time signature, and no key signature. The staff is divided into six boxes by vertical bar lines. The first box is labeled "Major" and contains three notes: A, C, E. The second box is labeled "Augmented" and contains three notes: A, C, E-sharp. The third box is labeled "Major" and contains three notes: G, B, D. The fourth box is labeled "Minor" and contains three notes: E, G, B. The fifth box is labeled "Diminished" and contains three notes: C, E, G-flat. The sixth box is labeled "Major" and contains three notes: F, A, C.

- |          |       |            |           |
|----------|-------|------------|-----------|
| a. major | minor | diminished | augmented |
| b. major | minor | diminished | augmented |
| c. major | minor | diminished | augmented |
| d. major | minor | diminished | augmented |
| e. major | minor | diminished | augmented |
| f. major | minor | diminished | augmented |
| g. major | minor | diminished | augmented |
| h. major | minor | diminished | augmented |

16

2. Listen to the demonstration triads. Then, identify each example as a major, minor, diminished, or augmented triad.

A musical staff with two staves. The top staff starts with a treble clef, a common time signature, and no key signature. The bottom staff starts with a bass clef, a common time signature, and no key signature. The staff is divided into six boxes by vertical bar lines. The first box is labeled "Major" and contains three notes: A, C, E. The second box is labeled "Augmented" and contains three notes: A, C, E-sharp. The third box is labeled "Major" and contains three notes: G, B, D. The fourth box is labeled "Minor" and contains three notes: E, G, B. The fifth box is labeled "Diminished" and contains three notes: C, E, G-flat. The sixth box is labeled "Major" and contains three notes: F, A, C.

- |          |       |            |           |
|----------|-------|------------|-----------|
| a. major | minor | diminished | augmented |
| b. major | minor | diminished | augmented |
| c. major | minor | diminished | augmented |
| d. major | minor | diminished | augmented |
| e. major | minor | diminished | augmented |
| f. major | minor | diminished | augmented |
| g. major | minor | diminished | augmented |
| h. major | minor | diminished | augmented |

## Lesson 47. Major 7 Chords

17

**Seventh (7) chords** are four-part chords built upwards in thirds from a root. The major 7 (Maj7) chord includes the root, third, fifth, and seventh of a major scale. Each note functions as described by its corresponding scale degrees: root, 3, 5, 7.

**CMaj7**

### Practice

1. Build a major 7 chord upwards from each given note.

2. Analyze each chord with a chord symbol.

## Lesson 48. Dominant 7 Chords

- 18 The **dominant 7** (7) chord can be formed by lowering the seventh of the major 7 chord by a half step.

The diagram shows two musical staves. The top staff is labeled "CMaj7" and the bottom staff is labeled "C7". Both staves have a treble clef and four horizontal lines. The top staff has three vertical stems with dots at the second, third, and fourth lines. The bottom staff has three vertical stems with dots at the first, second, and third lines. Below each staff, the intervals are labeled: "M3" under the first note, "P5" under the second note, and "M7" or "m7" under the third note. The "m7" is written with a flat symbol over the "7".

### Practice

1. Build a dominant 7 chord upwards from each given note.

A musical staff with a treble clef. It starts with a single note on the first line, followed by three empty measures for practice.

A musical staff with a bass clef. It starts with a single note on the third line, followed by three empty measures for practice.

2. Analyze each chord with a chord symbol. Hint: Some are major 7, some are dominant 7.

A musical staff with a treble clef. It contains four groups of three notes each, separated by vertical bar lines. The notes are: (C, E, G), (F, A, C), (G, B, D), and (C, E, G).

A musical staff with a bass clef. It contains four groups of three notes each, separated by vertical bar lines. The notes are: (C, E, G), (F, A, C), (G, B, D), and (C, E, G).

# **Lesson 49.** Minor 7 Chords

- 19** The **minor 7** chord (min7) can be formed by lowering the third of the dominant 7 by a half step.

A musical staff in G clef and common time. It features two chords: C7 and Cmin7. The first chord, C7, consists of notes C, E, G, and B. The second chord, Cmin7, consists of notes C, E, G, and B-flat. The notes are separated by vertical bar lines, and the intervals between them are labeled below the staff as M3, P5, m7 for the first chord, and m3, P5, m7 for the second chord.

## Practice

1. Build a minor 7 chord upwards from each given note.

A musical staff consisting of five horizontal lines and four spaces. It begins with a treble clef. The first measure contains a dotted half note. The second measure contains a single eighth note. The third measure contains a single eighth note with a sharp sign below it, indicating a key signature of one flat. The fourth measure contains a single eighth note.

A musical staff in bass clef, one flat key signature, and common time. It features four notes: a dotted half note on the fourth line, a quarter note on the third space, a dotted half note on the second line, and a quarter note on the first space.

2. Analyze each chord with a chord symbol. Hint: Some are minor 7, some are dominant 7.

A musical staff consisting of five horizontal lines. On the far left is a bass clef. To its right are four sharp symbols (F#) positioned above the lines. A single black note head is placed on the third line from the bottom.

## Lesson 50. Minor 7(b5)Chords

- 20 The **minor 7(b5)** chord [symbol min7(b5)], also known as the half-diminished, can be formed by lowering the fifth of the minor 7 chord by a half step.

A musical staff in G clef and common time. It shows two chords: Cmin7 and Cmin7(b5). The first chord, Cmin7, has notes C, E, G, and B-flat. The second chord, Cmin7(b5), has notes C, E, G, and A-flat. Below the staff are labels m3, P5, and m7 under the first chord, and m3, °5, and m7 under the second chord.

### Practice

1. Build a min7(b5) chord upwards from each given note.

A musical staff in G clef and common time with four given notes: a quarter note on C, a half note on E, a quarter note on G, and a half note on B-flat.

A musical staff in C bass clef and common time with four given notes: a quarter note on E, a half note on G, a quarter note on B-flat, and a half note on D-sharp.

2. Analyze each chord with a chord symbol. Some are minor 7, some are min7(b5).

A musical staff in G clef and common time with four chords: Cmin7, B-flat7, Gmin7, and F#7.

A musical staff in C bass clef and common time with four chords: E7, B-flat7, A-minor7, and D7.

# Lesson 51. Diminished 7 Chords

21

The **diminished 7** chord ( $\circ 7$ ) is formed by lowering the seventh of a min7(b5) chord by a half step.

**Cmin7(b5)**

**C°7**

Compared to the major 7, the seventh of the diminished 7 chord has been lowered twice, each time by a half step. The enharmonic equivalent is frequently used to avoid the double-flat. For example, the B $\flat\flat$  (double-flat) in the example above may also be expressed as an A, since A is two half steps below B.

**M7    m7    °7    M6**

## Practice

1. Build diminished 7 ( $\circ 7$ ) chords upwards from each given note.

(use enharmonic 7th)

2. Analyze each chord with a chord symbol. Some are min7(b5), some are diminished 7.

# Exercises, Lessons 47–51. Seventh Chord Types and Symbols

1. Write out each of the following chords from the chord symbols.

E7      Cmin7(b5)      DMaj7      Gmin7      Bmin7(b5)

A♭Maj7      E°7      Amin7      B♭7      B°7

2. Analyze each chord with a chord symbol.

## Ear Training

22

1. Listen to each demonstration chord. Then, identify each example as either a major 7 or dominant 7 chord.
  - major 7      dominant 7
  - major 7      dominant 7
  - major 7      dominant 7
  - major 7      dominant 7

23

2. Listen to each demonstration chord. Then, identify each example as either dominant 7 or minor 7.
  - dominant 7      minor 7
  - dominant 7      minor 7
  - dominant 7      minor 7
  - dominant 7      minor 7

**24**

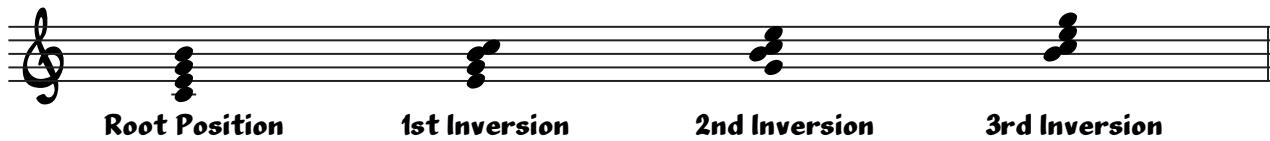
3. Listen to each demonstration chord. Then, identify each example as either minor 7 or min7(b5).
- a. minor 7      min7(b5)
  - b. minor 7      min7(b5)
  - c. minor 7      min7(b5)
  - d. minor 7      min7(b5)

**25**

4. Listen to each demonstration chord. Then, identify each example as either min7(b5) or diminished 7.
- a. min7(b5)      diminished 7
  - b. min7(b5)      diminished 7
  - c. min7(b5)      diminished 7
  - d. min7(b5)      diminished 7

## Lesson 52. Inversions of Seventh Chords

- 26** Like triads, seventh chords can be inverted. There are three inversions possible with seventh chords. The first inversion has the third on the bottom; second inversion has the fifth on the bottom; third inversion has the seventh on the bottom.



### Practice

1. Write the three inversions of the following seventh chords.

The image contains eight staves of music, each with a different chord name above it and a "1st 2nd 3rd" label below it indicating the inversion. The chords are: B♭Maj7, B7, Cmin7, C♯7, Dmin7(b5), EMaj7, F♯min7, and A♭7. The first two staves are in treble clef, and the last six are in bass clef.

2. Identify each inverted seventh chord with a chord symbol.

The image shows two staves of music. The top staff is in treble clef and G major (4/4 time), starting with an F7 chord. The bottom staff is in bass clef and C major (4/4 time). Both staves show a sequence of four chords: F7, E7, D7, and C7. The bass staff also includes a bass line below the chords.

## Lesson 53. Voice Leading Seventh Chords

As with triads, seventh chords can be voice led following the common-tone principle. In these examples, each voice moves smoothly, as the common tone is observed.

A musical staff in G clef and common time. It shows two measures of voice-leading exercises. The first measure contains four chords: FMaj7, B♭Maj7, E♭Maj7, and A♭Maj7. The second measure contains four chords: F7, B♭7, E♭7, and A♭7. The bass line remains constant at a low pitch throughout both measures.

### Practice

1. Complete the voice leading from the starting position.

A musical staff in G clef and common time. It shows two measures of voice-leading exercises. The first measure starts with FMaj7 and ends with A♭Maj7. The second measure starts with F7 and ends with A♭7. The bass line remains constant at a low pitch throughout both measures.

2. Complete the voice leading from the starting position.

A musical staff in G clef and common time. It shows two measures of voice-leading exercises. The first measure starts with Amin7 and ends with Cmin7. The second measure starts with Amin7(b5) and ends with Cmin7(b5). The bass line remains constant at a low pitch throughout both measures.

3. Complete the voice leading from the starting position. Hint: There will be no common tones. Voice lead moving each voice down by half-step motion.

**F<sup>#</sup>7    B<sup>7</sup>    E<sup>7</sup>    A<sup>7</sup>**

# Lesson 54. Contrary and Parallel Voice Leading of Seventh Chords

27

As with triads, seventh chords with no common tones may be voice led in either contrary or parallel motion.

The image shows a musical staff with four measures. The first measure is labeled **GMaj7**. The second measure is labeled **FMaj7**. The third measure is labeled **E♭Maj7**. The fourth measure is labeled **D♭Maj7**. The top half of the staff shows **Contrary Motion**, where the voices move in opposite directions. The bottom half shows **Parallel Motion**, where the voices move in the same direction.

## Practice

- Voice lead the following progression using first contrary, then parallel motion.

The image shows a musical staff with three measures. The first measure is labeled **FMaj7**. The second measure is labeled **GMaj7**. The third measure is labeled **AMaj7**. The top half of the staff is labeled **Contrary**, and the bottom half is labeled **Parallel**.

- Voice lead using contrary and parallel motion.

The image shows a musical staff with three measures. The first measure is labeled **CMaj7**. The second measure is labeled **B♭Maj7**. The third measure is labeled **A♭Maj7**. The top half of the staff is labeled **Contrary**, and the bottom half is labeled **Parallel**.

## Lesson 55. Third, Fifth, and Seventh over the Bass

- 28** Frequently, seventh chords contain the third, fifth, and seventh in the chord, and the root in the bass, making a total of four voices. This sound is especially common in pop music.

The image shows three staves of musical notation. The top staff is labeled 'CMaj7' and features a treble clef. It contains two stacked eighth-note chords: one with a bass note at the bottom and another with a bass note at the top. The middle staff is labeled 'Fmin7' and features a bass clef. It also contains two stacked eighth-note chords with a bass note at the bottom. The bottom staff is labeled 'C7' and features a bass clef. It contains two stacked eighth-note chords with a bass note at the bottom. In all three cases, the bass note is explicitly labeled 'Root' below the staff.

Voice leading the third, fifth, and seventh works the same as voice leading regular triads.

The image shows a single staff of musical notation. Above the staff, there are labels for eight chords: GMaj7, CMaj7, FMaj7, B♭Maj7, GMaj7, Amin7, GMaj7, and Amin7. Below the staff, three categories of voice leading are indicated: 'Common tone' (the first four chords), 'Contrary' (the next two), and 'Parallel' (the last two). The bass line consists of eighth notes, showing how the bass moves between these chords while maintaining a common tone or moving in the opposite direction (contrary motion) or in the same direction (parallel motion).

## Practice

1. Write the following seventh chords with the third, fifth, and seventh over the root.

A blank musical staff with four measures. The first measure is labeled Amin7, the second D Maj7, the third Cmin7(b5), and the fourth E7. The staff has a treble clef and a common time signature.

2. Voice lead the following seventh chords with the third, fifth, and seventh over the root, using the common-tone principle.

**FMaj7**      **Dmin7**      **B♭Maj7**      **Gmin7**      **E♭Maj7**

3. Voice lead the third, fifth, and seventh, using contrary, then parallel motion.

**FMaj7    Gmin7    Amin7    B♭Maj7**      **FMaj7    Gmin7    Amin7    B♭Maj7**

**Contrary**

**Parallel**

## Exercises, Lessons 52–55. Seventh-Chord Inversions and Voice Leading

1. Voice lead this progression of seventh chords using the common-tone principle.

B♭Maj7 Gmin7 Cmin7 F7 B♭Maj7 Gmin7 Cmin7 F7 B♭Maj7

AMaj7 F♯min7 Bmin7 E7 AMaj7 F♯min7 Bmin7 E7 AMaj7

2. Voice lead the same progression using the common tone principle with the third, fifth, and seventh over the root in the bass.

B♭Maj7 Gmin7 Cmin7 F7 B♭Maj7 AMaj7 F♯min7 Bmin7 E7 AMaj7

**Ear Training****29**

1. Listen to the major 7, dominant 7, and minor 7 chords in root position. Then, identify each example as major 7, dominant 7, or minor 7.
  - a. major 7      dominant 7      minor 7
  - b. major 7      dominant 7      minor 7
  - c. major 7      dominant 7      minor 7
  - d. major 7      dominant 7      minor 7
  - e. major 7      dominant 7      minor 7
  - f. major 7      dominant 7      minor 7
  - g. major 7      dominant 7      minor 7
  - h. major 7      dominant 7      minor 7

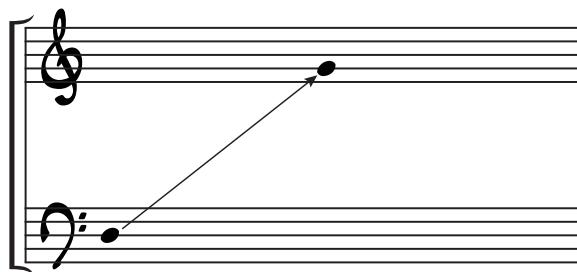
## Lesson 56. Harmonic Accompaniment from a Lead Sheet

In popular music and jazz, musicians frequently work with a **lead sheet**, rather than a complete score. The lead sheet includes the melody and the chords expressed in chord symbols, whereas the score contains all notes, written out. Accompanists use the lead sheet as a guideline to create their own parts from the chord symbol information.

The staff shows the following notes:

- Measure 1:** FMaj7 (Melody dot at 2nd note)
- Measure 2:** Gmin7 (Melody dot at 2nd note)
- Measure 3:** C7 (Melody dot at 2nd note)
- Measure 4:** FMaj7 (Melody dot at 2nd note)

The first step to creating harmonic **accompaniment** (support for the melody, devised from the chord symbols) is to voice lead the chords in the range of notes illustrated below, where they will sound rich and full, but not so low as to sound muddy. The melody is played separately above the chords.



30

The staff shows the following chord voicings:

- Measure 1:** FMaj7 (Chord voicing: B, D, F)
- Measure 2:** Gmin7 (Chord voicing: E, G, B, D)
- Measure 3:** C7 (Chord voicing: G, B, D, F#)
- Measure 4:** FMaj7 (Chord voicing: B, D, F)

**Practice**

1. Voice lead the chords from the first position shown. Watch out for the key signature!

A musical lead sheet consisting of two staves. The top staff is for the melody, featuring a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. It contains six measures of music with the following chords above the notes: A7, Dmin7, G7, Gmin7, C7, and FMaj7. The bottom staff is for the harmonic bass line, featuring a bass clef, a key signature of one sharp (F#), and a 4/4 time signature. It contains six measures of music with the following chords above the notes: A7, Dmin7, G7, Gmin7, C7, and FMaj7.

## Lesson 57. Arpeggiating Accompaniment Chords

- 31** **Arpeggiating** chords—playing each note of the chord separately, rather than all at the same time—is a common way to create harmonic accompaniment. Notice that the notes of each chord are arpeggiated in the same order, starting with the lowest note to the highest note and back again—while the original voice leading from the previous lesson remains intact (Lesson 56, p. 34).

The musical staff consists of two staves. The top staff is in treble clef and has a key signature of one flat. It contains four measures of music. The first measure is labeled **FMaj7** above the staff. The second measure is labeled **Gmin7**. The third measure is labeled **C7**. The fourth measure is labeled **FMaj7**. The bottom staff is in bass clef and has a key signature of one flat. It contains a continuous eighth-note pattern across all four measures.

### Practice

1. Complete the arpeggiated accompaniment. When there are two chords in the same measure, use the first chord for the first two beats of the pattern, and the second chord for the last two beats. Follow the voice leading set up in the previous lesson (Lesson 56, p. 35).

The musical staff consists of two staves. The top staff is in treble clef and has a key signature of one flat. It contains six measures of music. The first measure is labeled **A7**. The second measure is labeled **Dmin7**. The third measure is labeled **G7**. The fourth measure is labeled **Gmin7**. The fifth measure is labeled **C7**. The sixth measure is labeled **FMaj7**. The bottom staff is in bass clef and has a key signature of one flat. It contains a continuous eighth-note pattern across all six measures.

## Lesson 58. Using the Third, Fifth, and Seventh over the Root as Accompaniment Chords

32

Accompaniments created from seventh chords can use the third, fifth, and seventh only with the root of the chord in the bass.

Melody

Chord

Bass

F<sup>Maj</sup>7      G<sup>min</sup>7      C7      F<sup>Maj</sup>7

F<sup>Maj</sup>7      G<sup>min</sup>7      C7      F<sup>Maj</sup>7

F<sup>Maj</sup>7      G<sup>min</sup>7      C7      F<sup>Maj</sup>7

### Practice

- Voice lead the following chords from the starting position shown, using only the third, fifth, and seventh of each seventh chord.

A7      Dmin7      G7      Gmin7      C7      F<sup>Maj</sup>7

A7      Dmin7      G7      Gmin7      C7      F<sup>Maj</sup>7

A7      Dmin7      G7      Gmin7      C7      F<sup>Maj</sup>7

## Lesson 59. 2:1 Accompaniment Pattern

- 33** Another accompaniment pattern that works well with the three notes of the third, fifth, and seventh is the **2:1 pattern**. Two of the three notes are struck together, alternating with the third of the three notes, by itself. This is a 2:1 pattern based on the voice leading in Lesson 58 (p. 37).

The musical example shows a treble clef, a key signature of one flat, and a 4/4 time signature. The top staff contains four chords labeled FMaj7, Gmin7, C7, and FMaj7. The bottom staff contains a continuous eighth-note bass line.

### Practice

1. Complete the 2:1 harmonic accompaniment using the same voice leading as the previous two lessons (Lessons 57 and 58, p. 36–37).

The musical example shows a treble clef, a key signature of one flat, and a 4/4 time signature. The top staff contains six chords labeled A7, Dmin7, G7, Gmin7, C7, and FMaj7. The middle staff contains a continuous eighth-note bass line with a key signature of one sharp. The bottom staff contains a continuous eighth-note bass line with a key signature of one flat.

# Exercises, Lessons 56–59. Harmonizing and Accompaniment Patterns

1. Voice lead the accompanying chords using the common-tone principle.

**GMaj7**      **Emin7**      **Amin7**      **D7**

2. Arpeggiate the voice-led chords to create an accompaniment. Be careful to arpeggiate the notes of each chord in the same order, to preserve the voice leading.

**GMaj7**      **Emin7**      **Amin7**      **D7**

3. Voice lead the third, fifth, and seventh from the starting position shown.

**FMaj7**      **BbMaj7**      **Emin7(b5)**      **A7**

4. Create a 2:1 pattern, using the third, fifth, and seventh to create an accompaniment.

The image shows a musical staff with four measures. The top staff is in F major (F Maj 7), indicated by a treble clef and a key signature of one flat. The bottom staff is in G major (G Maj 7), indicated by a bass clef and a key signature of one flat. The third measure is labeled E min 7(b5) and the fourth measure is labeled A7. The bass lines for both staves follow a 2:1 pattern, consisting of three eighth notes followed by one quarter note.

### Ear Training

34

1. Listen to the following arpeggiated chords, and identify them as major 7, dominant 7, or minor 7.

- a. major 7      dominant 7      minor 7
- b. major 7      dominant 7      minor 7
- c. major 7      dominant 7      minor 7
- d. major 7      dominant 7      minor 7
- e. major 7      dominant 7      minor 7
- f. major 7      dominant 7      minor 7
- g. major 7      dominant 7      minor 7

35

2. Listen to the following 2:1 accompaniment patterns, and identify chords as major 7, dominant 7, or minor 7.

- a. major 7      dominant 7      minor 7
- b. major 7      dominant 7      minor 7
- c. major 7      dominant 7      minor 7
- d. major 7      dominant 7      minor 7
- e. major 7      dominant 7      minor 7
- f. major 7      dominant 7      minor 7
- g. major 7      dominant 7      minor 7

# Lesson 60. Melodic Motion

The notes of a melody move by step or by leap. A **step** is a major or minor second, and a **leap** is any interval larger.

Steps (S) and leaps (L) are analyzed as this melody moves from one note to the next.

## Practice

- Analyze the motion between the notes of the following melody by using either S or L.

## Lesson 61. Writing a Chord-Tone Melody

- 36** The notes that make up a chord are called **chord tones**. A **chord-tone melody** is one that uses only notes of the current chord, in any order. Notes may be used in different octaves, and some may be used more than once before others are used.

**Dmin**

A musical staff in G clef, 4/4 time, with a key signature of one flat. The staff contains eight notes. Below the staff, corresponding note values and Roman numerals are written under each note: 1, 3, 5, 5, 5, 1, 3, 5. The notes are distributed across three octaves.

### Practice

1. Adjust the notes of this melody to fit the chords. Label the chord tones using numerals, as above.
- a. D<sub>b</sub>

A musical staff in G clef, 4/4 time, with a key signature of one flat. The staff contains eight notes. Below the staff, corresponding note values and Roman numerals are written under each note: 1, 3, 5, 5, 5, 1, 3, 5. The notes are distributed across three octaves.

- b. B<sub>min7</sub>

A musical staff in G clef, 4/4 time, with a key signature of one flat. The staff contains eight notes. Below the staff, corresponding note values and Roman numerals are written under each note: 1, 3, 5, 5, 5, 1, 3, 5. The notes are distributed across three octaves.

2. Write a 4-measure chord-tone melody on the following chords.

**FMaj7**

A musical staff in G clef, 4/4 time, with a key signature of no sharps or flats. The staff is empty, intended for writing a melody.

**F#min7**

A musical staff in G clef, 4/4 time, with a key signature of one sharp. The staff is empty, intended for writing a melody.

# Exercises, Lessons 60–61. Melody

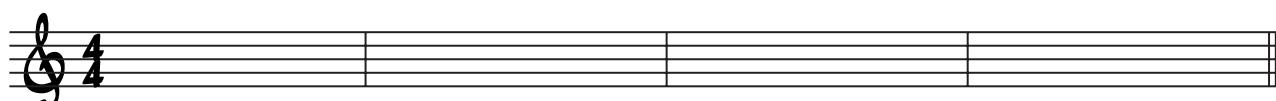
## Ear Training

**37**

1. Listen to a C7 chord. You will hear it arpeggiated over more than one octave. Then, transcribe this 4-measure melody.

**38**

2. Listen to a Cmin7 chord. Then, transcribe this 4-measure melody.

**39**

3. Listen to a CMaj7 chord. Then, transcribe this 4-measure melody.



## Lesson 62. Melodic Motion over Change of Harmony

- 40** In looking at melodic motion over a change of harmony, we pay attention to how the last note of one chord resolves into the first note of the next chord. If the last note of a chord is also a chord tone of the next chord, it may be described as a common tone (CT). In these cases, a leap into the first note of the next chord is possible. If the last note of a chord is not a chord tone of the next chord (known as a non-common-tone, or NC), a stepwise resolution into the first note of the next chord is called for.

The image shows two staves of music. The top staff is in F major (F Maj7) and the bottom staff is in B-flat major (B-flat Maj7). Both staves are in common time (indicated by '4'). The top staff has a bass clef, and the bottom staff has a treble clef. The first measure of each staff contains a single note. The second measure of each staff contains four notes. The notes in the first measure of the top staff are labeled 'CT' below them. The notes in the second measure of the top staff are labeled 'CT' below them. The notes in the first measure of the bottom staff are labeled 'NC' below them. The notes in the second measure of the bottom staff are labeled 'NC' below them. The notes are represented by black dots on the staff lines.

### Practice

1. Write a short, simple melody on this 2-chord progression. Use each of the four Cmin7 notes as the last note of the first measure, and resolve that note into the next chord by leap if it's a common tone, or resolve by step if it's a non-chord-tone.

The image shows two sets of blank musical staves. The top set is in common time (indicated by '4') and the bottom set is in common time (indicated by '4'). Each set consists of two staves. The top staff in each set has a bass clef, and the bottom staff has a treble clef. The first measure of each staff is labeled with a chord name above it: 'Cmin7' for the top staff and 'Fmin7' for the bottom staff. The second measure of each staff is also labeled with a chord name above it: 'Cmin7' for the top staff and 'Fmin7' for the bottom staff. The staves are intended for writing in a melody.

# Lesson 63. Repeating a Melodic Phrase on Different Chords

**41**

A **phrase** is the natural division of a melody into groups of notes that belong together, just as sentences are groups of words that belong together. Listen to this melody. It is made up of two phrases, as indicated by the phrase markings:

**42**

Notice that the rhythmic and melodic shapes of the two phrases are similar. If the chords in measures 3 and 4 were different, the melody notes would have to be adjusted to accommodate the new chords.

## Practice

1. Complete these 4-measure melodies by repeating the first 2-measure phrase on the chords given. Try playing your melody with the chords.

2. Write your own melody in the first two measures, with a repeat of that melody in the second two measures. Practice playing it with the chords.

## Lesson 64. The Melodic Sequence

- 43** A **melodic sequence** is a series of at least three repeats of melodic phrases. Commonly, the third one is varied in order to add variety and avoid excessive repetition, and the fourth one is often completely different to bring things to a conclusion.

The image shows two musical staves. The top staff is in 3/4 time with a bass clef, featuring four chords: Cmin7, F7, Dmin7, and G7. The word "Repeated" is written below the Dmin7 chord. The bottom staff is also in 3/4 time with a bass clef, showing four chords: Emin7, A7, D7, and G7. The word "Varied" is written below the first chord, and "Completely Different" is written below the second chord.

### Practice

1. Complete these melodic sequences, using the melodic material and chords given.

The image contains two sets of blank musical staves for practice. The first set, labeled "Repeat:", includes four chords: Gmin7, C7, FMaj7, and B♭Maj7. The second set, labeled "Conclude:", includes three chords: Emin7(b5), A7, and DMaj7.

2. Complete these melodic sequences, using the melodic material and chords given.

The image contains two sets of blank musical staves for practice. The first set, labeled "Repeat:", includes four chords: Emin7, A7, Dmin7, and G7. The second set, labeled "Vary:", includes three chords: Cmin7, F7, and B♭Maj7. The word "Conclude:" is written below the last staff.

## **Exercises, Lessons 62–64. Melody Writing**

A frequently used song form uses a 4-measure phrase, which repeats in the first section, then a shorter 2-measure phrase is repeated sequentially for the second section. Notice the double barline after measure 8 separating the two sections.

### **4-measure phrase**

**CMaj7**

**Fmin7**

**B♭7**

**Phrase repeated**

**CMaj7**

**Bmin7**

**E7**

**Double Barline**

**2-measure phrase**

**AMaj7**

**B♭min7**

**A♭Maj7**

**Amin7 D7**

**Phrase repeated**

**GMaj7**

**Dmin7 G7**

**CMaj7**

**Dmin7 G7**

**Conclusion**

1. Try your own melody writing on this same chord progression. Repeat your first 4-measure phrase in the second four measures, then use a 2-measure phrase repeated sequentially for the last eight measures.

## Ear Training

- 44** 1. Listen to the CMaj7 and FMaj7 chords. Then, transcribe this 4-measure melody.

- 45** 2. Listen to the Dmin7 and G7 chords. Then, transcribe this 4-measure melody.

- 46** 3. Listen to the Dmin7, G7, and CMaj7 chords. Then, transcribe this 4-measure melody.

## What's Next?

Congratulations on finishing *Berklee Music Theory, Book 2*. Now you have a basic understanding of chords and chord types, including major, minor, diminished, and augmented triads and seventh chords. You've practiced voice leading, connecting notes from chord to chord in a way that sounds smooth and musical. You've explored harmonic accompaniment on piano, and have even written melodies of your own.

Continue working with this material as much as you possibly can. Write out and play the chords of songs from a lead sheet; practice voice leading and devising accompaniment patterns based on the chords; try writing your own melody on those same chords. All of these activities will help to reinforce and even further the theoretical knowledge gained in this course.

Until then—keep practicing, and continue to build your knowledge of music theory. It will make you a better musician.

## About the Author

Paul Schmeling, Chair Emeritus of the Piano Department at Berklee College of Music, is a master pianist, interpreter, improviser, and arranger. He has inspired countless students since he began teaching at Berklee in 1961. He has performed or recorded with jazz greats such as Clark Terry, Rebecca Parris, George Coleman, Carol Sloane, Frank Foster, Art Farmer, Herb Pomeroy, Phil Wilson, Dick Johnson, and Slide Hampton. In the 1990s, the Paul Schmeling Trio released two inventive and critically acclaimed albums, interpreting the music of Hoagy Carmichael and songs associated with Frank Sinatra. He is the co-author of the *Berklee Practice Method: Keyboard* (Berklee Press 2001) and *Berklee Instant Keyboard* (Berklee Press 2002). He is also the author and instructor of three online courses on Berkleemusic.com, *Music Theory 101*, *Music Theory 201*, and *Berklee Keyboard Method*.