Dariusz Terefenko

The passacaglia - a primer for teaching Baroque improvisation

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Dariusz Terefenko
University of Rochester
Rochester

THE PASSACAGLIA – A PRIMER FOR TEACHING BAROQUE IMPROVISATION

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Introduction

In recent years the furtive field of music theory pedagogy has produced remarkable textbooks that have significantly improved and modernized the quality of music theory instructions[1]. As some textbooks seem to advocate the importance of "hands-on" approaches to studying certain theoretical concepts, there is, however, a considerable scarcity of sources that consider teaching improvisation at a level appropriate in academia[2]. While the mastering of specific tasks – chorale harmonization, continuo realization, model composition, lead-sheet interpretation, motivic and phrase improvisation – requires a considerable amount of practical instruction that may potentially be realized "in time" by the student, the introduction of more comprehensive theoretical topics from an improvisational standpoint – in keeping with the techniques and methodologies cultivated in the Baroque period – necessitates a well-developed pedagogy and clearly specified objectives. The issue of the priority of harmony versus counterpoint, for instance, their interactions with or influence on the metric or rhythmic structure, and the role they exert in conveying formal properties may be addressed through studying improvisation. Not only does the addition of topics in baroque improvisation warrant effective theory pedagogy,

[1] J.N. Straus, *Elements of Music*, Upper Saddle River, NJ 2008; S. Laitz, *The Complete Musician: An Integrated Approach to Tonal Theory, Analysis, and Listening*, New York 2007; R. Gauldin, *Harmonic Practice in Tonal Music*, New York 2005; E. Henry, M. Rogers, *Tonality and Design in Music Theory*, Englewood Cliffs, NY 2005; J.P. Clendinning, E. West Marvin, *The Musician's Guide to Theory and Analysis*, New York 2004; C. Mayfield, *Theory Essentials: An Integrated Approach to Harmony, Ear Training, and Keyboard Skills*, Vols. 1-2, Belmont, CA 2003; M. Roig-Francoli, *Harmony in Context*, New York 2002.

[2] D. Ledbetter, *Continuo Playing According to Handel: His Figured Bass Exercises With a Commentary*, New York 1990; A. Brings, Ch. Burkhart, R. Kamien, L. Kraft, F. Pershing, *A New Approach to Keyboard Harmony*, New York 1979; S. Berkowitz, *Improvisation through Keyboard Harmony*, Englewood Cliffs, NY 1975; W. Pelz, *Basic Keyboard Skills. Harmonization and Modulation, Transposition, Accompaniment, Improvisation*, Boston, MA 1963; M. Lieberman, *Keyboard Harmony and Improvisation*, New York 1957; R.O. Morris, *Figured Harmony at the Keyboard*, London 1932.

but it also provides a welcome practical respite that directly focuses on the music as opposed to an over-intellectualized theoretical discourse. As improvisation – an overtly neglected, yet important musical tradition – becomes less of an exception and more a norm in theory curricula, the level of musicianship among the students will increase as the practical involvement with music theory will promote expedient assimilation and comprehensive understanding of its concepts.

How did baroque musicians learn to improvise? What was the process accompanying their improvisations? Was it entirely practical and conceptual with little theory behind it or vice versa? In the absence of harmonic science – at least in its current manifestations – what specific theoretical concepts enabled musicians to learn their craft? What was the role of counterpoint in advancing musical improvisation? While these and similarly framed questions might be considered rhetorical, an attempt to find answers is highly relevant to the current study.

In this paper I propose amending music theory curricula with topics in baroque improvisation. A complementary, yet very effective pedagogical tool, improvisation can be utilized for studying the principles of form, counterpoint and its harmonic implications, phrase structure, motivic development, invertible counterpoint, modulations, and numerous other concepts. To that end I will employ one of the most accessible variation forms from common practice music, namely, the passacaglia[3]. The attractiveness of this formal design – its relative improvisational manageability and applicability to music theory instructions – corresponds to its salient structural properties: the recurrence of the bass line, open harmonic framework, unambiguous contrapuntal layout, and symmetrical phrase structure. These properties lend themselves to a number of melodic, contrapuntal, harmonic, rhythmic, textural and tonal transformations that subsequently participate in the unfolding of formal structure.

First, I will briefly examine two passacaglias from the Baroque period by Dietrich Buxtehude and Johann Sebastian Bach[4]. The analysis of these pieces exposes a number of very important improvisational techniques, typical of the style and period, that were masterfully implemented to project a sense of the form in general, and contrapuntal, melodic, rhythmic, and textural properties in particular. Next, I will discuss specific improvisational strategies and their practical manifestations in the context of an eight-measure passacaglia. In order of importance, I will focus on the following issues: the role of outer-voice counterpoint in 1:1 melodic ratio, contrapuntal reifications of the outer--voice framework, diminutions in 2:1 and 3:1 with resultant stable and unstable tones, motivic and rhythmic development, invertible counterpoint at the octave, modulation to relative major and minor dominant, three-voice texture, free imitation, and the principles of large-scale form. Having discussed the nuts and bolts of improvisation, I will conclude by suggesting possible formal outlines for passacaglias of "medium" (ten variations) and "large" (twenty variations) size.

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[3] For an extensive survey of the genre see Richard Hudson's *Passacaglio and ciaccona: from guitar music to Italian keyboard variations in the 17th century* (Ann Arbor, Mich. 1981).

[4] For the sake of space I will refer to the scores available online. They can be downloaded at http: //imslp.info/files/imglnks/usimg/1/1e/IMSLP29678-PMLP66660-Buxtehude-BuxWV161.pdf (accessed on April 29, 2009): BuxWV161; and, http://imslp.info/files/imglnks/usimg/6/61/IMSLP01337-BWV0582.pdf (accessed on April 29, 2009): J.S. Bach, BWV582.

Among many mysteries surrounding improvisation, the facts that its practitioners are naturally predisposed to it or that the principles governing the process itself are too complex to be acquired in any methodologically construed manner stand out as the most commonly misunderstood. General absence of improvisation from theory curricula seems to corroborate this point. While the claim pertaining to the complexity and comprehensiveness of improvisation (especially in its more advanced stages) is partially true with respect to common-practice improvisation – after all, following its flourishing in the Baroque and Classical era, it witnessed a period of relative obscurity in the 19th and 20th centuries – in jazz, to the contrary, methodologies and strategies for teaching the principles of improvisation sprang exponentially in the second half of the 20th century and continue to be developed[5].

Improvisation may yield compelling results provided that its pedagogy is solidly built and its edifice resembles a well-planned and hierarchically organized structure. And, as in any other musical activity, its success depends just as much on the quality of instructions as it does on the diligence of students in appropriating and internalizing consecutive improvisational steps.

The passacaglias by D. Buxtehude and J.S. Bach – general remarks

When listening to a passacaglia, one is immediately drawn to its repeated dirge-like minor ground upon which the composer projects a series of melodic, rhythmic, textural, and harmonic variations. Unlike typical sectional variations of the Classical period, the baroque passacaglia has a continuous formal design. Its continuous rhetoric stems from its metric design, the lack of perfect authentic cadence at the end of each variation, and a gradual accumulation of tension – unencumbered by phrase and formal constrains – controlled by a calculated use of logically unfolding ideas. Upon glancing at either Buxtehude or Bach's passacaglias, one may notice a great economy of means accompanying each variation and a compositional-like treatment of melodic ideas. Each variation is a continuation of the preceding one; both composers are cognizant of the transformational potential of musical ideas and skillfully develop them before morphing to something else. To create an effect of melodic and rhythmic continuity and to disguise an overtly symmetrical phrase structure, both composers usually introduce new ideas at the end of the previous variations, as in m. 24 in Bach's case and in m. 21 in Buxtehude's. The metric design of the grounds (in both cases, the ground begins with a metrically unstressed upbeat) plays a significant role on the overall unfolding of the music. The necessity to resolve the upbeat to the downbeat at the top of each variation, coupled with a new type of figuration, creates a sense of inevitability that propels the music forward.

One of the most effective, yet quite ambitious methods of disguising the phrase structure of the passacaglia is to combine two adjacent variations into a single antecedent-consequent model. Bach's Variations I and II conform to this particular design. Note that in mm. 16-17 of Variation II, in the absence of noticeable changes in the musical texture, Bach reharmonizes the ground by reinterpreting ^3 as the root of a local

[5] For instance: M. Levine, *The Jazz Theory Book*, Petaluma, CA 1995 and B. Dobbins, *A Creative Approach to Jazz Piano Harmony*, Rottenburg 1991.

dominant formation, Eb[7], resolving deceptively to Fm. It can be argued that the new harmonic support in Variation II creates a sense of phrase continuation that, combined with Variation I, forms a large sixteen-measure antecedent/consequent period. In Buxtehude's piece, the opening two variations are texturally unified, yet the treatment of suspensions in Variation II is noticeably different from Variation I.

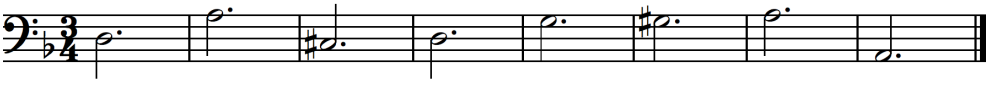
While the texture of these passacaglias may become quite intricate and dense at times, the amount of rhythmic and melodic diminution does not affect the properties of the outer-voice counterpoint that, in both cases, is harmonically autonomous and clearly defines the underlying tonality. The outer-voice counterpoint, then, acquires the status of a structural and conceptual entity that controls the unfolding of melodic ideas, and its members have the potential of being contrapuntally reified as components of other harmonic formations.

The comparison of the two passacaglias proves that the composers had quite different attitudes toward ways of articulating the overall form of the piece[6]. In Buxtehude's composition, tonal motion to the relative major (for the duration of seven variations: variations VIII-XV) and, then, directly to the minor dominant (for the durations of seven variations: variations XVI-XXII) creates a sense of tonal departure. The overall form (twenty eight repetitions of the ground) displays a palindromic design with seven variations in the tonic at the beginning and at the end circumscribing fourteen variations in the middle (seven in III and seven in v). Alternatively, in Bach's case (twenty repetitions of the ground), a distinct combination of gradual tapering of the musical texture in variations XIV-XV, the embellished presentation of the ground in variations V and VIII, and the use of invertible counterpoint in variation XI-XIII generate a sense of textural departure. All of these techniques constitute effective form-building entities that can be successfully implemented in our passacaglias.

Exploring contrapuntal and harmonic potential of the passacaglia

Example 1 shows a passacaglia ground that will be used for the discussion of methodologies and techniques pertinent to improvisation.

Example 1: The passacaglia ground

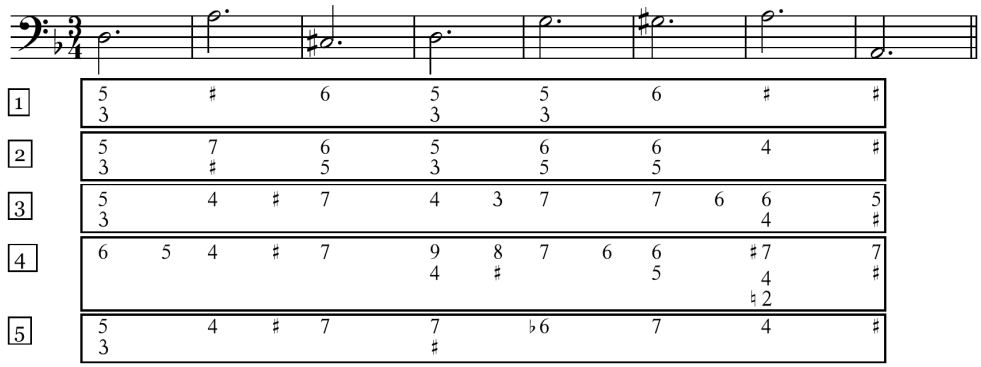


The ground is harmonically open with a clear 4+4 phrase division: mm. 1-4 prolong the tonic and mm. 5-8 move, via iv, to V. The harmonic rhythm is relatively slow and its possible realizations conform to the rules of common practice tonality. Example 2 proposes an exhaustive assortment of figured bass realizations of the ground[7].

[6] When we talk about the form of passacaglia we have to remember that great composers were concerned with the projection of a larger formal structure (with its typical form-building entities) unto a sectional form.

[7] I will use figured bass notation as a more idiomatic way of indicating harmonic possibilities.

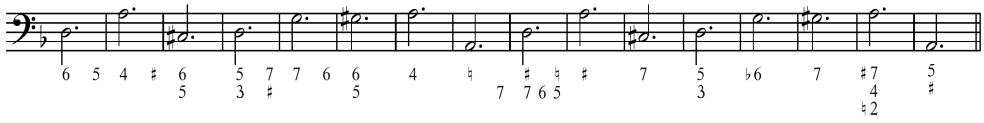
Example 2: Passacaglia – harmonic realizations



What transpires from Example 2 is the sheer amount of contrapuntal reifications of the ground. While certain choices, like the use of the Neapolitan, have predetermined formal positions, others, such as a distinct tonicization of ^4 in m. 4, can be freely explored in different parts of the passacaglia. Additionally, the use of invertible counterpoint at the octave may further increase the number of possibilities and emphasize certain contrapuntal realizations.

To create a much stronger sense of harmonic continuity within an uninterrupted 16--bar period, m. 8 can be realized in the manner similar to Bach's treatment of the lament bass in *Crucifixus* from Mass in B-minor[8]. Instead of concluding the phrase on the expected V in m. 8, ^5 receives a predominant harmonic support that resolves to a local V in m. 1 of the next variation, therefore projecting a $ii^{ø}$-V^7 progression across the phrase boundaries. Example 3 illustrates this possibility.

Example 3: Passacaglia – antecedent/consequent 16-measure structure



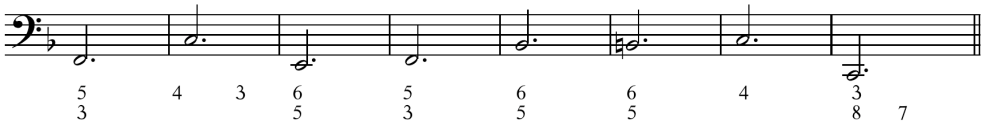
Even though this striking transformation of the normative ^5-^1 motion into a completely new and unexpected one adds a welcome addition to the overall structure of the passacaglia, the amount of contrapuntal calisthenics required to get back on "tonal tracks" makes it quite ambitious to accomplish.

One of the techniques employed by Buxtehude involves the presentation of the ground in the relative major and minor dominant. These unexpected tonal shifts create a sense of harmonic departure and greatly enhance the overall form of the passacaglia. Example 4 illustrates the realization of the ground in the relative major[9].

[8] J.S. Bach, Mass in B minor, Credo, *Crucifixus*, mm. 25-26.

[9] The behavior of the counterpoint in the minor dominant is the same as in the tonic.

Example 4: Passacaglia in relative major

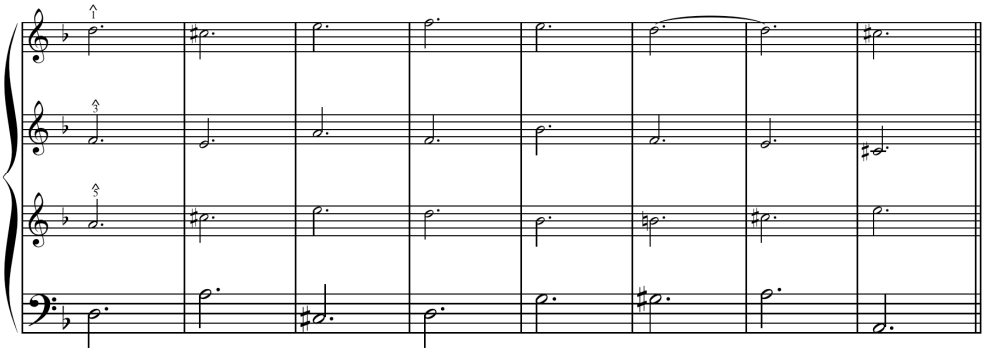


The aforementioned examples provide a number of normative realizations of the ground. Having strong melodic properties and a well-established sense of tonality, these harmonic frameworks conform to the rules of common practice tonality and their counterpoints – when realized in two voices and 1:1 ratio – exhibit melodic properties resembling first species of counterpoint. For the purpose of practicing melodic diminutions that fill-in a larger spectrum of horizontal intervallic pairs, we will provide – in addition to the aforementioned "correct" frameworks – a number of "incorrect" ones with a more diverse intervallic makeup.

Using two voice-frameworks for improvisation

Improvising a passacaglia involves a comprehensive web of strategies that proceed from simple to complex. To ensure progress, each pedagogical step needs to be thoroughly internalized before moving on to the next one. While teaching improvisation may involve different approaches, especially in its more advanced stages, the initial phase in improvising the passacaglia is relatively straightforward. It usually involves the ability to improvise a single voice counterpoint in 1:1 ratio that has a largely stepwise design and moves in contrary motion against the ground. In order to facilitate that process one may create a set of guidelines to control and explore various contrapuntal and melodic possibilities. To begin with, the student can start each variation on a different triad note, ^1, ^3, and ^5, and, then, further differentiate individual variations by other melodic qualifiers: disjunct/conjunct motion and ascending/descending direction. These preconditions compel the student to concentrate on a particular task or a set of tasks. Example 5 illustrates the counterpoints resulting from combining and alternating between various melodic qualifiers.

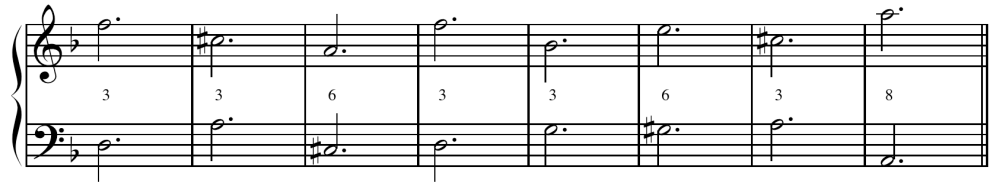
Example 5: Three counterpoints starting on ^1, ^3, and ^5



Another set of guidelines may explore larger intervallic skips in the counterpoint. While the resulting, unembellished line may not be as idiomatic as those in Example 5,

the goal of this exercise is more pragmatic and utilitarian rather than idealistic; by improvising intervallicaly diverse counterpoints in 1:1 ratio, a foundation has been laid for the ensuing melodic and rhythmic diminutions. Example 6 shows such a framework.

Example 6: Larger intervallic skips



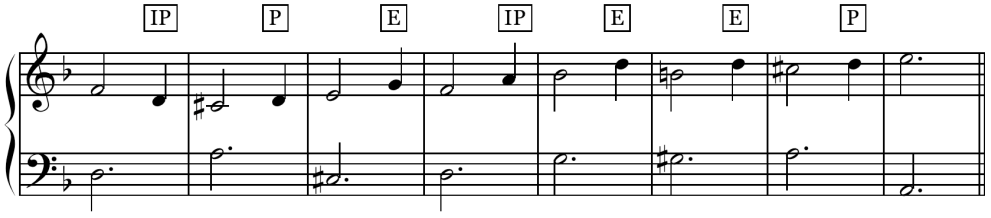
One of the prerequisites in improvising 1:1 frameworks is the ability to maintain a steady beat. Clearly, a well-established metric and rhythmic structure helps to generate suspensions and weave in various non-harmonic tones into the fabric of the melodic line.

The use of non-harmonic tones

Having improvised two-voice frameworks in 1:1 ratio, we can now proceed to embellish them with basic 2:1 melodic diminutions. The 2:1 ratio adds a number of stable and unstable tones to the counterpoint. The use of non-accented passing, neighbor, or escape tones, and suspensions does not alter the fundamental 1:1 framework as the consonant downbeats are, for the most parts, preserved.

By assigning a specific type (or types) of non-harmonic tone to a single variation and exploring its potential, the student discovers its behavior, context, and the circumstances under which it is most effectively utilized. Example 7 utilizes incomplete passing (IP, henceforth), passing (P, henceforth), and escape (E, henceforth) tones within a single iteration of the ground.

Example 7: Non-harmonic tones



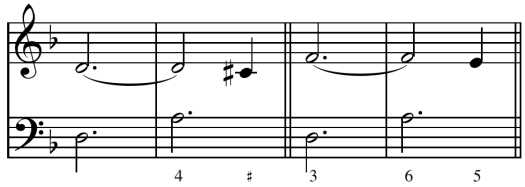
Each consecutive variation may features a specific type (or types) of non-harmonic tone. While retaining a single type of non-harmonic tone within one variation might be either untenable or – if, indeed attempted – overtly unmusical, occasional additions of other non-harmonic tones seem necessary to improvise a more satisfying counterpoint. The methodology used for creating these and similar exercises follows the principles of

combining various melodic and contrapuntal possibilities, and, at the same time, developing control over the material and delivering it in metered time[10].

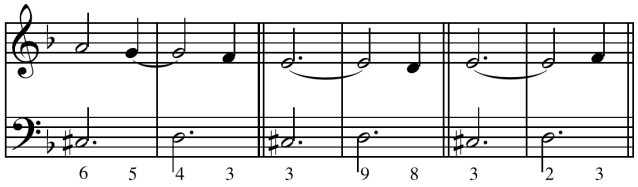
One of the most challenging and necessary conditions for successful improvisation is the ability to maintain a steady pulse. While the importance of keeping time cannot be underestimated under any musical circumstances, it is particularly vital in projecting various melodic diminutions in general and suspensions in particular. Rhythmic events, suspensions can only be reified within a well-established metric structure. Not only does the use of suspensions require theoretical understanding of their tripartite rhetoric, but, more importantly, their proper use in improvisation is ultimately connected to the rhythmic and metric properties of the musical structure. Example 8 (a through e) lists some of the possible suspensions that can be utilized within a two-voice framework.

Example 8: Suspension possibilities

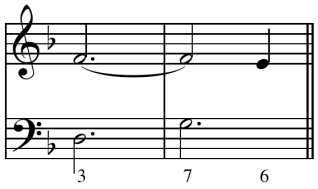
a) Measure 1-2



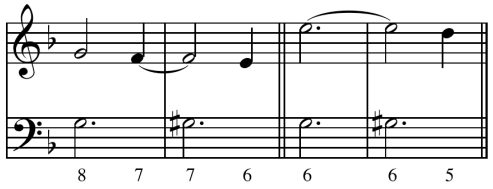
b) Measure 3-4



c) Measure 4-5

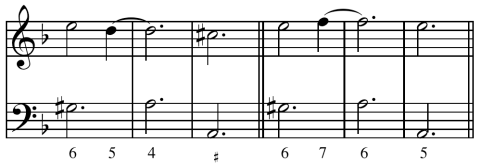


d) Measure 5-6



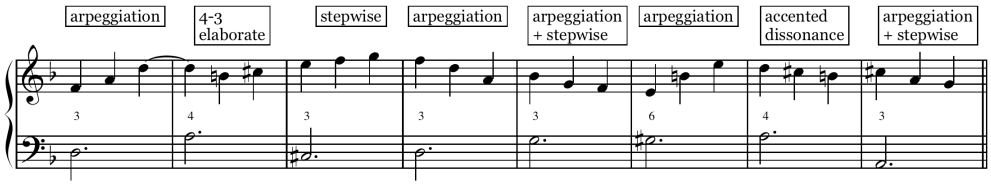
[10] It also becomes apparent that not all the possibilities will be explored because of the sheer number of available combinations.

e) Measure 6-8



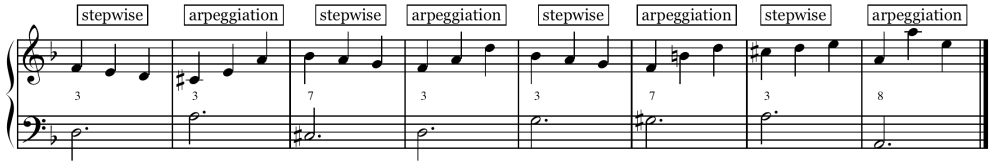
In a 3:1 melodic ratio more possibilities for non-harmonic tones ensue such as: elaborate suspension resolutions, three-note cambiatas, multiple passing tones, arpeggiation, and others. Improvisational strategies can be systematically organized according to the explicit properties of the melodic line: stepwise (ascending/descending), arpeggiation (ascending/descending), and mixed. Examples 9 show possible realizations of the ground using some of these properties.

Example 9: 3:1 diminutions



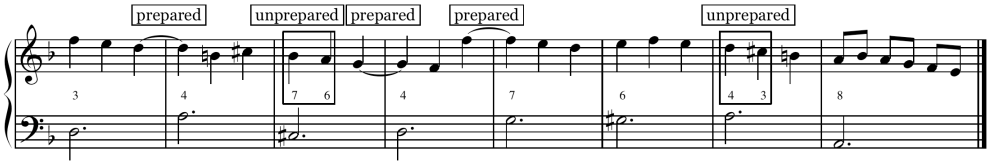
To explore these ideas to their full potential and develop control over them, one may alternate between stepwise motion and arpeggiation on a measure-by-measure basis (or vice versa) thus creating more melodic variety as shown in Example 10.

Example 10: Alternating stepwise and arpeggiation



The implementation of suspensions within the structure of melodic lines guarantees a horizontal approach to improvisation and necessitates the ability for making large-scale melodic connections. As the student's improvisational skills improve, so do his or her aural faculties, and the proper integration of suspensions within melodic lines can measure the student's progress. Example 11 shows the use of suspensions in a variety of melodic contexts: prepared, unprepared, and with direct or delayed resolutions.

Example 11: Contextual suspensions



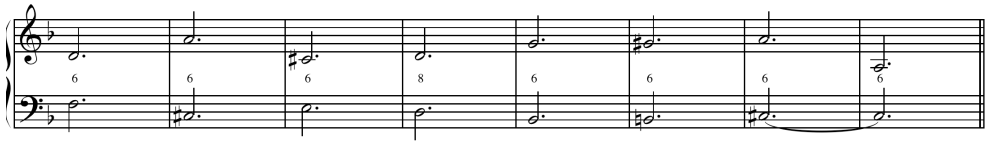
By improvising tonally autonomous two-voice 1:1 frameworks and embellishing them with an assortment of stable or unstable tones in 2:1 or 3:1 ratios, the student reaches a pivotal point in learning how to improvise. The decision to include suspensions relatively early on – even though they are quite difficult to implement – is a practical one, as other improvisational techniques such as: motivic development, rhythmic diminutions, or three- or voice-texture may take advantage of their expressive potential.

Having discussed the basic techniques of embellishing the ground, let us now turn to two methods of generating a formal departure namely, the use of invertible counterpoint at the octave and the tonal shift to the relative major and minor dominant.

Invertible counterpoint at the octave as a means of formal departure

The aforementioned techniques of melodic embellishments focus on diminutions in 2:1 and 3:1 ratios. With the use of invertible counterpoint at the octave, however, the number of possible variations increases exponentially. Invertible counterpoint at the octave is a powerful device that places a premium on preserving the tonality of the framework as well as on horizontal approach to improvisation and voice independence. As numerous textbooks on counterpoint inform, invertible counterpoint at the octave retains the status of imperfect consonances (3rds and 6ths become 6the and 3rds, respectively)[11]. The fifth, however, needs to be handled with caution as, upon inversion, it becomes the dissonant 4th. Example 12 shows an invertible 1:1 framework.

Example 12: Invertible counterpoint at the octave



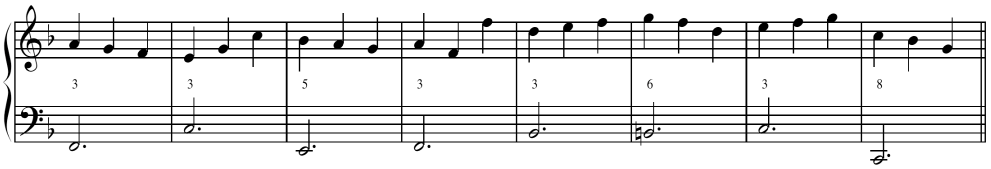
The passacaglia in relative major

Another technique that adds variety to improvisation and creates a sense of formal departure is a tonal shift to the relative major key and/or minor dominant[12]. Theoretical guidelines for generating two-voice 1:1 frameworks are analogous to their minor key counterparts as are the conditions for applying various linear diminutions. Example 13 shows a 1:1 framework in the relative major embellished with non-harmonic tones in 3:1 ratio.

[11] J. Fux, *Gradus ad Parnassum*, trans. A. Mann as *The Study of Counterpoint*, New York 1965; R. Parks, *18th-century counterpoint and tonal structure*, Englewood Cliffs, NY 1984; R. Gauldin, *A Practical Approach to 16th-century Counterpoint*, Englewood Cliffs, NY 1985; T. Benjamin, *Counterpoint in the Style of J.S. Bach*, New York 1986; P. Schubert, *Modal Counterpoint, Renaissance Style*, London 1999.

[12] Buxtehude, in his passacaglia, includes tonal motions to relative major and minor dominant.

Example 13: 3:1 diminutions in relative major



Just as in the minor counterpart, the use of invertible counterpoint in the relative major can add another layer of complexity to the passacaglia.

While the rules governing the behavior of the ground and accompanying counterpoint are similar in both keys, advancing a successful modulation "in time" either to relative major or minor dominant involves a discussion of pertinent theoretical issues to make these tonal shifts successful.

Modulating to relative major and minor dominant

Modulations from D minor to F major, F major to A minor, and D minor to A minor can be accomplished in a number of ways. In the context of either a two or three-voice baroque passacaglia, a horizontal approach that involves the projection of specific linear progressions, be they ^5-^6 or ^7-^6, is more idiomatic than harmonic. One of the challenges in improvising modulation is to properly introduce the leading tone of a new key, to fit its content within an easily perceptible phrase structure – be it four-, six-, eight-measure, or any other symmetrical units – and to distribute musical events (linear progressions, sequences, non-harmonic tones, cadential confirmations) where they are bound to occur. Just as suspensions or cadences are intimately connected to a specific metric position within the phrase, so do sequences and other contrapuntal devices that help advancing successful modulations.

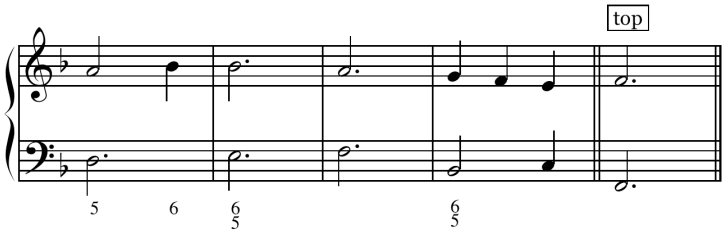
The ^5-^6 and (local) ^1-^b2 melodic motions, and the functional subversion are among the most potent and destabilizing forces that change a stable formation onto an unstable and thus can initiate either prolongational, transitional, or modulatory progressions. These three contrapuntal devices effectively subvert the tonic (or other functional formations), are particularly useful in launching sequential progressions, and, above all, in combination with each other, constitute powerful means for evading the cadence thus enabling melodic continuity and/or phrase expansion[13].

^5-^6 motion

Example 14 shows a ^5-^6 contrapuntal motion destabilizing the tonic and initiating a diatonic ascending second sequence to the relative major. The use of ^5-^6 sequence connects i and III in a most unencumbered and natural manner.

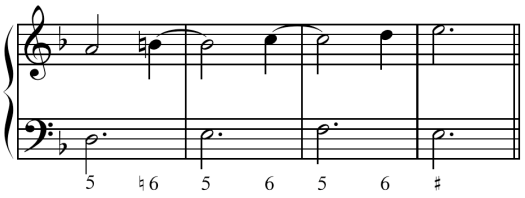
[13] G. Zarlino, *The Art of Counterpoint*, New York 1983, p. 206.

Example 14: ^5-^6 motion: ascending second sequence to III



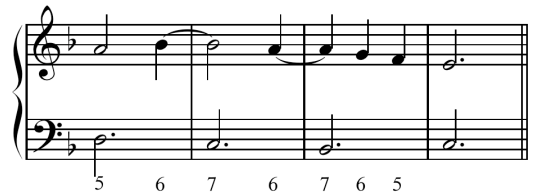
In Example 15, the same ^5-^6 motion, albeit chromatically altered, initiates motion to v.

Example 15: ^5-^6 motion: ascending second sequence to v

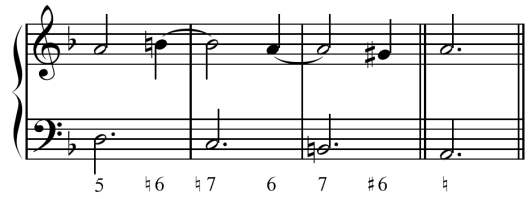


The same motion can be used in activating a descending second sequence with a chain of 7-6 suspensions as shown in Example 16 and Example 17.

Example 16: ^5-^6 motion: descending second sequence to III



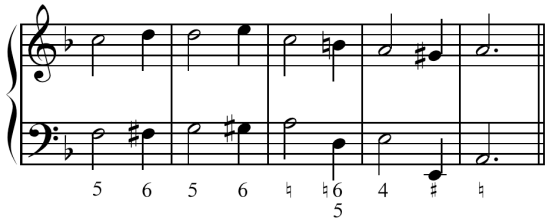
Example 17: ^5-^6 motion: descending second sequence to v



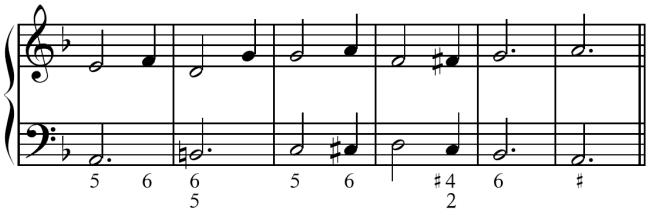
Not only are these two sequential progressions very effective in diatonic environments but they can be easily chromaticized to dramatize their presentation and to ad-

vance a tonal motion to other key areas as well. The chromaticized version of the ^5-^6 ascending motion is illustrated in Example 18 and Example 19 connecting III with v and v and i, respectively.

Example 18: ^5-^6 motion: chromaticized ascending second sequence – III-v



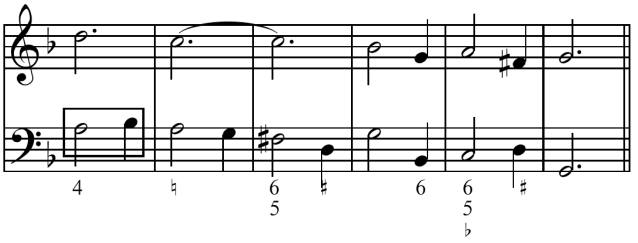
Example 19: ^5-^6 motion: chromaticized ascending second sequence – v-i



“Local” ^1-^b2 motion

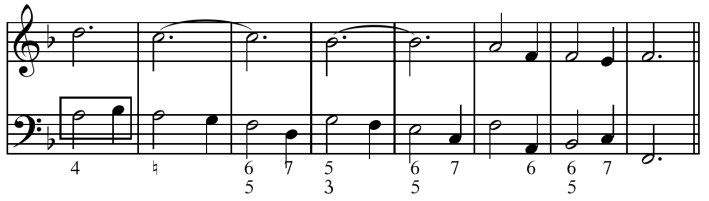
A “local” ^1-^b2 motion is usually associated with a descending sequence as illustrated in Example 20. Because of the presence of a “local” ^b2, this motion triggers the subdominant region.

Example 20: “Local” ^1-^b2 motion

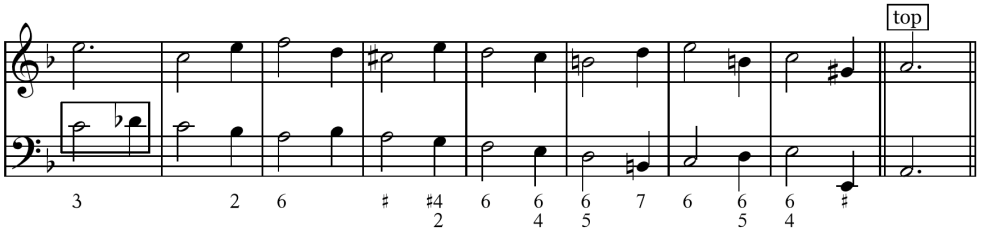


And just as the ^5-^6 contrapuntal expansion can be chromaticized to access intermediary key areas so can a local ^1-^b2 prompt chromaticized progressions. Examples 21, 22, and 23 show the diatonic and chromatic progression from i to III, III to v and i to v utilizing the local ^1-^b2 motion, respectively.

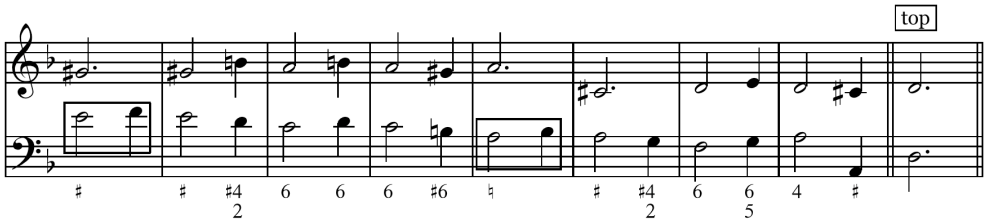
Example 21: “Local” ^1-^b2 motion: i-III[14]



Example 22: “Local” ^1-^b2 motion: III-v

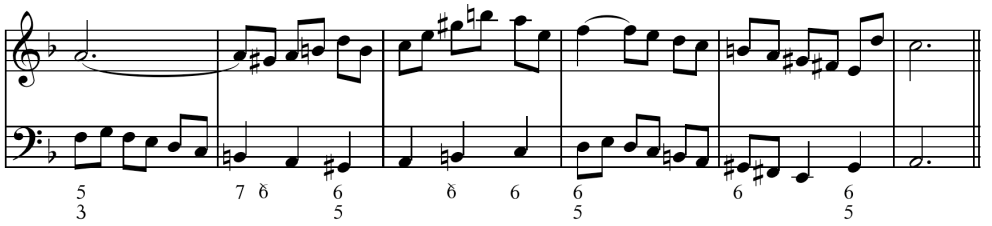


Example 23: “Local” ^1-^b2 motion: v-i



Example 24 illustrates a fully realized modulation in a two-voice texture from III to v in which the leading tone, g#, is carefully woven into the structure of the progression.

Example 24: Modulation from III to v



What becomes apparent from the progression in Example 24 is the manner in which the leading tone, g#, is introduced and absorbed into the structure of the progression. First, it is introduced as a lower, unaccented chromatic neighbor in the soprano (m. 2), then as an accented lower neighbor in the bass (m. 2). In m. 3 it becomes more pronounced as it occurs on beat two. By that measure, it begins to assert its proper func-

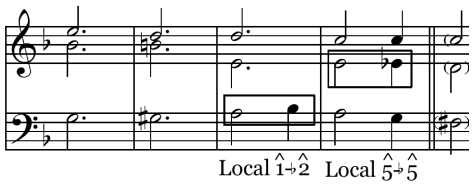
[14] Boxes in Examples 21-23 indicate a “local” ^1-^b2.

tion: the leading tone of a new key. Finally, in m. 5 – to confirm its proper function within the progression – g# occurs three times: in the bass, as an accented passing tone, in the soprano, also as an accented passing tone, and in the bass on beat three, as a leading tone of v. This gradual manifestation of its presence and affirmation of its function "in time" is further evidence for the primacy of linear approach in improvisation.

The functional subversion

The functional subversion constitutes one of the most effective techniques for improvising modulations, initiating sequences, and evading cadences. By reinterpreting the A in m. 8 as a predominant instead of a dominant, a descending sequence can begin either prolongational or modulatory progression. The functional subversion, then, involves the following steps: modal mixture change (major to minor 3rd) and intensification of the new tonal function (a "local" ^1-^b2 strengthen by a ^5-^b5 chromatic shadowing). The stratification of these events "in time" enables a successful subversion of harmonic function. Example 25 demonstrates the use of functional subversion.

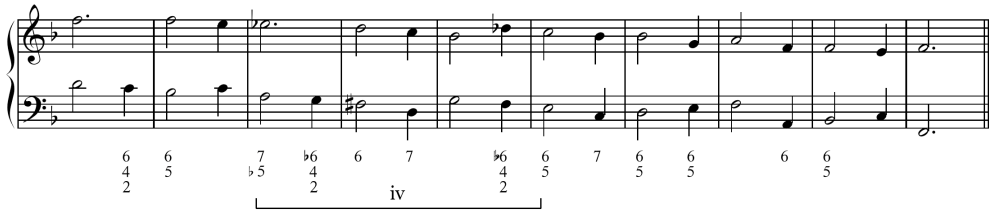
Example 25: Functional subversion



Examination of the progressions from Examples 18-25 shows that the leading tone is carefully woven into the polyphonic fabric, the phrase structure is highly symmetrical, and that the outer-voice counterpoint and resultant intervallic pairs controlling the downbeats are tonally self sufficient. All of these make the arrival of the new key inevitable and musically satisfying.

The contrapuntal linear expansions – ^5-^6 and ^1-^b2 – and the functional subversion can also be used for advancing more elaborate modulations involving tonicizations of intermediary key areas[15]. Example 26, for instance, includes a tonicization of iv, as one of the possible intermediary key areas.

Example 26: i-III: The use of iv as an intermediary key area

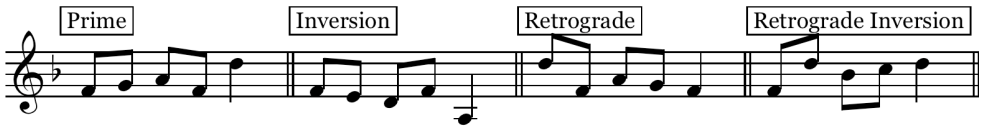


[15] Since more involved modulations are rare in passacaglias, I resort to a brief mention of that possibility. Indeed, the ability to modulate via intermediary key areas is one of the necessary conditions for improvising more complex musical forms.

Developing motivic ideas

The ability to develop motivic ideas, in a manner akin to composition, plays a significant role in learning improvisation. With the assistance of carefully executed developmental procedures – repetition, expansion, rhythmic diminution, inversion, retrograde, and others – the passacaglia may show traces of a written composition. By exploring the potential of a motivic idea through a series of transformations, the student can manage to improvise a number of motivically unified variations. Example 27 demonstrates some of the transformational techniques of a single motivic idea that can be utilized in improvisation.

Example 27: Motivic transformations

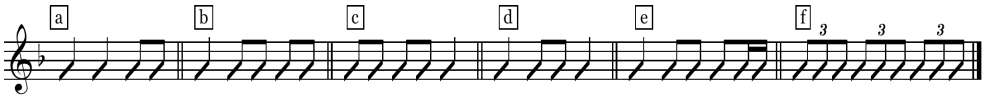


The use of tonal inversion, retrograde and retrograde inversion can produce four distinct variations. While the ability to apply these transformations to a melodic idea "in time" can be ambitious at times, the choice of a specific motive that easily lends itself to these transformations can attenuate the process of improvisation. The main objective of these exercises is to equip the student with a subset of indispensible and idiomatic improvisational techniques that can be discretionally used in improvisation.

Rhythmic diminutions

Broadly speaking, the creativity in handling stable and unstable tones and proper dissonant treatment are central to successful improvisation. As melodies are intimately connected to rhythm – and one cannot exist without the other – by shifting focus from the melodic properties of the line to the rhythmic, the student can improvise a counterpoint that is unified by a single rhythmic idea. Example 28 shows rhythmic motives that can be implemented for practicing rhythmic unity. For the purpose of practicing, each of these rhythmic motives (and the palette of these can be greatly expanded) should be retained within the context of a single variation.

Example 28: Rhythmic motives

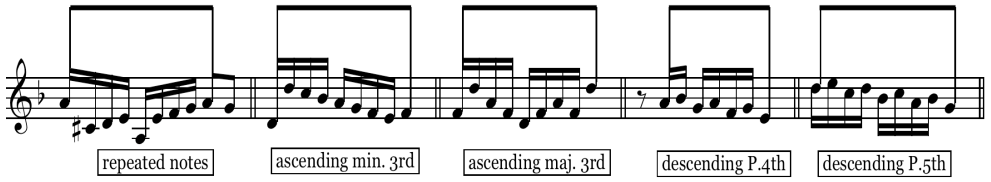


Note that with each consecutive variation there is a sense of rhythmic growth and logical expansion of the original rhythmic cell.

Using idiomatic melodic devices in embellishing disjunct counterpoint

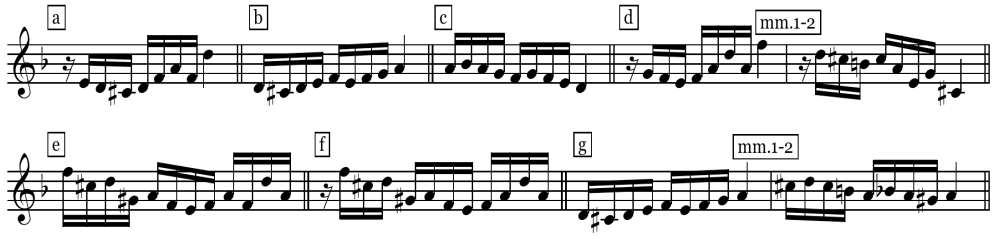
Niedt in his treatise *The Musical Guide* proposed a number of characteristic figures to connect a wide range of adjacent melodic intervals[16]. The ability to fill-in a space between "target" notes constitutes yet another step in gaining improvisational freedom. Some of these devices are reproduced in Example 29[17].

Example 29: Melodic diminutions: adjacent intervallic pairs



In addition to the aforementioned, there are other "fill-in" devices that utilize some of the most idiomatic baroque-like gestures: scales, arpeggiation, accented and unaccented non-harmonic tones, in various combinations. Example 30 lists more effective combinations of these.

Example 30: Idiomatic melodic gestures



Disguising the ground – free two-voice improvisation

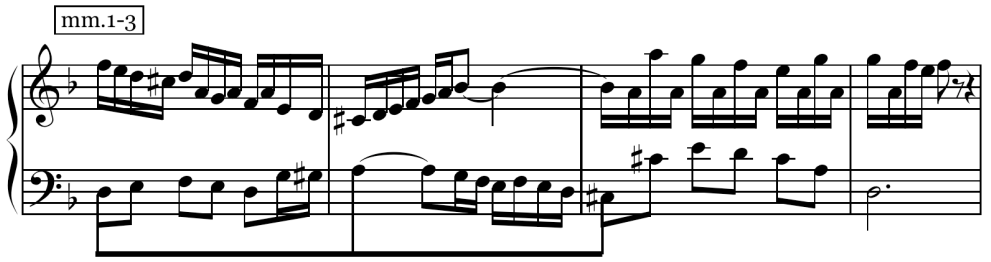
Just as the counterpoint undergoes numerous melodic and rhythmic transformations in the course of the passacaglia, by applying similar techniques to the ground, a free two-voice texture can further enhance the presentation of the passacaglia. Example 31 illustrates the beginning of such a variation.

---

[16] F.E. Niedt, *The Musical Guide*, 3 parts (1700-21), trans. P. Poulin, J. Taylor, Oxford 1988. For similar figures, consult other sources such as: J.J. Quantz, *On Playing the Flute*, Lebanon, NH 2001; C.Ph.E. Bach, *Essay on the True Art of Playing Keyboard Instruments*, New York 1949; L. Mozart, *A Treatise on the Fundamental Principles of Violin Playing*, New York 1985.

[17] For more examples consult F. Niedt, *The Musical Guide...*, Part II, p. 75-88.

Example 31: Free counterpoint in two-voice texture



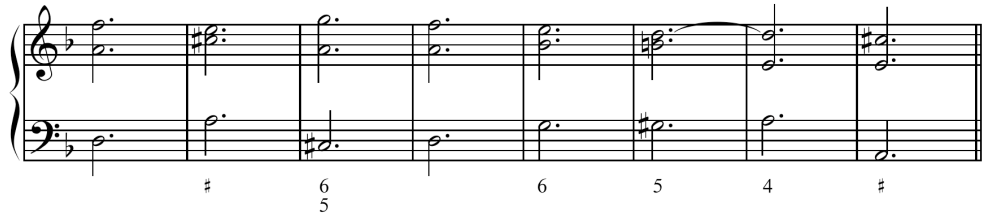
The three-voice passacaglia

Having introduced the basic techniques and devices for improvising the two-voice passacaglia, we can now add one more voice to generate a three-voice texture. While the theoretical precepts concerning the behavior of outer-voice counterpoint and the metric distribution of melodic events remain largely operational, a few remarks regarding the relationship between contrapuntal voices, namely the use of free imitation and invertible counterpoint, are relevant to our study.

Consonant 1:1 framework

The harmonic structure of 1:1 three-voice framework is controlled by a consonant outer-voice counterpoint and, for the most parts, complete triadic formations as shown in Example 32.

Example 32: Three-voice framework

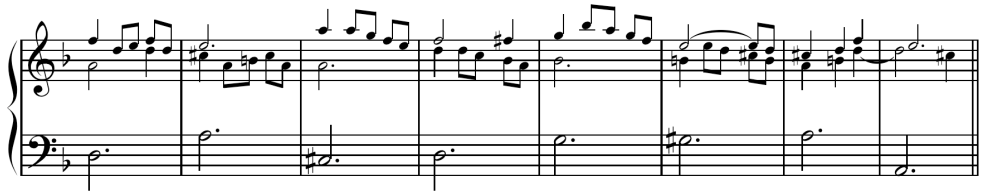


The addition of a third voice energizes the musical texture considerably and provides the opportunity for introducing free imitation. The use of imitation, both strict and free, tests one's ability to reify harmonic progressions horizontally with considerable degree of voice independence and harmonic complementation.

The use of free imitation in three-voice texture

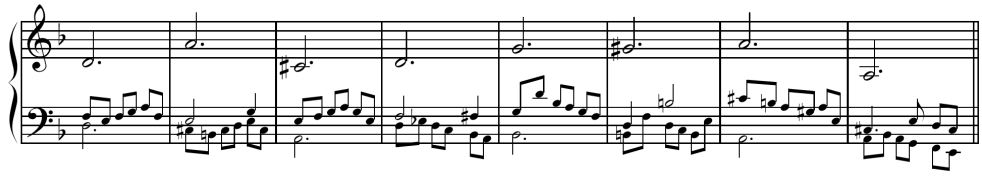
The introduction of imitative procedures to improvisation begins with a simple motivic imitation between upper voices as shown in Example 33.

Example 33: Motivic imitation in three-voice texture

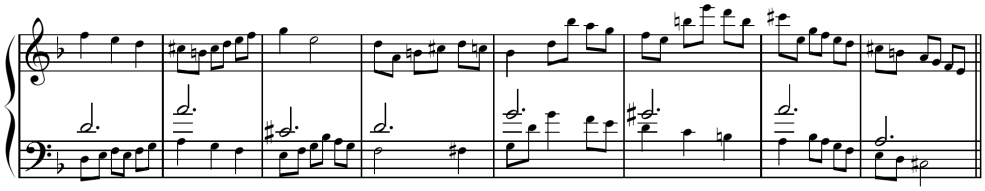


This technique is referred to as "call and response" whereupon one voice initiates an idea and the other comments on it preserving or appropriating its salient features. The use of this technique guarantees equal participation of the voices and the manifestation of a truly polyphonic fabric. Having explored free imitation between upper voices, other voice combinations can be employed in an imitative dialogue. Examples 34 and 35 demonstrate a bass-tenor and bass-soprano pairing with the ground occurring in the soprano and alto, respectively.

Example 34: Motivic imitation: the ground in the soprano voice



Example 35: Motivic imitation: the ground in the alto voice



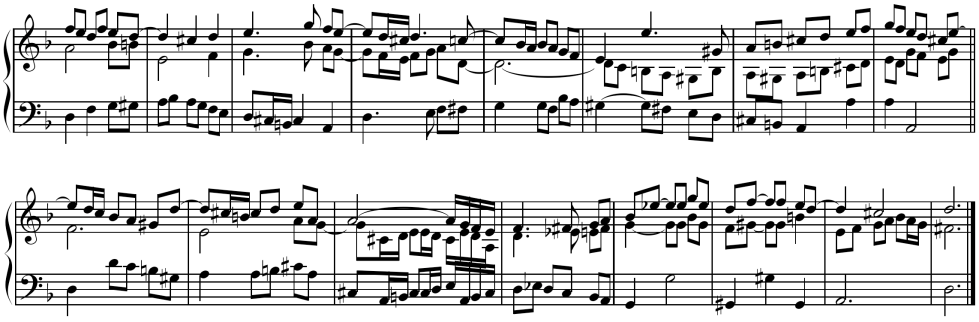
In Example 34, the ground is placed in the soprano with the two lower voices engaging in an imitative discourse. Example 35 illustrates a more complicated scenario with the ground occurring in the inner voice with the outer voices supplying imitative counterpoints. As has been stressed time and time again, the use of free imitation in three--voice texture necessitates linear as opposed harmonic approach to improvisation. The primary objective of free imitation is to develop a sense of voice independence, melodic continuity and, above all, the ability to project contrapuntal lines so they – rather than following the rigidity of harmonic constrains – generate the harmonic structure.

Free imitation and the trio sonata texture

Learning how to control and support the ground present in different voices allows one to free up the contrapuntal fabric and experiment with a free polyphonic texture.

Unequal voice polyphony in three-voices is closely related to the trio sonata texture in which individual voices have a unique melodic and rhythmic profile as well as have a clearly defined roles: the bass voice supplies a harmonic foundation, the soprano provides a melodic interest, and, at the same time, establishes a consonant bass-soprano polarity, and the middle voice enhances the overall texture through complementary melodic diminutions and participates in free imitation[18]. By embellishing all of the voices, including the ground, in a manner similar to the two-voice texture, a completely new subset of variations can be improvised as demonstrated in Example 36.

Example 36: Free melodic elaboration in three voices



Even though variations in Example 36 gradually depart from the normative treatment of the passacaglia, they may still be successfully implemented within the passacaglia proper, and, also, may prepare the student for more advanced improvisational studies such as: two-, three-part inventions, sonatas, baroque suite dances, and many others. They create a sense of temporary departure from continuous variation procedures and constitute effective techniques for disguising the ground.

Formal improvisation

Improvising formal designs tests the student's ability to organize his or her ideas eloquently and deliver them with conviction in "real time". It is comparable to compositional processes in which decisions concerning local and global events shape the unfolding of the musical form. Making musical choices regarding the form – as well as other elements of the musical fabric – requires a thorough familiarity with improvisational techniques as well as with the pertinent melodic, contrapuntal and harmonic vocabulary. Improvisation often requires prompt adjustment to the unexpected, as the "game plan" might be sidetracked on the account of minute details – be they rhythmic displacements of non-harmonic tones or minor modifications of melodic ideas – that frequently redirect the music into a new territory. Competence for handling the unexpected is one of the prerequisite skills warranting improvisational success, i.e. the ability to "save oneself", so to speak. Improvising the passacaglia or any other continuous variation form (chaconne, folia, or passamezzo) might be a little less complicated than improvising the sonata or the

[18] Unequal voice polyphony – unlike equal voice polyphony – relates to common practice music in which the polarity between soprano and bass plays much more significant role in the polyphonic fabric than inner voices. This distinction has been brought to my attention be prof. M. Brown (Eastman School of Music).

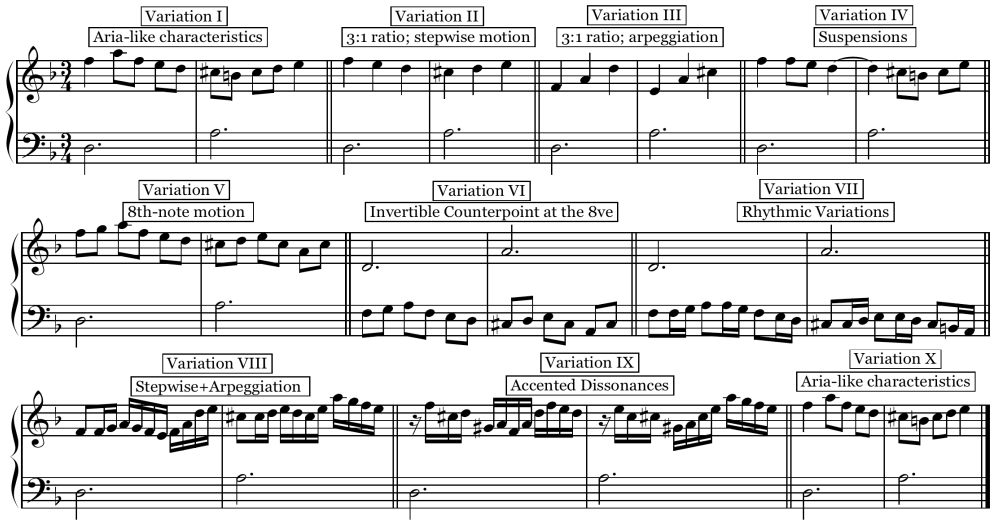
fugue which *de facto* are indentified with much more stringent formal and contrapuntal processes; nevertheless, demonstrating formal considerations is just as important in the passacaglia as it is in any other musical forms. What exactly do these considerations relate to? How do they interact with improvisation? What do they involve and how do they assist the student in conveying the form of the passacaglia?

The answer to these questions is largely personal and depends on one's expediency in delivering and organizing ideas in a musically creative and persuasive manner. Since the passacaglia has a relatively loose formal organization, the articulation of its structure can be accomplished in a number of ways. Depending on the level of proficiency, the student may employ various formal paradigms: from the relatively simple, involving basic improvisational techniques, to the more complex, including the use of invertible counterpoint, relative major or dominant minor keys, and three-voice texture. In the process of articulating form, there are certain inevitable form-building entities, the presence of which is not only idiomatic but, to a certain degree, required. Events such as tonicization of the subdominant and the use of ^b7, ^b2, or the Neapolitan, signal the conclusion of the passacaglia and are bound to happen in the final variation. To project a sense of balanced or arch-like formal design, the opening and closing variations may be linked by similar melodic, rhythmic, or textural properties. Invertible counterpoint, relative major and/or minor dominant section, or a disguised presentation of the ground, either in two- or three--voice texture are quite effective in introducing formal departures.

Broadly speaking, conditions for the projection of musical forms involve the juxtaposition of opposing thematic and tonal areas, the development of motivic ideas, and the resolution of tonal or other conflicts. The rules for improvising the passacaglia are less stringent – after all, they do not involve resolution of tonal or melodic conflicts nor do they refer to the strictures of a specific formal paradigm – as they primarily refer to the development of musical ideas and the projection of large-scale loosely organized formal structure.

Example 37 illustrates a simple formal outline for a "medium" size passacaglia with ten variations. Each variation begins with a specific idea (to be continued by the student).

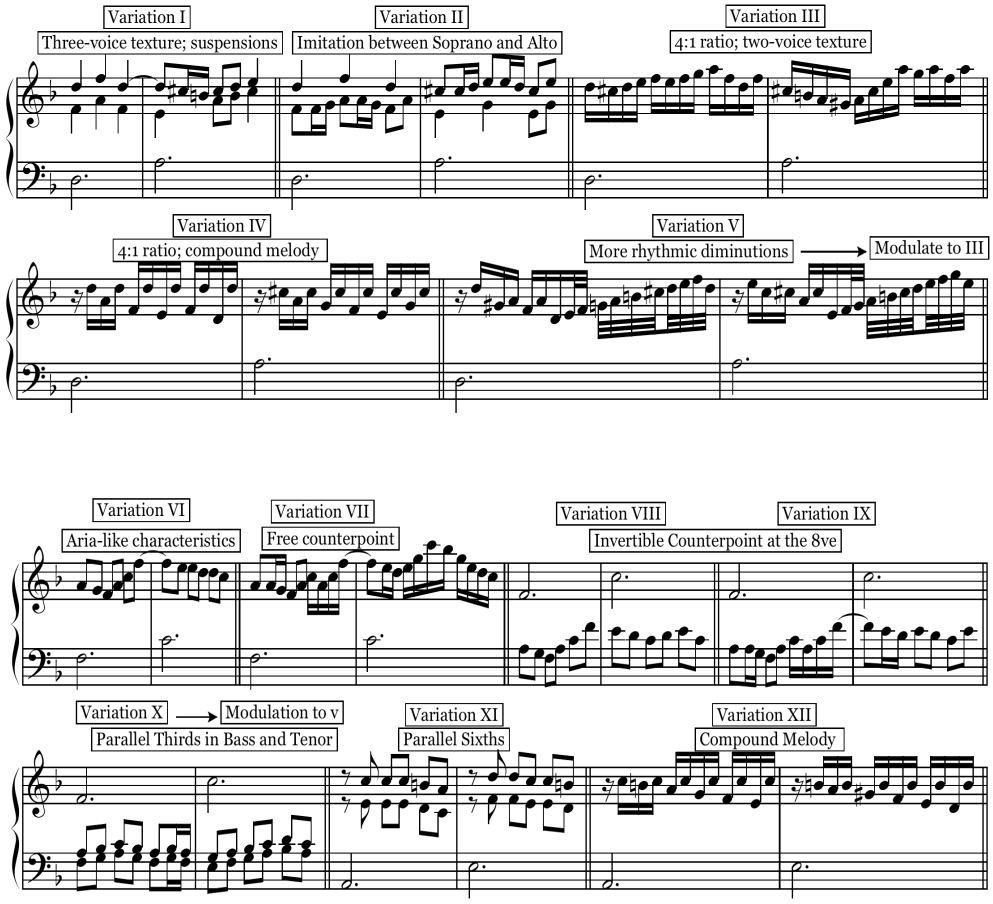
Example 37: A "medium" passacaglia – ten variations

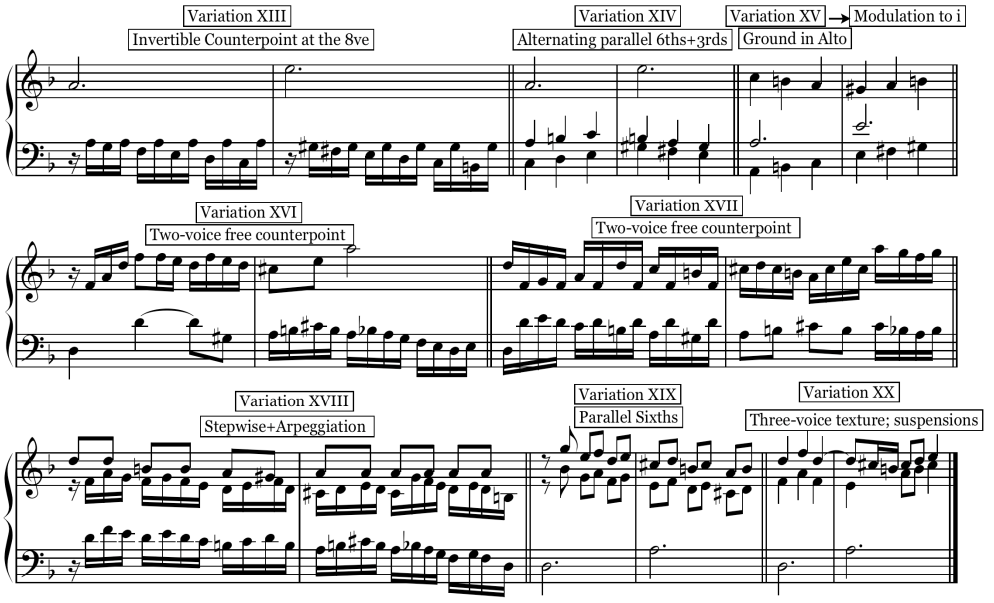


Note that the *topoi* of the first and last variation employ aria-like characteristics. The content of the last variation, however, should, predictably, be enhanced with the tonicization of iv and an inclusion of a Neapolitan, both of which effectively denote the end of the piece. As the passacaglia unfolds, there is a gradual buildup of tension created by rhythmic diminutions and accented and unaccented dissonances. Invertible counterpoint in Variations VI and VII adds a much-needed textural contrast to the overall framework of the piece.

Example 38 shows a much more involved outline for a "large-scale" passacaglia with twenty variations.

Example 38: A "large-scale" passacaglia: twenty variations





The framework of the passacaglia in Example 38 has a number of interesting features that convincingly denote the formal structure of the piece. For instance, variations VI through XV include tonal departures to III and v, respectively. These tonal departures are further accentuated with the use of invertible counterpoint at the octave in variations VIII, IX, and X (in relative major) and XIII, XIV, and XV (in minor dominant). Note that in Variation XV the ground occurs in the middle voice, making the entire variation even more ambitious to realize. Variations XVI, XVII and XVIII disguise the ground by incorporating free counterpoint in two-voice texture (variations XVI and XVII) and trio--sonata texture in Variation XVIII with some striking harmonic expansions.

Further directions

The ability to improvise, arguably, is an ultimate test examining student's comprehension of numerous theoretical concepts. The notion of cadence, for instance, takes on a completely different slant when one is asked to improvise a basic four-measure phrase in 6/8 and conclude it with either a half cadence or another cadential formula[19]. Other theoretical concepts – be they sequences, phrases, stable/unstable tones, or chromaticism – can be solidly internalized by implementing improvisation into music theory curricula.

Having established the groundwork for improvising the passacaglia, I would like to conclude with a few remarks and practical suggestions addressed to the student. Improvisation can be an enjoyable activity provided that enough time and effort have been devoted to building the theoretical foundation and connecting it to musical practice. Theory and practice form a unique partnership that provides a necessary back-

[19] By giving this test to my students I can attest that the task looks much simpler on paper than it is in practice.

ground for the development and implementation of various improvisational methodologies. Among numerous improvisational skills guaranteeing pedagogical success, the ability to improvise two-voice 1:1 consonant frameworks – without melodic embellishments and played in a steady tempo – is crucial in learning how to improvise[20]. This ability permits the student to gradually add various melodic and rhythmic diminutions, implement motivically-based developmental procedures and textural variations, reharmonize the ground, and, ultimately, develop a sense of long-range hearing whereupon certain musical events can be anticipated prior to their actual occurrence. Needless to say, mastering of these skills requires a conceptual shift in the way we understand the behavior of certain music properties. While specific theoretical concepts such as cadences or sequences, are intimately related to the vertical convergence of contrapuntal lines at various levels of the musical structures, others, such as suspensions, are entirely linear in their manifestations. The interplay between the vertical and horizontal approaches is crucial to a successful improvisation; both play a unique role in improvisation: the vertical ensures the tonal orthography in general and the projection of cadences in particular, the horizontal assures contrapuntal independence and melodic inventiveness.

In recent years, the philosophy of teaching music theory has changed considerably. With the introduction of web-based instructions, computer assistant programs and other technologies, improvisation may seem antiquated with no place in the postmodern world. When, however, one considers long-lasting benefits and comprehensiveness of acquired skills, it seems that benefits greatly outweigh challenges and spending more time on teaching improvisation seems highly relevant and may indeed be a winning alternative in music theory pedagogy.

Summary

THE PASSACAGLIA – A PRIMER FOR TEACHING BAROQUE IMPROVISATION

During the lifetime of Bach such disciplines as harmony and thoroughbass were realized directly at the keyboard by the student, providing a solid foundation for later and more elaborate improvisatory skills – skills which were mandatory for all clavier players of that period. Unfortunately, the great majority of today's Baroque counterpoint classes rely on the more academic process of committing *notes to paper*, thereby subjugating aural and performance skills. In this article, I propose amending music theory curricula with topics in baroque improvisation. To that end I will employ one of the most accessible variation forms from common practice music: the passacaglia.

Key words: *passacaglia, Baroque improvisation, figured bass, music theory, counterpoint*

[20] About 60 beats per minute.