

## Day 13 – Triads and Inversions

### Vocabulary Unit 2B


- |                      |   |
|----------------------|---|
| 84. Chord            | 91. Triad inversion numbers                 |
| 85. Triad            | 92. Major triad                             |
| 86. Tertian harmony  | 93. Minor triad                             |
| 87. Root             | 94. Diminished triad                        |
| 88. Root position    | 95. Augmented triad                         |
| 89. First inversion  | 96. Major Scale Chord Pattern               |
| 90. Second inversion | 97. Primary Triads                          |
|                      | 98. 7 <sup>th</sup> Chord inversion numbers |

#### 84. Chord

Figure 4.1




**KEY CONCEPT** A **chord** is a group of pitches that forms a single harmonic idea. The pitches in a chord usually sound all at once, but they may also sound in succession.

**EXAMPLE 7.1:** Handel, Chaconne in G Major, Variation 4, mm. 33–36 

#### 85. Triad

#### 86. Tertian Harmony

**EXAMPLE 7.3:** Triads above each scale degree in G major 



$\hat{1}$        $\hat{2}$        $\hat{3}$        $\hat{4}$        $\hat{5}$        $\hat{6}$        $\hat{7}$   
 M      m      m      M      M      m      d

**EXAMPLE 7.2:** Handel, Chaconne, Variation 1, mm. 9-16 



87. Root

88. Root Position

Figure 4.8



**Try it #1**

Compare the triads in Example 7.3 with the root-position chords identified in Example 7.2. Write the scale-degree number for the root of each of Handel's chords in the corresponding blank below.

m. 9:  $\hat{1}$       m. 11: \_\_\_\_\_      m. 12: \_\_\_\_\_      m. 13: \_\_\_\_\_      m. 14: \_\_\_\_\_

# 89. First Inversion

Figure 4.9

Figure 4.9 illustrates first inversion triads. On the left, a treble clef shows four triads: C4-E4-G4, D4-F4-A4, E4-G4-B4, and F4-A4-C5. Each triad has a '3' in a box below it, indicating the fingering for the third. On the right, a grand staff shows the same four triads in first inversion: C4-E4-G4, D4-F4-A4, E4-G4-B4, and F4-A4-C5. Each triad has a '3' in a box below it, indicating the fingering for the third.

EXAMPLE 7.10: Handel, Chaconne, Variation 1, mm. 13-16

EXAMPLE 7.10 shows a piano passage from Handel's Chaconne, Variation 1, measures 13-16. The bass clef accompaniment features first inversion triads. A diagram below the first measure shows the structure of a first inversion triad: the bottom note is the fifth, the middle note is the third, and the top note is the root. A second diagram shows the structure of a first inversion triad: the bottom note is the third, the middle note is the root, and the top note is the fifth.

# 90. Second Inversion

Figure 4.10

Figure 4.10 illustrates second inversion triads. On the left, a treble clef shows four triads: C4-E4-G4, D4-F4-A4, E4-G4-B4, and F4-A4-C5. Each triad has a '5' in a box below it, indicating the fingering for the fifth. On the right, a grand staff shows the same four triads in second inversion: C4-E4-G4, D4-F4-A4, E4-G4-B4, and F4-A4-C5. Each triad has a '5' in a box below it, indicating the fingering for the fifth.

Figure 4.7

Figure 4.7 shows first and second inversion triads. The first two triads are in first inversion (C4-E4-G4 and D4-F4-A4) with fingering '1' below them. The last two triads are in second inversion (E4-G4-B4 and F4-A4-C5) with fingering '5' below them.

**EXAMPLE 7.11:** Bach, "O Haupt voll Blut und Wunden," mm. 9-10a

C: I root position IV first inversion I second inversion

ROOT POSITION      ROOT POSITION      1ST INVERSION      ROOT POSITION      2ND INVERSION

**EXAMPLE 7.15:** Figured bass for triads

(a) Triads and inversions in three voices

5[3]8      6[3]8      6[4]8      arrow denotes the root

## 91. Triad Inversion Numbers



**KEY CONCEPT** To identify the root of an inverted chord, look for the interval of a fourth. The upper note of the fourth is the root.

Root Position      1st Inversion      2nd Inversion

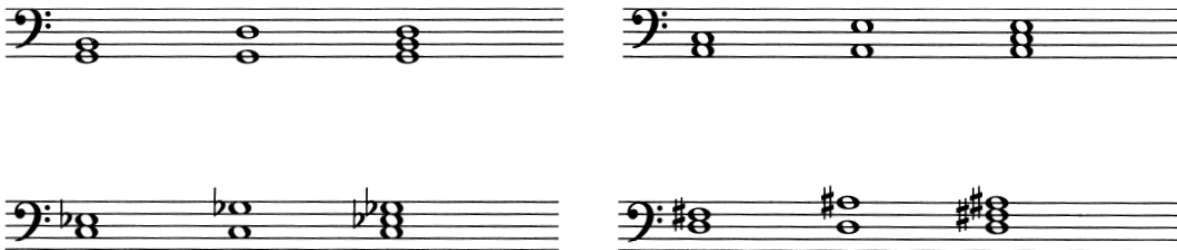
Chords reduced to simple position:

C: I I I I<sup>6</sup> I<sup>6</sup> I<sup>6</sup> I<sup>6</sup><sub>4</sub> I<sup>6</sup><sub>4</sub> I<sup>6</sup><sub>4</sub>

## HOW TO BUILD A TRIAD

1. Build the “snowman” in thirds above the root. **Tertian harmony thirds will either be all lines or all spaces.**
2. Identify the quality of the lower third as major or minor.
3. Identify the quality of the fifth (between the root of the triad and the fifth) as perfect, diminished, or augmented.
4. Identify the chord with a letter (the root of the “snowman”).
5. Identify the quality of the triad:

### HOW TO BUILD A TRIAD



92. Major Triad

93. Minor Triad

94. Diminished Triad

95. Augmented Triad

### (a) Spelling triads as fifths and thirds

1. root

2. P5 for a major or minor triad

d5 for a diminished triad

A5 for an augmented triad

3. M3 for a major triad

m3 for a minor triad

m3 for a diminished triad

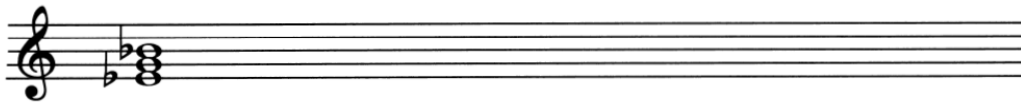
M3 for an augmented triad

Figure 4.6

Augmented Major Minor Diminished

### Try it #2

Write the appropriate triad above each scale degree in E $\flat$  major, in whole notes. Write the accidentals next to the note as needed. Label each triad's quality in the blank provided: M, m, or d.



E $\flat$  major: M    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

### Try it #4

Spell the following triads.

(1) (2) (3) (4) (5) (6)

(7) (8) (9) (10) (11) (12)

### EXAMPLE 7.8: Scale-degree triads in G major

tonic    supertonic    mediant    subdominant    dominant    submediant    leading tone

G: I    ii    iii    IV    V    vi    vii $^{\circ}$

## 96. Major Scale Pattern

### Try it #5

Identify the Roman numeral and inversion for each left-hand triad specified below. Be sure that the Roman numeral shows the correct chord quality (major, minor, or diminished).

Handel, Chaconne, Variation 3, mm. 29–32

	ROMAN NUMERAL	POSITION OR INVERSION		
1. m. 30, beat 1	_____	_____	4. m. 31, beat 1	_____
2. m. 30, beat 2	_____	_____	5. m. 32, beat 1	_____
3. m. 30, beat 3	_____	_____		

**EXAMPLE 7.5:** Triads above each scale degree in G minor

(a) Natural minor ♭

$\hat{1}$  m     $\hat{2}$  d     $\hat{3}^{\flat}$  M     $\hat{4}$  m     $\hat{5}$  m     $\hat{6}^{\flat}$  M     $\hat{7}^{\flat}$  M

(b) With leading tone in triads on  $\hat{5}$  and  $\hat{7}$  (common) ♭

$\hat{5}$  M     $\hat{7}$  d

(c) With leading tone in triad on  $\hat{3}^{\flat}$  (rare) ♭

$\hat{3}^{\flat}$  M A<sup>5</sup>

**Try it #3**

Write the appropriate triad above each scale degree in C minor. Add the accidentals before each note as needed. On the first staff, write all the triads in natural minor; on the second, add the appropriate accidental to spell a major triad on  $\hat{5}$  and a diminished one on  $\hat{7}$ . Write the triad qualities (M, m, or d) in the blanks provided.

Natural minor:

m    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_    \_\_\_\_\_

With leading tone:

\_\_\_\_\_    \_\_\_\_\_

# Day 14 – Harmonic Analysis

Chordal reduction

E: I  $ii^7 V^{(11)}$   $ii^{\flat}_5 V^7$   $ii^{\flat}_5 V^7$   $ii^{\flat}_3 V^7$  (I)  $V^9/IV$   $IV ii^7$   $v^9$   $I^7$   $v^9/V$   $v^{11}$  I

Figure 4.12

## 97. Primary Triads

Figure 4.13

5th  
Tonic Dominant Subdominant  
5th

### Roman Numeral Analysis

Major =

minor =

diminished =

Augmented =





# Inversions Revisited

Figure 4.15

Root Position      1st Inversion      2nd Inversion

Chords reduced to simple position:

C:

Figure 4.16

## Seventh Chord Inversions

Position

# Day 15 – Figured Bass

means

3

means

4

5  
3      5  
3      5  
3

5  
3      5  
3      5  
3

**Figure 4.19**

Figured bass as it appears originally:

Same figured bass harmonized in simple position:

Same figured bass harmonized in four-part harmony:

DM:



**KEY CONCEPT** Figured bass consists of a bass line with numbers written under it or over it; the numbers represent the intervals to be played above the bass to make the chords. (We will return to this example later to determine its chords.)

## Did You Know?

The idea of the invertible triad, with its three forms—root position, first inversion, and second inversion—first appears in writings about music in the early seventeenth century (the early Baroque era), but was not widely accepted among musicians until the mid-eighteenth century (at the end of the Baroque and beginning of the Classical era). The invertible triad is described by Otto Siegfried Harnish (c. 1568–1623) in 1608, and the term *trias harmonica* (harmonic triad) is used by Johannes Lippius (1585–1612) in 1610. Lippius, a theologian and musician, characterized the triad as being like the Holy Trinity: three elements but also one.

The French composer Jean-Philippe Rameau (1683–1764) is often credited with the idea of chord inversion, because his controversial writings (published between 1722 and 1760) brought this idea to the forefront at a time when the music being composed was increasingly built on chords rather than independent lines. Rameau labeled the chords with a separate bass-clef staff underneath the music, where he wrote in the roots of each chord; this practice was called “fundamental bass,” not to be confused with figured bass. Roman numerals were not used for analysis until after Rameau’s death.

Symbol	Meaning
#, b, or ♯	
6 6 6 #, b, or ♯	
#6, b6, ♯6	
♭, ♯, 4+	

A musical score in 2/4 time, bass clef. The bass line consists of five notes: G4, A4, B4, C5, and D5. Below the notes are figured bass symbols: #6, 6, 6, 6, and #. The treble clef staff is empty.

Musical staff with five measures in bass clef. The notes are: B $\flat$ , B, B $\sharp$ , B, B $\flat$ . Below the staff are figures: b5, b, 5, #, b5 b3.

**Try it #6**

In the treble-clef staff, write the three notes (in whole notes) of the triad indicated by the bass and figures. Write all three notes of the triad (line-line-line or space-space-space) plus any accidentals specified.

Musical staff with six measures in 4/4 time. Bass notes and figures: (a) 6, (b) (5/3), (c) 6, (d) #6/4, (e) b, (f) #.

Going Backwards ....

Musical staff in bass clef with a key signature of one flat and common time. It shows a sequence of chords moving downwards.