Compendium

of Voice-Leading Patterns from the 17th and 18th Centuries to Play, Sing, and Transpose at the Keyboard

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Thoroughbass Abbreviations and the Figures to Add

The most common figures are in bold boxes.

Graphic based on:
David Kellner, Treulicher Unterricht im General-Bass (1732, 28)
Simple Cadences in Two Voices

Bass scale degrees are indicated with $1\circ$, $2\circ$, etc. Upper voices are indicated with 1, 2, etc. "Simple" means "only consonances." Consonant intervals are unison, 3, perfect 5, 6, and 8. The unison, perfect 5, and 8 are perfect consonances; 3 and 6 are imperfect consonances. A simple cadence in two voices requires the tenor and discant clausulae.

Clausulae are stereotypical melodic segments used to make various kinds of cadences. The tenor clausula (TC) uses the degrees $3\ 2\ 1$, and is always colored green here. The discant clausula (DC) uses the degrees $1\ 7\ 1$, and is always colored red here. Clausulae maintain their names regardless of which voice they are placed in. For example, the discant clausula could be placed in the top, middle, or lowest voice.

Traditionally the three pitches in clausulae are named Ultima (ULT), Penultima (PEN), and Antepenultima (ANT), meaning "last," "2nd-to-last," and "3rd-to-last," respectively.

In minor-key cadences, the seventh degree must be chromatically raised to make a leading tone: $\#7$.

In practice, the tenor clausula may also begin on $1$ or end on $3$, but always has $2$ at PEN. Below are all eight possible simple cadences in two voices. The discant clausula is always the same.
Simple Cadences in Three Voices

A simple cadence in three voices adds the bass clausula (1 5 1) to the TC/DC pair. Unlike the other clausulae, the bass clausula may only appear in the bass voice. All four versions of the tenor clausula are possible (see bottom of page three). Thoroughbass figures are included between the staves. Thoroughbass figures indicate the intervals of the upper parts as measured from the bass. The ordering of the figures does not always correspond to the ordering of the upper voices. A "spacing" or "position" indicates the starting interval between the outer voices.

<table>
<thead>
<tr>
<th>Major Keys</th>
<th>Minor Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>a</td>
</tr>
<tr>
<td>[\text{ANT PEN ULT}]</td>
<td>[\text{ANT PEN ULT}]</td>
</tr>
<tr>
<td>[\text{ANT PEN ULT}]</td>
<td>[\text{ANT PEN ULT}]</td>
</tr>
<tr>
<td>[\text{ANT PEN ULT}]</td>
<td>[\text{ANT PEN ULT}]</td>
</tr>
</tbody>
</table>

In minor-key cadences, the seventh degree must be chromatically raised to make a leading tone. Accidentals in thoroughbass refer to a third above the bass (i.e. here G becomes G#).

\[\text{with inverted upper voices:}\]

\[\text{with inverted upper voices:}\]
Simple Cadences in Four Voices

A simple cadence in four voices adds the alto clausula (5 5 5) to the three-part cadence. As before, the upper voices can be inverted to create the different spacings based on the starting interval. The parts in a four-voice texture are named (from top down): soprano (or discant), alto, tenor, and bass. These names are used even when the composition is for one or more instruments (not singers). In practice, composers usually preferred not to end a piece with the fifth in the top voice.

In minor-key cadences, the seventh degree must be chromatically raised to make a leading tone. Accidental in thoroughbass refer to a third above the bass (i.e. here G becomes G#).

In practice, baroque composers saved time in two ways: (1) rather than indicate the order of the upper voices via the figures (as above), composer would simply write the figures from highest to lowest and let the player "realize" the spacing as desired; (2) composers would abbreviate figures. Learn the abbreviations by using the table on page two. For instance, if 8/5/3 were written, the player could realize this in the octave, third, or fifth spacing. But the 5/3 chord was so common that if nothing was written, the player assumed a 5/3 chord and realized the figure in as many or as few voices as required by the situation at hand.

In practice, composers usually preferred not to end a piece with the fifth in the top voice.
“Compound” means that there is a dissonance in the form of a syncopatio (i.e., suspension). Whereas the modern term “suspension” implies the delay of a chord tone, the historical term “syncopatio” implies the syncopated delay of an interval. In the baroque era, the two-voice cadence occurred most often with a syncopatio dissonance. The syncopatio dissonance arises by “delaying” the arrival of 7 in the discant clausula. This delay splits the PEN position into two parts, which is where the name “compound” may come from.

A syncopatio has 3 parts: (1) consonant preparation, (2) dissonant “clash,” and (3) consonant resolution. After Giovanni Artusi (c.1540-1613), the tied (“delayed”) voice is the patient, the moving voice the agent. In a cadence, the discant clausula is always the patient, while the tenor clausula is always the agent. Memory aid: the patient is passive (tied); the agent is active (it moves to make the dissonant "clash").

The terms supersyncopatio and subsyncopatio refer to the position of the patient voice (above or below).

Here are the same eight two-voice cadences as on page three, but with syncopatio dissonances. Sometimes a dash between two thoroughbass figures indicates the resolution of a syncopatio.
Compound Cadences in Three Voices

Compound cadences in three voices come in three variants: 5/4, 6/5, and 6/4.

As in the simple cadence in three voices, one adds the bass clausula (1 5 1) to the DC/TC pair.

All four versions of the tenor clausula are possible. The small notes in the bass are optional.

The discant clausula is shown here in its syncopated form.

Memory aid: in a compound cadence, one voice always has the "delayed" DC: 1 5 1 7 1.

Compound Cadence with 5/4

This compound cadence has a 5/4 chord at PEN. The dissonant 4 in a 5/4 chord must always be prepared.

![Chart showing 5/4 compound cadence](chart.png)

C: 1 3 5 1

a: 1 3 5 1

Compound Cadence with 6/5

This compound cadence has a 6/5 chord at PEN. Only the bass is different from the 5/4 version. This bassline is considered a variant on the bass clausula, since it still ends with 5 1. The 5 in a 6/5 chord acts like a dissonance, even though it is a consonant perfect 5. Thus, if the 5 can be prepared (tied by common tone), it should be. Ironically the dissonant diminished 5 may enter unprepared in a 6/5 chord, though.

![Chart showing 6/5 compound cadence](chart.png)

C: 1 3 4 5 1

a: 1 3 4 5 1

Compound Cadence with 6/4

The compound cadence with 6/4 "syncopates" the TC, resulting in a double syncopatio with the DC. Though the 4 is a dissonance, it may enter unprepared in a 6/4 chord (see page ten).

![Chart showing 6/4 compound cadence](chart.png)

C: 1 3 5 1

a: 1 3 5 1
This compound cadence adds the alto clausula to the three-part compound cadence with 5/4. You may also syncopate the entry of the red discant clausula. Small bass notes are optional. As noted already, the 4 must be prepared in a 5/4 chord, but not in a 6/4 chord.

**Compound Cadences with 5/4 in Four Voices**

### Major Keys
- Octave position
- Third position
- Fifth position

### Minor Keys
- Octave position
- Third position
- Fifth position

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This compound cadence adds the blue voice to the three-part compound cadence with 6/5. This is considered a variant on the alto clausula because it still ends with 5 5.

In reality, the alto and bass clausulae are flexible filler voices to the DC/TC pair. You may also syncopate the entry of the red discant clausula. Small bass notes are optional. As noted already, the 5 in a 6/5 chord should be prepared, if possible. (The perfect 5 must be prepared, but the diminished 5 may enter unprepared in a 6/5 chord.)

### major keys

<table>
<thead>
<tr>
<th>octave position</th>
<th>third position</th>
<th>fifth position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Major Octave" /></td>
<td><img src="image" alt="Major Third" /></td>
<td><img src="image" alt="Major Fifth" /></td>
</tr>
<tr>
<td>C: 1 3 4 5 1</td>
<td>6 5</td>
<td>6 5</td>
</tr>
</tbody>
</table>

### alternate baseline

<table>
<thead>
<tr>
<th>octave position</th>
<th>third position</th>
<th>fifth position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Alternate Octave" /></td>
<td><img src="image" alt="Alternate Third" /></td>
<td><img src="image" alt="Alternate Fifth" /></td>
</tr>
<tr>
<td>C: 3 4 5 1</td>
<td>6 5</td>
<td>6 5</td>
</tr>
</tbody>
</table>

### minor keys

<table>
<thead>
<tr>
<th>octave position</th>
<th>third position</th>
<th>fifth position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Minor Octave" /></td>
<td><img src="image" alt="Minor Third" /></td>
<td><img src="image" alt="Minor Fifth" /></td>
</tr>
<tr>
<td>a: 1 3 4 5 1</td>
<td>6 5 #</td>
<td>6 5 #</td>
</tr>
</tbody>
</table>

### alternate baseline

<table>
<thead>
<tr>
<th>octave position</th>
<th>third position</th>
<th>fifth position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Alternate Octave" /></td>
<td><img src="image" alt="Alternate Third" /></td>
<td><img src="image" alt="Alternate Fifth" /></td>
</tr>
<tr>
<td>a: 3 4 5 1</td>
<td>6 5 #</td>
<td>6 5 #</td>
</tr>
</tbody>
</table>
Compound Cadences with 6/4 in Four Voices

This compound cadence adds the alto clausula to the three-part compound cadence with 6/4. You may also syncopate the entry of the DC and TC, as on page seven. Small bass notes are optional.

**major keys**

<table>
<thead>
<tr>
<th>Octave Position</th>
<th>Third Position</th>
<th>Fifth Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6) 6 5 3</td>
<td>(6) 6 5 3</td>
<td>(6) 6 5 3</td>
</tr>
<tr>
<td>C: 1 3 5 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parallel fifths can be avoided thus:

Though the 4 is a dissonance, it may enter unprepared in a 6/4 chord, but not in a 5/4 chord.

<table>
<thead>
<tr>
<th>Octave Spacing</th>
<th>Third Spacing</th>
<th>Fifth Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6) 6 5 3 5</td>
<td>(6) 6 5 3 5</td>
<td>(6) 6 5 3 5</td>
</tr>
<tr>
<td>a: 1 3 5 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parallel fourths invert to parallel fifths!

Perfect 5ths may move to dim. 5ths. But dim. 5ths are a dissonance and need to resolve to a third. Thus, dim. 5ths do not usually progress to perfect 5ths, but this is nevertheless allowable if (1) it is not in the outer voices and (2) there are three or more voices.
A double cadence combines the simple and compound cadences, as shown in the first example. There are two main types of double cadences: with 5/4 and with 6/5 (depending on the bassline). Memory aid: one voice always has the "syncopated" DC preceded by an extra 7: 7 1 1 7 1.

Double Cadences in Three Voices

Here the first pitch of the TC is changed, making a 7 chord. The final bassline below is also slightly different.
Double Cadences in Four Voices

This version merely adds the flexible alto clausula to the three-voice double cadence. To save space, only major-key versions are shown here. Don’t forget to use #7 in minor.

**major keys**

- **third position**
- **fifth position**
- **octave position**

**simple + compound**

- The same as above, but starting with a 7 instead of 5/3.

**Variant with a 6/5-chord.**

**Mores variants with 6/5-chords.**
Evaded Cadences in Three Voices

A cadence is "evaded" if the impression is given of ending with \( 5 - 1 \) in the bass, but then something else happens. Here are three common evasive strategies (with a fourth shown on the next page).

**Form 1:** any cadence ending with \( 5 - 1 \) in the bass (i.e. a "deceptive" cadence)

**Form 2:** any cadence ending with \( 5 - 3 \) in the bass

**Form 3:** DC resolves to \( 4 \) (often 4 in new key), modulating down a fifth (see arrow): *motivo di cadenza.*

In the first evaded double cadence given below, all three voices can be inverted, making 6 combinations total. This is called triple invertible counterpoint. green = TC (agent); red = DC (patient); blue = alto clausula (auxiliary)
Evaded Cadences in Four Voices

The flexible alto clausula is added, plus a new variant with tonization. Minor-key versions are not shown.

Form 1: any cadence ending with 6o in the bass (i.e. a “deceptive” cadence). The small notes refer to the alternative bass.

Form 2: any cadence ending with 3o in the bass

Form 3: DC resolves to n7 (actually 4 in new key), modulating down a fifth (see arrow): motivo di cadenza.

Form 4: DC moves to #1, which becomes #7 (leading tone) in the key a step higher (see arrow)
Tenor or Discant Clausulae in the Bass in Three Voices

The DC and TC can also appear in the bass. They are less conclusive than cadences that end with 5 1. The blue voice, which resembles an alto clausula, is merely an auxiliary to the DC/TC pair.

**Discant clausula in the bass:**

**major keys**

<table>
<thead>
<tr>
<th>Octave Position</th>
<th>Third Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 7 1 a: 1 7 1</td>
<td></td>
</tr>
</tbody>
</table>

**minor keys**

<table>
<thead>
<tr>
<th>Octave Position</th>
<th>Third Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 3 2 1 a: 3 2 1</td>
<td></td>
</tr>
</tbody>
</table>

With a tenor clausula in the bass: 3 2 1. Notice that the third spacing ends with a dim. 5 moving to perfect 5, which is allowable if it involves a middle voice.

With another tenor clausula in the bass: 1 2 3.

In this compendium, clausulae have been identified via scale degrees. This works most of the time. But there is another TC/DC pair—the "mi-cadence"—that ends on 5 in the bass (solfege syllable "mi" in hexachordal solmization). Here the TC ends with a half step (F-E) and the DC with a whole step (D-E). When conceived in terms of the major/minor system, a mi-cadence is equivalent to a half cadence.
Tenor or Discant Clausulae in the Bass in Four Voices

Compare the four-voice versions here with the three-voice versions on the previous page. The black and blue voices are auxiliaries to the DC/TC pair. To save space, minor-key versions are not shown.

Discant clausula in the bass. To avoid parallel 5ths, the upper voices are not always invertible.

**major keys**

<table>
<thead>
<tr>
<th>Octave Position</th>
<th>Third Position</th>
<th>Fifth Position</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Octave1" /></td>
<td><img src="image2.png" alt="Third1" /></td>
<td><img src="image3.png" alt="Fifth1" /></td>
</tr>
<tr>
<td><img src="image4.png" alt="Octave2" /></td>
<td><img src="image5.png" alt="Third2" /></td>
<td><img src="image6.png" alt="Fifth2" /></td>
</tr>
<tr>
<td><img src="image7.png" alt="Octave3" /></td>
<td><img src="image8.png" alt="Third3" /></td>
<td><img src="image9.png" alt="Fifth3" /></td>
</tr>
<tr>
<td><img src="image10.png" alt="Octave4" /></td>
<td><img src="image11.png" alt="Third4" /></td>
<td><img src="image12.png" alt="Fifth4" /></td>
</tr>
</tbody>
</table>

C: 1 7 1

With a tenor clausula in the bass: 3 2 1. Notice that in a 7-6 suspension, one usually avoids adding 5 to the 7 (i.e. double 3 or 8 instead). This progression is much easier in three voices than four.

C: 3 2 1

With another tenor clausula in the bass: 1 2 3. Dim.5-perf.5 is allowable if involving a middle voice.

C: 1 2 3

mi-cadence (almost the same as the third spacing)

a: 1 7 6 5
Up until now, we only examined situations where the TC remains held during the resolution of the syncopatio dissonance in the DC (a "static" TC), as shown below.

But the TC (indeed, any agent voice in a syncopatio) may also move to a different consonance after the dissonant "clash" at the PEN position, but before the ULT position, like when the TC leaps to 5 on beat four, as shown below. But this creates ambiguity regarding the clausulae. Is the green voice a tenor or a bass clausula? It has 2 at the PEN position, like a tenor clausula, but it also ends with 5 1, like a bass clausula. Ultimately, it doesn’t matter what we call it if we recognize the underlying contrapuntal processes: clausulae.

However, theories that track root motion (e.g. Roman numerals and function theory) draw a largely arbitrary distinction between the "active" and "static" tenor clausulae shown above. For example, why should the two chords at the arrows below be analyzed differently, when the overall voice-leading patterns are so similar? The reason is that, if you are working within a theory that assumes that (1) all chords have roots (even dissonant ones), and that (2) root motion between chords is syntactically meaningful, then you must analyze these two chords differently. But if you emphasize the underlying contrapuntal similarities in the clausulae, then you can view these two progressions as quite similar. Throughout the seventeenth century and up until around 1750, very few musicians thought in terms of chordal roots as we understand them today. Rather, these ideas emerged in the early 18th century and first gained widespread adoption in the second half of the 18th century.
Overview: Rules of the Octave
(Non-Sequential Stepwise Bass Harmonizations)

Rule of the Octave (Basic Form)

The Rule of the Octave (RO) determines the normative harmonies for each bass degree. "Basic" means that this RO only has 5/3 and 6/3 chords (exception: 4 descending).
A line through a figure means that this interval is raised chromatically. "5" serves merely as a reminder that the given bass degree takes a 5/3 chord.
Notice that, in major, the descending RO tonicizes the dominant key (key of V).

major keys

ascending

\[
\begin{array}{cccccccc}
5 & 6 & 6 & 5 & 6 & 6 & 5 & 6 \\
\end{array}
\]

either/or

\[
\begin{array}{cccccccc}
5 & 6 & 6 & 6 & 6 & 5 & 6 & 6 \\
\end{array}
\]

descending

\[
\begin{array}{cccccccc}
5 & 6 & 6 & 5 & 6 & 6 & 5 & 6 \\
\end{array}
\]

C(I): 1 2 3 4 5 6 7 1

G(V): 2 6 5 4 3 2 1

Rule of the Octave (Advanced Form)

"Advanced" means that this RO contains dissonant harmonies (i.e. chords other than 5/3 and 6/3). See arrows.

major keys

ascending

\[
\begin{array}{cccccccc}
5 & \frac{4}{3} & 6 & \frac{5}{6} & 5 & 6 & \frac{5}{6} & 5 \\
\end{array}
\]

descending

\[
\begin{array}{cccccccc}
5 & \frac{6}{5} & 6 & \frac{5}{6} & 5 & 6 & \frac{6}{5} & 5 \\
\end{array}
\]

C(I): 1 2 3 4 5 6 7 1

G(V): 2 6 5 4 3 2 1

minor keys

ascending

\[
\begin{array}{cccccccc}
5 & \frac{3}{5} & 6 & \frac{5}{6} & 5 & 6 & \frac{5}{6} & 5 \\
\end{array}
\]

descending

\[
\begin{array}{cccccccc}
5 & \frac{6}{5} & 6 & \frac{5}{6} & 5 & 6 & \frac{6}{5} & 5 \\
\end{array}
\]

a: 1 2 3 4 5 6 7 1

G(V): 2 6 5 4 3 2 1
Basic Rule of the Octave in Three Voices

To avoid parallel perfect fifths in the octave spacing, ascending only has a 5/3 chord instead of the normative 6/3 chord (see arrow).

To avoid parallel perfect fifths in the octave spacing, descending can take an augmented sixth (a dissonance). See the asterisk.
Basic Rule of the Octave as Clausulae

Here we see how even a stepwise bassline can be conceived as a series of cadences. Notice how each tetrachord (i.e. four-note bass segment) has invertible upper voices. A 4/2-chord appears on descending, which makes the bass into an incomplete DC (1 7 6 instead of 1 7 1). The TC is in the bass in green notes.

major keys
ascending
third position
descending

octave position

G(V): 1 2 3 4 (4 3) 2 1

Notice the parallel perfect 5ths in the ascending version. At least they are not between the outer voices!

minor keys
ascending
third position
descending

octave position

par. perf. 5ths

a: 1 2 3 4 5 6 7 1 1 7 6 5 4 3 2 1
Some variation in the voice-leading is possible.
Notice how similar the fifth spacing is to the third spacing.
A few three-note chords are necessary to avoid voice-leading errors.
Both C. P. E. Bach and J. D. Heinichen allow for the player to occasionally add or subtract a voice from the prevailing four-voice texture.
Advanced Rule of the Octave in Four Voices (Complete)

The advanced RO is not possible in only three parts. Some variation in the voice-leading is possible. A few three-note chords are necessary to avoid voice-leading errors. Both C. P. E. Bach and J. D. Heinichen allow for the player to occasionally add or subtract a voice from the prevailing four-voice texture.
Advanced Rule of the Octave in Four Voices
(Larger Section)

The RO is often more useful when conceived in two sections centered around the tonic.
All three upper voices are invertible, as shown by the colors.
The colors do not relate to clausulae, as in the previous section.

major keys
ascending  
descending

other positions

minor keys
ascending  
descending

other positions
Advanced Rule of the Octave in Four Voices
(Smaller Section)

The RO is often more useful when conceived in two sections centered around the tonic.
All three upper voices are invertible, as shown by the colors.
The colors do not relate to clausulae, as in the previous section.

major keys
*descending

other positions

*ascending

same as the upper half in G major

minor keys
*descending

other positions

*ascending

*d2 instead of a1 avoids parallel fifths.
Stepwise Bass: Parallel 6/3 Chords

Fauxbourdon refers to a series of 6/3 chords whose bass moves in stepwise motion.

In order to avoid parallel fifths between the upper voices, the 6 has to be in the top voice. Parallel 6/3 chord are usually realized in three voices, since the voice-leading is simpler than in four.

In four voices, a filler-voice (green) is added that must move in a zig-zag to avoid parallels. The filler voice alternates between doubling the bass and the sixth of each chord.

F♯ (see arrow) avoids a tritone leap in the tenor (c1–F♯1), but also creates an augmented second in the bass (F–G♯).
Stepwise Bass: Ascending 5-6 & Descending 7-6 Sequences

An ascending stepwise bass can also be harmonized by a 5-6 sequence. The 7-6 is the analogue for descending stepwise baselines. As in fauxbourdon, the voice leading is simpler in three voices than in four.

**major keys**

**ascending**

- C: 1 2 3 4 5 6 7
- Lament-Bass (descending chromatic tetrachord):

**descending**

- a: 1 2 3 4 5 6 7
- with inverted voices (minor not shown)

**minor keys**

**ascending**

- C: 1 2 3 4 5 6 7

**descending**

- in four voices
Stepwise Bass: Suspension Chain in Two Voices

major keys

with "static" agent voice (blue)

with inverted voices

with "active" agent voice (blue)

compare this version with the falling fifth sequence

with inverted voices

minor keys

with "static" agent voice (blue)

with inverted voices

with "active" agent voice (blue)

compare this version with the falling fifth sequence

with inverted voices
Stepwise Bass: Syncopated-Bass Sequence (with 6/3 Chords)

The 4/2 sequence is one of the most common sequences of the baroque period. It is important to know that the bass voice is the patient in the *syncopatio*.

Three voices

<table>
<thead>
<tr>
<th>Major keys</th>
<th>Third position</th>
<th>Octave position</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 1 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor keys</th>
<th>Third position</th>
<th>Octave position</th>
</tr>
</thead>
<tbody>
<tr>
<td>a(i): 1 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Four voices

<table>
<thead>
<tr>
<th>Major keys</th>
<th>Third position</th>
<th>Fifth position</th>
</tr>
</thead>
<tbody>
<tr>
<td>C: 1 7 6 5 4 3 2 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor key</th>
<th>Third position</th>
</tr>
</thead>
<tbody>
<tr>
<td>[The octave and fifth positions are not shown.]</td>
<td></td>
</tr>
</tbody>
</table>

C(VI): 4 3 2

C(III): 4 3

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Version: January 7, 2022
Stepwise Bass: Syncopated-Bass Sequence (with 6/5 Chords)

The 4/2 sequence is one of the most common sequences of the baroque period. Both the bass and the red voice are syncopated in alternation with one another.

Four voices

C: 1 7 6 5 4 3 2

Octave position

Minor keys

Third position

Fifth position

C(III): 4 3

Octave position

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Stepwise Bass: Ascending Sequences

This sequence has the patient in the upper voice always reset to form the preparation of the next synopatio. Although it can occur with only one of the upper voices, it is more common with two upper voices moving in parallel thirds or sixths. For reasons of space, minor-key versions are not shown.

with 9/4-8/3 syncopatio chain

with inverted voices

major keys

with 9/7-8/6 syncopatio chain

with inverted voices

major keys

another variant with 7-6 suspensions

with inverted voices
Stepwise Bass: Ascending "Leapfrog" Sequences

This "leapfrog" sequence gives the impression of a continuous ascending syncopatio chain by having each patient leap up a fourth after its resolution, becoming the agent of the next syncopatio.

The inverted versions do not occur as often, because the two upper voices end up quite far apart.

with 9-8 syncopatio chain

with 7-6 syncopatio chain
Leaping Bass: ↓3 ↑2 Sequence with 6/3 Chords

The falling thirds sequence is one of the most common sequences of the baroque period. To save space, only the beginning and end of each sequence is shown here. You should fill in the missing measures by continuing the sequential pattern.

major keys
third position

C: 1 6 7 5

minor keys
third position

a: 1 6 7 5

Yet another three-voice version would arise by omitting the tenor voice, leaving only red and green voices below.

major keys
four voices
third position

C: 1 6 7 5

minor keys
third position

a: 1 6 7 5

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Version: January 7, 2022
The falling thirds sequence is one of the most common sequences of the baroque period. Since the 5 in a 6/5 chord is treated like a dissonance, it must therefore be prepared and resolved down by step. To save space, only the beginning and end of each sequence are shown here. You should fill in the missing measures by continuing the sequential pattern.
Leaping Bass: ↓4 ↑2 Sequence

This sequence is famous from Pachelbel's "Canon in D." It is also called a "Romanesca" after the baroque dance.

Syncopatio dissonances can be added by holding over (1) the blue voice, or (2) the blue and red voices.

blue voice held (4-3 suspension):

blue and red voices held (6/4-5/3 suspension):
Leaping Bass: \(\uparrow 4 \downarrow 3\) and \(\uparrow 4 \downarrow 2\) Sequences

It may be played with or without tonicization (the sharps).
To save space, only major-key versions are shown.

**Sequenced up by step**

**Major keys**

**Fifth position**

- C: 1 4 4 7 5 1
- F: 5 1
- G: 5 1
  - a: 5 1

**Octave position**

**Third position**

**Sequenced up by third**

**Major keys**

**Fifth position**

- C: 1 4 3 6 5 1

**Octave position**

**Third position**

**Sequenced up by third (modulating), with leaps of an augmented 2 in the red voice**

- F: 5 1 a: 5 1
- C: 5 1 e: 5 1
- G: 5 1 b: 5 1

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The falling fifths ("circle of fifths") sequence is one of the most common in the baroque period. It occurs in four forms: (1) only 5/3 chords, (2) alternating 5/3 and 7 chords, (3) vice versa, or (4) only 7 chords. Notice how the dissonant 7 is always prepared (tied over) by common tone in the same voice before it occurs.

To save space, only the beginning and end of each sequence is shown in major and in four voices.
Leaping Bass: ↑5 ↓4 Sequence

This sequence is best used on those bass degrees that have a perfect fifth above them. Arrows indicate dim.5ths.

Three voices

This sequence has a typical three-voice solution with 4-3 syncopatio dissonances.

The upper voices of this sequence often appear on their own, sometimes as a canon:

Four voices

fifth position
The omnibus sequence or progression is usually more associated with the 19th century, but it first emerged in the late 18th century. Composers only use a segment of the entire sequence. Notice how two voices hold while the other two move chromatically in contrary motion. The harmonies also repeat after each group of four chords. The entire progression is reversible. The omnibus is thus a special case of "wedge" voice leading, or when two parts move in contrary motion by step. It is difficult to decipher the key of the omnibus sequence, since it is so chromatic. Therefore, no bass scale degrees have been added. In practice, any chord can be taken as the start of a key. Thus, one function of the omnibus sequence is to modulate quickly to distantly related keys.
Appendix 1: Common Modulation Strategies

modulation up a fifth via bass syncopation and #4/2

bass syncopation

double cadence

modulation down a fifth via motivo di cadenza (see p. 13)

bass syncopation

double cadence

modulation down a fifth via motivo di cadenza (see p. 13)

evaded double cadence

double cadence

modulation up a second (see page 14)

evaded double cadence

double cadence
modulation down a third each time (see “carousel” on p. 14)
The vocabulary of schemata (singular: schema) analysis is mostly a product of recent music theory scholarship—that is, it is for the most part not historical in origin. Schemata are best identified in terms of outer-voice scale degrees in a given rhythmic pattern of strong and weak beats. That is, the key and time signatures given here are somewhat arbitrary. In context, schemata are varied and ornamented in countless ways. Roman numerals indicate the relationship of tonicized keys to the main key of C major. Not all schemata can be transferred to the minor mode. Because middle voices are subordinate, they are only indicated as thoroughbass figures. Parenthesis show possible variations. Schemata can most clearly be seen in galant and classical works (i.e. after c.1720 into the early 19th century).

### Appendix 2: Alphabetical List of Schemata

#### Comma

| \[ \begin{array}{cccc}
\hat{2} & \hat{1} & 7 & 6
\end{array} \] |
| \[ \begin{array}{cccc}
\hat{2} & \hat{1} & 7 & 6
\end{array} \] |

#### Complete Cadence

| \[ \begin{array}{cccc}
\hat{5} & \hat{4} & \hat{3} & \hat{2}
\end{array} \] |
| \[ \begin{array}{cccc}
\hat{5} & \hat{4} & \hat{3} & \hat{2}
\end{array} \] |

#### Converging Cadence

| \[ \begin{array}{cccc}
\hat{5} & \hat{4} & \hat{3} & \hat{2}
\end{array} \] |
| \[ \begin{array}{cccc}
\hat{5} & \hat{4} & \hat{3} & \hat{2}
\end{array} \] |
Cudworth Cadence

Do-Re-Mi

Fenaroli (often forte, repeated piano)

Fonte ("spring")
Passo Indietro ("step back")

Ponte ("bridge") - any prolongation of \( \hat{5} \)

Prinner / La-Sol-Fa-Mi

Quiescenza
"New" Romanesca

"Old" Romanesca / Pachelbel Canon in D

Sol-Fa-Mi


Bianciardi, Francesco. 1607. Breve regola per imparar a sonare sopra il Basso con ogni sorte d’instrumen. Siena.


Forthcoming.


Forthcoming.


Forthcoming.


