

## Working with unfigured (or under-figured) early Italian Baroque bass lines

The perennial question in dealing with early Italian music is exactly what figures should appear under the bass line. Most of the music of this time is sparsely figured; some is not figured at all.

According to the earliest basso continuo treatises (dating from the turn of the 17<sup>th</sup> century), the intervals to be added by the continuo player derive from an understanding of the interval relationships dictated by linear counterpoint. Because the authors of treatises took for granted a working knowledge of counterpoint and composition (and remember that all professional musicians were educated in composition, unlike today), they usually did not feel the need to indicate exactly which intervals to add above the bass, instead choosing to discuss only cases which were exceptions to the rule. Fortunately, from those treatises that did take a more basic approach, we can compile the following rules:

**1. The playing must be full of harmonious consonances, namely the unison, the third, the fifth, or the sixth, the octave, and their doublings (Lorenzo Penna).**

From this, we see that essentially all bass notes need their own chords (not stated explicitly above, but expressed more clearly in other treatises). Also, note the careful wording: “the fifth, OR the sixth”.

Francesco Bianciardi wrote out the following chart of what consonances should appear above each scale step. The top staff is for keys with *B quadro* (“square B” or B natural); the bottom for keys with *B molle* (“soft B” or B flat):

The image shows two musical staves in bass clef, each with a key signature of one sharp (F#). The top staff is for *B quadro* (B natural) and the bottom staff is for *B molle* (B flat). Both staves show a sequence of chords for each scale degree, with figures placed above the notes. The top staff shows chords for B, C, D, E, F#, G, A, B, C, D, E, F#, G, A, B. The bottom staff shows chords for B, C, D, E, F#, G, A, B, C, D, E, F#, G, A, B. The figures are: B (5), C (4, 6), D (3, 5), E (2, 4, 6), F# (1, 3, 5), G (2, 4, 6), A (3, 5), B (5), C (4, 6), D (3, 5), E (2, 4, 6), F# (1, 3, 5), G (2, 4, 6), A (3, 5), B (5).

From the above, we conclude:

**2. Thirds and fifths are theoretically possible above any note except the leading note. A sixth is used here to avoid the interval of a diminished fifth with the bass (middle bar of each system).** In some treatises, a sixth is placed by default above the third scale degree as well.

**3. Chromatically raised bass notes require a minor sixth above the bass (see the last bar of each system).**

The third and seventh scale degrees form a semitone (“mi-fa”) with the notes immediately above them. According to Penna and others,

**4. If the bass moves by a half-step among two notes “mi” and “fa”, the lower note “mi” of the half-step must have a sixth above it to avoid the diminished fifth.**

Rules 3 and 4 are basically corollaries of each other, since chromatically altered notes are often approached or left by a half-step.

Additional exceptions arise from the interval resolutions required by linear counterpoint, which divides intervals into the following categories:

<u>PERFECT CONSONANCES</u>	<u>IMPERFECT CONSONANCES</u>	<u>DISSONANCES</u>
-unison -perfect octave -perfect fifth	-minor and major thirds -minor and major sixths	-everything else (including the perfect 4th)

The perfect 4<sup>th</sup> was considered a dissonance when sounded with the bass, although between other voices it was regarded as a perfect consonance. But in the early Baroque, we find that the texture of relatively equal voices that was a characteristic of Renaissance music was giving way to one in which the outer voices (i.e. singer or melody instrument, plus bass) were dominant. We will consider the table above as referring to intervals formed with the bass and one upper voice.

A firm rule of linear counterpoint is that:

**5. An imperfect consonance must resolve to the nearest perfect consonance by means of both voices moving as close to stepwise as possible.**

Since the first four rules have shown us we can expect thirds and sometimes sixths above the bass, we can understand how the following list of required chromatic alterations to voices above the bass was derived (by Adriano Banchieri) from rule 5:

- 6a. A third that resolves to a unison must be altered to a minor third.**
- b. A third that resolves to a perfect fifth must be altered to a major third.**
- c. A third that resolves to an octave must be altered to a major third.**
- d. A sixth that resolves to a unison must be altered to a minor sixth.**
- e. A sixth that resolves to a perfect fifth must be altered to a minor sixth.**
- f. A sixth that resolves to an octave must be altered to a major sixth.**

Rule 6e shows us that the type of sixth above “mi” in rule 4 must be minor.

We can now understand additional rules from the treatises based on what we have just learned.

**7. When the bass ascends a fourth or descends a fifth, the first of the two bass notes involved always has a major third, even if it is not indicated** (resolution of third to octave from rule 6c above). This is the equivalent of the modern “authentic” or “perfect” cadence.

**8a. When the bass ascends a fifth or descends a fourth, both chords require a *terza naturale*** (i.e. a third drawn from among the scale degrees of the composition). **However, in the approach to a cadence, the first chord often has a *terza minore*** (lowered third). **If this cadence occurs at the end of a piece or section, the final chord must have a major third.** These situations generally correspond to the modern “plagal” cadence.

**b. It is permissible to connect the two chords discussed above with one or two passing notes: either a major sixth alone, or a major sixth and augmented fourth** (the fifth from the first chord moves to the sixth; the third from the first chord moves to the augmented fourth).

**c. When the bass descends by a fourth, a seventh may be played above the first chord, resolving to the major sixth.**

**9a. When the bass descends a whole tone, a minor third and major sixth must be played above the first note. When the bass descends a semitone, a major third and major sixth must be played above the first note** (resolution of sixth to octave according to rule 6f). The progression must be such that there is a feeling, however momentary, of a cadence (the so-called modern “Phrygian” cadence ). This can be extended to situations in which the first of the two chords occurs on a “bad” (rhythmically weak) note and the second on a “good” (rhythmically stronger) note.

**b. The progression above** (consider the notes F-E as an example) **often occurs in a slightly more elaborate form** (such as E-F-E). **In this case, the type of third above the bass that is used over the last note can also be used above the first** (in other words, both instances of E will have the same type of third). The type of third will often be determined by looking at the very next bass note after the progression (in which case rules 7 and 8 may apply).

**c. When the bass descends by step, a seventh may be played above the first chord, resolving to the major sixth.**

**10. If the bass has a stepwise ascending passage, the right hand should remain stationary.** No new chords are required until some other rule applies. This advice is clearly for keyboard players, but may have ramifications for players of other instruments as well.

**11. If the bass moves in leaps, each bass note is accompanied with its own chord, no matter what note values are used.** This means that the upper voices are not held as the bass moves.

**12. If the bass ascends or descends with a second, third or sixth, the *terza naturale* must be played.**

**13. In final cadences, the last chord must have a major third.** Exactly what constitutes a “final cadence” is not always clear: cadences at section endings certainly qualify, but cadences after individual phrases may or may not.

**14. If the bass ascends a second or third, a *terza naturale* and a *sexta naturale* is played.**

**15. A sixth above the bass can often be treated as a passing note, neighbour/auxiliary note or leading tone, except when the sixth is above a note regarded as “mi” (see rule 4).** This means the sixth can be introduced “off the beat” and used to connect two chords. In this event the chord will initially have just a third and a fifth, and the fifth will move smoothly to the sixth. This cannot apply to “mi” bass notes because the fifth that precedes the sixth would be a diminished fifth, which is not allowed.

**16. If the bass descends stepwise in small (i.e. short) note values, one plays the fifth above the first note, the sixth above the second notes, and one accompanies these with tenths above them.** This is perhaps most idiomatic to keyboard instruments.

**17. When there is a dotted half or dotted quarter in the bass, a chord is played above the dotted note and the following note moves through a dissonance.** The note after the dotted note will typically be a shorter value, and acts as a passing note in the bass which does not require its own chord.

Most treatises spend little, if any, time on dissonance treatment, particularly in cadential situations. Cadences should not be played too simply: at a minimum, a 4-3 suspension is needed, if not one of the many elaborate cadential formulas known as the *giro*. See the useful handout (prepared by Lucas Harris) that follows. At this point in time, most dissonances are suspensions: they must be prepared in advance and resolved by step.

Apart from dissonances, the overall chord vocabulary is quite simple: there are no second-inversion triads (except the  $\frac{6}{4}$  in cadences) and no dominant seventh chord inversions.

In order to see these rules at work, sample figures to a vocal piece by Giovanni Paolo Cima, *Cantantibus organis*, are provided (for clarity, the text has been removed). The original piece has zero continuo figures: all the printed figures are derived solely from the above list of rules. Each rule number is given in bold, and a square bracket identifies the bass notes that were examined in determining which rule to apply. Two caveats: cadential formulas are omitted, and figures are not given in situations where none of the above rules apply: for clarity, such cases have been left blank in order to show the rules – and their limitations – as clearly as possible. Admittedly, a glance at the upper part will often provide the required figures without recourse to any rules at all, and would also assist in those cases where the rules cannot help. The best practice would, of course, combine the use of rules with a look at the upper part, which should yield satisfactory figures for all the bass notes.

## BIBLIOGRAPHY

[www.bassus-generalis.org](http://www.bassus-generalis.org): This incredibly valuable web site has translations of crucial documents from the dawn of the figured bass era. Treatises can be read online or downloaded as Adobe Acrobat files.

De Goede-Klinkhammer, Thérèse. “*Del suonare sopra il basso: Concerning the Realization of Early Seventeenth-Century Italian Unfigured Basses.*” *Performance Practice Review*, x/1(1997).

# Extended cadences, or, The 'Giro'

Straight 343:

#2 With 6/4:

#1: G - A - B - C

#2: G - A - B - C - D - E - F - G

With 7:

#4 Fake-out:

#3: G - A - B - C - D - E - F - G

#4: G - A - B - C - D - E - F - G

Fake-out to 7 sequence:

#5: G - A - B - C - D - E - F - G

Tenor' cadence:

#7 A favorite Italian dissonance:

#6: G - A - B - C

#7: G - A - B - C

A rare one in the Gabrieli (bar 29):

#9 Pedal point, then cadence:

#8: G - A - B - C

#9: G - A - B - C - D - E - F - G

Twice as fast:

#11

#10: G - A - B - C

#11: G - A - B - C - D - E - F - G

# 6. Cantantibus organis

Giovanni Paolo Cima

The musical score is written for organ and consists of seven systems, each with a treble and bass staff. The key signature is one sharp (F#) and the time signature is common time (C). The score includes various musical notations such as notes, rests, and ornaments, along with detailed fingerings and articulation marks.

**System 1:** Treble staff starts with a whole rest. Bass staff begins with a whole note G (finger 6), followed by a half note G (finger 6), a quarter note F# (finger 5), and a quarter note G (finger 6). A slur covers notes 9a, 8b, and 10. A final slur covers notes 17, 9a, 15, and 7.

**System 2:** Treble staff has a whole rest. Bass staff starts with a half note G (finger 6), a quarter note F# (finger 6), a quarter note G (finger 7), and a quarter note F# (finger 6). A slur covers notes 9a and 9c. Another slur covers notes 8b and 8b. A final slur covers notes 10, 3, 7, 17, 4, 9a, and 4.

**System 3:** Treble staff begins with a half note G# (finger 1), followed by a quarter note G (finger 1), a quarter note F# (finger 1), and a quarter note G (finger 1). A slur covers notes 7, 17, 14, and 8b. A final slur covers notes 17 and 14.

**System 4:** Treble staff starts with a quarter rest, followed by a quarter note G (finger 4), a quarter note F# (finger 4), and a quarter note G (finger 4). A slur covers notes 4, 3, and 7. A final slur covers notes 7 and 9a.

**System 5:** Treble staff begins with a half note G (finger 6), followed by a quarter note F# (finger 6), a quarter note G (finger 6), and a quarter note F# (finger 6). A slur covers notes 10, 3, and 7. A final slur covers notes 7 and 9a.

**System 6:** Treble staff has a whole rest. Bass staff starts with a half note G (finger 6), a quarter note F# (finger 6), a quarter note G (finger 5), a quarter note F# (finger 6), a quarter note G (finger 5), a quarter note F# (finger 6), and a quarter note G (finger 5). A slur covers notes 4 and 9a. A final slur covers notes 16 and 7.

**System 7:** Treble staff begins with a half note G (finger 6), followed by a quarter note F# (finger 6), a quarter note G (finger 6), and a quarter note F# (finger 6). A slur covers notes 9a, 17, 14, and 3. A final slur covers notes 4 and 9a, 15.

**System 8:** Treble staff starts with a half note G (finger 6), followed by a quarter note F# (finger 6), a quarter note G (finger 6), and a quarter note F# (finger 6). A slur covers notes 7, 10, 2, and 9a. A final slur covers notes 8b and 6.