CHORALE HARMONIZATIONS USING NON-HARMONIC TONES

The method of approach to harmonization of the chorale remains unchanged. The student must first approach the harmonization as if he intended to use triads. After the framework is decided upon, the four-voice solution may be worked into a contrapuntal harmonic style – an increased melodic interest in each voice line.

Be sure that every non-harmonic tone that you insert or create follows the rules and does not create parallels. Non-harmonic tones tend to increase the melodic interest of the bass melody which must be solid before the non-harmonic tones are inserted. Many of the leaps of a third and fourth are filled in by passing tones.

Use the non-harmonic tones tastefully and stylistically, following the outlines in the previous chapters.

With the exception of the anticipation and the escape tone, **DO NOT** add non-harmonic tones to the soprano line.

PARTWRITING EXERCISE - CHAPTER 14

Partwrite the following exercises using all the non-harmonic tones:

1.

2.
CHAPTER FIFTEEN

Seventh Chords: Introduction

A seventh chord is a four-note chord spelled in thirds. A seventh chord contains a triad plus a note that forms a seventh above the root. Seventh chords are classified as dissonant sonorities.

The identification of a seventh chord depends upon two factors: the tonal quality of the triad, and the interval formed by the root and seventh. The name of the G B D F seventh chord is determined in the following manner:

First factor  G B D  major triad
Second factor  G - - F  minor seventh

G B D F is called a major-minor seventh chord.

Seventh chords used in compositions during the 18th and 19th centuries:

<table>
<thead>
<tr>
<th>Structural name</th>
<th>Common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>major-minor seventh</td>
<td>seventh (dominant seventh)</td>
</tr>
<tr>
<td>minor-minor seventh</td>
<td>minor seventh</td>
</tr>
<tr>
<td>diminished-minor seventh</td>
<td>half-diminished seventh</td>
</tr>
<tr>
<td>major-major seventh</td>
<td>major seventh</td>
</tr>
<tr>
<td>diminished-diminished seventh</td>
<td>diminished seventh</td>
</tr>
<tr>
<td>minor-major seventh</td>
<td>minor-major seventh</td>
</tr>
<tr>
<td>augmented-major seventh</td>
<td>augmented-major seventh</td>
</tr>
</tbody>
</table>
FIGURED BASS FOR THE SEVENTH CHORD

Figured bass for the root position of a seventh chord may be:

Figured bass for the first inversion may be:

Figured bass for the second inversion may be:

Figured bass for the third inversion may be:
THE PREPARED SEVENTH

The seventh of a chord is a harmonic tone, but it forms a dissonant relationship with the root. An examination of pre-Bach examples of seventh chords shows that the seventh is usually preceded by a consonance and is resolved downward to a consonance. The dissonant seventh is preceded and followed by a consonance, much like a non-harmonic tone.

With this in mind, carefully observe the three-note melodic line of the voice which contains the seventh, in each of the following examples.

<table>
<thead>
<tr>
<th>Melodic Figure</th>
<th>Seventh Chord Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspension figure</td>
<td><img src="image1" alt="Suspension figure" /></td>
</tr>
<tr>
<td>Passing Tone figure</td>
<td><img src="image2" alt="Passing Tone figure" /></td>
</tr>
<tr>
<td>Neighboring tone figure</td>
<td><img src="image3" alt="Neighboring tone figure" /></td>
</tr>
<tr>
<td>Appoggiatura figure</td>
<td><img src="image4" alt="Appoggiatura figure" /></td>
</tr>
</tbody>
</table>
In the Chorales by J. S. Bach, triads are more frequent than seventh chords.

Diatonic triads: 83.7%
Diatonic seventh chords: 14.8%
Altered triads and seventh chords: 1.5%

Inversions of seventh chords are more frequent than root position.

Root position: 26%
First inversion: 58.5%
Second inversion: 3%
Third inversion: 12.5%

Seventh chords appear in 1st and 2nd classifications, most of the time.

1st classification: 51%  
V7  39%  
vii°7  12.5% (most in minor)

2nd classification: 45.5%  
ii7  37%  
IV7  8.5%

3rd classification: 2.7%  
vi7  2.6% (most in major)  
I7  .4% (major only)

4th classification: .3%  
III 7 (major only)
CHAPTER SIXTEEN

Dominant Seventh Chord

The most frequent seventh chord is found in the first classification with its root on the dominant. The following table shows the type of chord and symbol used in major and minor keys.

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>V(^7)</td>
<td>V(^7)</td>
</tr>
<tr>
<td>major-minor seventh</td>
<td>major-minor seventh</td>
</tr>
</tbody>
</table>

\(v\)\(^7\) minor-minor seventh (infrequent)

ROOT POSITION

Suspension Figure

1) When the 7\(^{th}\) of the V\(^7\) appears in the suspension figure, the V\(^7\) is prepared by chords of the second classification, namely ii and IV.

2) In a major key, the 7\(^{th}\) of the V\(^7\) chord descends one half step to its resolution tone.

3) In a minor key, the 7\(^{th}\) of the V\(^7\) chord descends one whole step to its resolution tone.

4) The 7\(^{th}\) the V\(^7\) chord may be ornamented in its resolution. Under all conditions of ornamentation, the dissonant 7\(^{th}\) must be resolved.

5) The V\(^7\) chord may progress to either the tonic or submediant, within the phrase or at the cadence.

6) Occasionally a V\(^7\) complete may progress to an incomplete tonic.
Passing Tone Figure

1) When the 7th of the V7 is appears in the passing tone figure, the V7 is prepared by chords of the tonic and its inversions, or by the V triad in root position or first inversion, but not by chords of the second classification.

2) The 7th of the V7 chord descends by scale step to its resolution tone.

3) The 7th the V7 chord may be ornamented in its resolution.

4) The progressions, including the passing tone figure, are usually found in a cadence.

Appoggiatura Figure

1) When the 7th of the V7 appears in the appoggiatura figure, the V7 is preceded by the dominant triad.

2) The 7th of the V7 chord is usually approached from the 5th of the V triad. Occasionally the 3rd of the V triad may leap a fifth to the 7th of the V.

3) The 7th the V7 chord may be ornamented in its resolution.

4) The 7th appears in the appoggiatura figure infrequently.

Neighboring Tone Figure

1) When the 7th of the V7 appears in the neighboring tone figure, the V7 is preceded by the VI chord (third classification).

2) The 7th the V7 chord may be ornamented in its resolution.
FIRST INVERSION

Suspension Figure

Was Gott tut, das ist wohlgetan

1) When the 7th of the V7 appears in the suspension figure, the V7 is prepared by chords of the second classification.

2) The 7th of the V7 chord descends to the resolution tone.

3) All four tones are present in the first inversion of the V7 chord.

4) The bass note of the first inversion of the V7 may be approached by step or leap.

5) The chord following the first inversion V7 is usually tonic. Sometimes the first inversion of the V7 may be followed by the root position of the V7.

Passing Tone Figure

Jesu, Jesu, du bist mein

1) The first inversion of the V7 is prepared by the tonic in first inversion or root position. Tonic has the 5th in the soprano, and V7 has the 7th in the soprano.

2) Special use of non-harmonic tones in the bass passing tones or suspensions avoids unequal fifths between soprano and bass.

3) The leap from the bass note of the first inversion of tonic to the bass note of the first inversion V7 may be either a perfect fourth or a diminished fourth.

4) The V7 in first inversion may follow the V triad.
Neighboring Tone Figure

Jesu, deine tiefen Wunden

1) The first inversion of the V⁷ usually follows the root position of the tonic and progresses to the root position of the tonic.

2) The first inversion of the V⁷ may follow the first inversion of the tonic by leap in the bass, or by filled-in leap.

Appoggiatura Figure

Was mein Gott will, das g'scheh'

1) When the V⁷ in first inversion occurs in the phrase, it follows the first inversion of the tonic and progresses to the tonic to root position. This progression is rare within the phrase.

2) The V⁷ in first inversion occurs occasionally at the beginning of a phrase, using the appoggiatura figure between the last chord of the preceding phrase and its resolution to the tonic. Cross frequently occurs in the voice leading in the progression to the V⁷.
SECOND INVERSION

The second inversion of the $V^7$ is the least frequent position. This inversion of the chord is practically limited to the passing tone figure in Bach's chorales. The neighboring tone, appoggiatura and suspension figures are rare.

The passing tone figure precedes and resolves the 7th in two ways: ascending and descending.

**Passing Tone Figure**

When the ascending passing tone figure is used, the 7th of the $V^7$ rises to the dominant. A study of Bach's use of this figure will reveal that the 7th of the $V^7$ does not resolve down in the conventional manner. Unequal fifths between two voices are frequent in this use of the $V^7$.

1) The second inversion of the $V^7$ may be used between the first inversion of the tonic and the root position of the tonic. Imperfect fifths may appear between upper voices.

2) The second inversion of the $V^7$ may be used between the root position of the tonic and the first inversion of the tonic. The 7th of the $V^7$ may ascend to the 5th of the tonic. Imperfect fifths may appear between upper voices.
THIRD INVERSION

Suspension Figure

Puer natus in Bethlehem

1) The third inversion of the V\(^7\) is prepared by chords of the second classification, namely ii and IV, and progresses to the first inversion of the tonic.

2) All four tones present in the third inversion.

3) The third inversion V\(^7\) chord may appear at the beginning of a phrase or within a phrase. It is rarely found as the final chord in a half cadence.

Passing Tone Figure

Wenn mein Stündlein vorhanden ist

1) The passing tone figure the V\(^7\) is less frequent than the suspension figure.

2) The third inversion V\(^7\) chord in a passing tone figure may appear at the beginning of a phrase or within a phrase.

3) When a chromatic passing tone figure is used, a modulation takes place.

4) Leaps in the voices leading occur when the chord is at the beginning of a phrase. Within the phrase the approach to the third inversion of the V\(^7\) is smooth in all voices.
**Neighboring Tone Figure**

Dir, dir, Jehovah, will ich singen

1) The third inversion $V^7$ chord in a neighboring tone figure is rare.
2) The third inversion of the $V^7$ both follows and progresses to the tonic in first inversion.
3) The progression is most useful within the phrase.

**Appoggiatura Figure**

Puer natus in Bethlehem

1) The third inversion $V^7$ chord in an appoggiatura figure is rare.
2) The device is found between phrases and within a phrase.
   a) between phrases a change of key takes place
   b) within a phrase the third inversion of the $V^7$ follows either the V or ii chord.
3) The third inversion of the $V^7$ progresses to the tonic in first inversion.
CHAPTER SEVENTEEN

Supertonic Seventh Chord

The next most common seventh chord is found is the second classification with its root on the supertonic. The following table shows the type of chord and the symbol used in major and minor keys:

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii(^7)</td>
<td>ii(^\circ)(^7)</td>
</tr>
<tr>
<td>minor-minor seventh</td>
<td>minor-minor seventh (rare)</td>
</tr>
</tbody>
</table>

The 7\(^{th}\) of the supertonic seventh chord usually appears in the suspension figure. It is found most often in first inversion, next in root position, occasionally in third inversion, and practically never in second inversion.

ROOT POSITION

Suspension Figure

1) The ii\(^7\) chord may follow the vi or I chord, or occasionally the IV.
2) The ii\(^7\) may progress to V or sometimes to V\(^7\) or occasionally the vii\(^\circ\) in first inversion.
3) The ii\(^7\) appears in root position frequently, in major keys.
4) The seventh of the ii\(^7\) resolves in the same manner as the seventh of the V\(^7\).
5) The ii\(^7\) may appear at any point of the phrase.
Passing Tone Figure

In the example below, the ii⁷ is introduced through the first inversion of the ii. The passing tone figure is in the soprano. Notice that the resolution of the seventh is momentarily retarded to form the 6–5 melodic line over the dominant “G” in the bass.

Von Gott will ich nicht lassen

1) When the seventh of the ii⁷ appears in the passing tone figure, it is preceded by the first inversion ii triad.

2) Small leaps may occur in the upper voiced between the ii and ii⁷, since the supertonic sonority is established by the first inversion of the triad.

3) The ii⁷ may be followed by the V triad or V⁷. The tonic triad in inversion may appear between the ii⁷ and the dominant harmonies.

Neighboring Tone and Appoggiatura Figures

There are no examples in Bach chorales of these melodic figures used in connection with the ii⁷ chord.
FIRST INVERSION

Suspension Figure

Jes Leiden, Pein und Tod

1) The ii\(\text{7}\) in first inversion may follow IV in first inversion, vi, or I in root position or inversion.

2) The ii\(\text{7}\) in first inversion progresses normally to the V triad. Occasionally the Cadential 6/4 chord precedes the V triad.

3) All chord tones are present in the first inversion of the ii\(\text{7}\).

4) The progression ii\(\text{7}\) - V may occur during the time duration of one beat.

5) The ii\(\text{7}\) in first inversion may appear at any point within the phrase. The majority, however, are found as part of a cadence.

Passing Tone, Neighboring Tone and Appoggiatura Figures

The ii\(\text{7}\) in first inversion does not appear in these melodic figures.

SECOND INVERSION

The ii\(\text{7}\) in second inversion does not appear in Bach chorales, as a functional chord.
THIRD INVERSION

Suspension Figure

Ach Gott, erhör' mein Seufzen

1) The third inversion of the ii\textsuperscript{7} follows the root position of the I chord.
2) The soprano, alto and tenor voices may descend or ascend, in similar motion, from the I triad to the third inversion of the ii\textsuperscript{7}.
3) The third inversion of the ii\textsuperscript{7} progresses to the V or V\textsuperscript{7}, in first inversion.
4) This progress occurs most often at the beginning of a phrase.

Passing Tone, Neighboring Tone and Appoggiatura Figures

The ii\textsuperscript{7} in third inversion is extremely rare, or does not appear in these melodic figures.
CHAPTER EIGHTEEN

Leading Tone Seventh Chord in Minor

Following the supertonic seventh chord in frequency is the leading tone seventh chord in minor. The \( \text{vii}^7 \) is a diminished-diminished seventh chord. It may be used as a first-classification chord, in the authentic cadence.

ROOT POSITION

Suspension Figure

Christ, der du bist der helle Tag

1) The \( \text{vii}^7 \) frequently follows the \( \text{iv} \) chord in root position or first inversion.
2) The \( \text{vii}^7 \) occasionally follows the \( \text{ii}_7 \) in root position.
3) The root of the \( \text{vii}^7 \) may be approached in the bass by step or leap, including the leap of a diminished fifth, descending from the \( \text{iv} \).
4) The upper voices progress smoothly.

Passing Tone Figure

Herlich tut mich verlangen

1) When the \( \text{vii}^7 \) appears in a passing tone figure in root position, a chromatic chord progression, or modulation is involved.
2) The 7th in the \( \text{vii}^7 \) usually appears in the tenor.
Neighboring Tone Figure

When appearing in a neighboring tone figure, the $\text{vii}^7$ is found in diatonic as well as chromatic progressions.

1) When the $\text{vii}^7$ appears in a neighboring tone figure root position, it usually follows the tonic in root position, and occasionally in first inversion.

2) The 7th in the $\text{vii}^7$ usually appears in the tenor, or alto, but not in the soprano.

Appoggiatura Figure

1) The leap of the appoggiatura figure usually ascends, but occasionally descends to the 7th in the $\text{vii}^7$. The 7th descends to the resolution tone, in either case.

2) The $\text{vii}^7$ chord is usually preceded by a chromatically altered chord.
FIRST INVERSION

Ist Gott mein Schild und Helfersmann

![Music notation](image)

**Suspension Figure**

1) The vii\(^{o7}\) in first inversion follows a second-classification chord, usually the supertonic.
2) The vii\(^{o7}\) in first inversion progresses to the first inversion tonic triad.

**Neighboring Tone Figure**

1) The vii\(^{o7}\) in first inversion follows tonic (first inversion) or dominant.
2) The vii\(^{o7}\) in first inversion progresses to tonic in first inversion.

**Passing Tone Figure**

No examples found in the Bach chorales.

**Appoggiatura Figure**

1) The vii\(^{o7}\) in first inversion follows the vii\(^{o}\) triad, or occasionally the tonic.
2) The vii\(^{o7}\) in first inversion progresses to the tonic in first inversion, or occasionally to the V\(^{7}\) in first inversion.
3) A passing tone often fills in the leap of the third in this melodic figure.
SECOND INVERSION

Ach Gott und Herr, wie gross und schwer

Suspension Figure

1) The $\text{vii}^7$ in second inversion follows second-classification chords.
2) The $\text{vii}^7$ in second inversion progresses to tonic, in root position or first inversion.

Passing Tone Figure - No examples found in the Bach chorales.

Neighboring Tone Figure

1) The $\text{vii}^7$ in second inversion follows tonic, in root position or inversion.
2) The $\text{vii}^7$ in second inversion progresses to tonic, in root position or first inversion.

Appoggiatura Figure

1) The $\text{vii}^7$ in second inversion follows tonic, in any inversion.
2) The $\text{vii}^7$ in second inversion progresses to tonic, in root position or first inversion.
1) Third inversion of $\text{vii}^0\text{7}$ is rare.

2) $\text{vii}^0\text{7}$ in third inversion usually follows subdominiant in first inversion.

3) $\text{vii}^0\text{7}$ in third inversion usually progresses to either $V^7$ or tonic in first inversion.

4) The $7^{\text{th}}$ may be appear as a suspension figure, or occasionally by the descending chromatic passing tone figure.
CHAPTER NINETEEN

Subdominant Seventh Chord in Major and Minor

The next prominent seventh chord is found in the second classification, on the subdominant in major and minor.

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV(^7)</td>
<td>iv(^7)</td>
</tr>
<tr>
<td>major-major seventh</td>
<td>minor-minor seventh</td>
</tr>
<tr>
<td>major-minor seventh (first inversion)</td>
<td></td>
</tr>
</tbody>
</table>

ROOT POSITION

Suspension Figure

Vater unser im Himmelreich

1) The IV\(^7\) follows tonic, or the third-classification submediant chord.
2) The IV\(^7\) progresses most often to the V triad, and sometime the V\(^7\).
3) The IV\(^7\) is most often found in the cadence formula.
4) The 7\(^{th}\) of the chord is most often found in the soprano.
5) The IV\(^7\) is rarely incomplete.
6) The IV\(^7\) is found frequently on the second half of the beat.
Passing Tone Figure

Christins der unselig macht

1) The IV\(^7\) follows IV triad in first inversion.
2) The IV\(^7\) progresses most often to the V triad, and sometime the V\(^7\).
3) The IV\(^7\) is most often found in the cadence formula.

Neighboring Tone and Appoggiatura Figures

These melodic figures are rare in Bach Chorales.

Suspension Figure

Herzlich tut mich verlangen

1) IV\(^7\) in first inversion follows the tonic, mediant, or mediant in first inversion.
2) IV\(^7\) in first inversion progresses to the V or V\(^7\), and sometimes to the vii\(^{o7}\) in root position.
3) iv\(^7\) (minor key) in first inversion progresses to the V in a phrygian cadence.
4) In most cases the, IV\(^7\) in first inversion is found on the first half of the beat.

Passing Tone, Neighboring Tone and Appoggiatura Figures

These melodic figures are rare in Bach Chorales.
SECOND INVERSION

No examples of IV\(^7\) in second inversion are found in the Bach chorales.

THIRD INVERSION

Suspension Figure

1) The IV\(^7\) in third inversion follows first inversion tonic, or root position mediant.

2) The IV\(^7\) in third inversion is frequently a common chord in tow keys of a modulation.

3) The IV\(^7\) in third inversion appears near the beginning of a phrase or within the phrase.

Passing Tone, Neighboring Tone and Appoggiatura Figures

No examples of IV\(^7\) in third inversion, with these melodic figures, are found in the Bach chorales.
CHAPTER TWENTY

Other Diatonic Seventh Chords

The other diatonic seventh chords include:

- $\text{vii}^0_7$ in major  
  First Classification
- $\text{vi}_7$ in major  
  Third Classification
- $\text{VI}_7$ in minor  
  Third Classification
- $I_7$ in major  
  Third Classification
- $\text{iii}_7$ in major  
  Fourth Classification

Leading Tone Seventh Chord in Major: The Root Position

The seventh chord built on the leading tone in a major key is a diminished-minor seventh chord (half-diminished). The leading tone seventh chord in major is much less frequent than in minor. The chord has a limited function in the chorales. It is found in the progression IV$^6$ - $\text{vii}^0_7$ - I, and appears on the second half of the beat. It is controlled by the suspension figure.

![Chord Diagram](image)

Leading Tone Seventh Chord In Major: Inversions

Inversions of the $\text{vii}^0_7$ in major are rare.
Submediant Seventh Chord in Major and Minor: The Root Position

The submediant seventh chord, in major and minor keys, is found most often in root position. The following table shows the type chord and symbol used.

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>vi⁷</td>
<td>V⁷</td>
</tr>
<tr>
<td>minor-minor seventh</td>
<td>major-major seventh</td>
</tr>
<tr>
<td></td>
<td>vi⁷</td>
</tr>
<tr>
<td>vi⁰³</td>
<td>diminished-minor seventh</td>
</tr>
</tbody>
</table>

The Vi⁷ in Major and the unaltered Vi⁷ in Minor

O Ewigkeit, du Donnerwort

1) vi⁷ follows mediant (triads and seventh chords) or tonic triads.
2) vi⁷ progresses to the second classification (ii or IV), or first classification (V or vii⁰ in first inversion).
3) The 7th of the vi⁷ appears in a suspension figure.

The Vi⁰³ in Minor

Verleih, uns Frieden gnädiglich

1) vi⁰³ follows dominant, or mediant in first inversion.
2) vi⁰³ progresses to iv in the first inversion
3) The 7th of the vi⁰³ appears in a suspension figure.
Submediant Seventh chord in Major and Minor: Inversions

Examples of the submediant seventh chord are extremely rare. They usually appear as passing chords, and have no harmonic function.

The Tonic Seventh Chord in Major

The seventh chord built on the tonic in a major key is a major-major seventh chord. Tonic harmony, when it is dissonant, has a strong tendency to progress to second-classification chords. The I\(^7\) is a third classification chord.

Es is gewisslich an der Zeit

1) When the I\(^7\) in root position or inversion follows the V or V\(^7\), the 7\(^\text{th}\) appears in a suspension figure.
2) When the I\(^7\) in root position or inversion follows the I (root position or first inversion), the 7\(^\text{th}\) appears in a passing tone figure.
3) The I\(^7\) progresses to second classification chords. IV is more frequent than ii.
4) The incomplete I\(^7\) is rarely used.
The Mediant Seventh Chord in Major

In the fourth classification in a major key, occasionally a minor seventh chord appears on the median. In root position, the chord is usually incomplete, appearing with one root, two thirds, and one seventh.

1) The mediant seventh in root position or in inversion is rare, and if found only in major keys.
2) This chord is found in a retrogression from either the first or second classifications.
3) The iii\(^7\) progresses normally to third classification (vi), or by elision to the second classification (IV).
4) The suspension figuration is the only one used.