

## **From Voice to Keyboard Improvised Techniques in the Renaissance**

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§ In questo articolo inizio con l'elencare le tecniche per il contrappunto improvvisato che si trovano in diversi trattati del Rinascimento. Molte fra queste sono intese esplicitamente per i *pueri cantores* nella liturgia, ma altre (come quelle in Lusitano e Sancta Maria) sono chiaramente concepite per la tastiera.

Durante il mio intervento ho dimostrato alcune di queste tecniche con l'aiuto di volontari nel pubblico.

Molte di queste tecniche sono identiche sia cantate, sia suonate (per esempio aggiungere un motivo ripetuto a un *cantus firmus*, aggiungere due voci in decime parallele e imitazioni in stretto). Il problema che ci sta dinnanzi è se e come queste tecniche sono state trasferite da un ambito all'altro. Gli allievi imparavano prima a cantare? Oppure a suonare? Mi concentrerò sul contrappunto fugato e l'imitazione in stretto, mostrando alcune differenze fra l'improvvisazione vocale e alla tastiera.

§ In this paper I begin by listing the improvised contrapuntal techniques that are found in various Renaissance treatises. Many are explicitly intended for boys singing in the liturgy, but some (those found in Lusitano and Sancta Maria) are clearly intended for the keyboard. During the conference I have demonstrated some of these techniques with the help of volunteers from the audience.

Many of the techniques are identical whether sung or played (adding a repeating motive to a CF, adding two lines in parallel tenths to a CF, and stretto fuga, for instance). The problem that faces us is lack of evidence as to whether and how these techniques were transferred. Did students learn to sing first? To play? I will focus on *contrapunto fugato* and *stretto fuga*, and show some differences between keyboard and vocal improvisation.

### What could be improvised?

Many improvised techniques that were practiced in the Renaissance are discussed in treatises. A summary of those is shown in Example 1. In this paper I will discuss only two of those techniques: *contraponto fugato* (also called *con obliquo*) and stretto fuga, with the aim of showing how vocal training in improvisation might differ from the corresponding training for the keyboardist. I have always assumed choirboys started with vocal improvisation, but in fact we don't even know if students went from vocal to keyboard improvisation or the other way around.

#### Example 1. What could be improvised?

- To pre-existing melodic material
  - a CF in even note values
  - a CF in mixed note values (e.g., chanson)
  - two CFs (e.g., CF in canon, or a composed motet or chanson)
  
- one can add
  - a single line in note-against-note texture or 'species'
  - “ “ in mixed values
  - “ “ **with a fresh repeating motive (*contraponto fugato*)**
  - “ “ with a repeating motive derived from the chant (*ad imitatione*)
  - a line that makes an invertible combination
  - two lines, one in parallel tenths
  - two lines in fauxbourdon
  - two lines in canon
  - three lines ('parallel-sixth model' or keyboard-style or sung)
  
- With a fresh *soggetto* one can
  - make imitative '**stretto fuga**' at the minim or semi-breve or breve that can be **simple à 2**, or in '**doppia conseguenza**' (à 3) or (à 4) (invertible)

Because there are so few details about keyboard instruction in treatises, one way for us to carry out this investigation is to try to do it ourselves, just as military historians can learn from battle re-enactments. From this practice we may learn if one technique is better suited than another to voice or keyboard.

### **Contraponto fugato**

This technique is quite widespread: a list of synonyms and citations for this technique can be found in SCHUBERT 2002. One of the best discussions is by Lusitano.<sup>1</sup> Example 2 shows a case.



Example 2

«L'aria de cantar il contraponto, & pigliar un passage, & fatto una, o due volte, subito si farà una tirata, over passo largo ascendente, o descendente, secondo che a te parerà». (LUSITANO 1989, f. 14<sup>v</sup>)

The word 'aria' here means 'manner'.<sup>2</sup> Lusitano says that the way to sing counterpoint is to take a motive and, having done it once or twice, immediately to do a quick run or a long ascending or descending figure or scale, as you wish. In the example the *passage* is apparently the first four notes (sol mi fa la), which is sounded again a fifth higher and then again at the original pitch level. The *tirata* seems to be the scale la sol fa mi re, but this scale too recurs, so perhaps the whole 4-semibreve unit is the *passage*? Whether you think it's part of *passage* will determine ficta you use (I would sing B-flat in m. 7).

The cantus firmus in Ex. 2 is the word 'alleluia' from the alleluia *Dies sanctificatus*, which Lusitano uses in its entirety in the longer treatise for his examples of *contraponto fugato*. This longer segment (26 notes), he now shows in breves. One of these long examples is shown in Ex. 3 with the commentary:

One must know that the best way of doing counterpoint is to take a motive at first, and after having sung other motives, to return to the first as a theme, and then

<sup>1</sup> Lusitano's discussion can be found in two treatises, the short *Introduzione facilissima* (LUSITANO 1989) and the longer treatise attributed to him, *Un tratado de canto de organo*, which will appear soon in a translation by Philippe Canguilhem (*Chanter sur le livre à la Renaissance* 2013). My thanks to Philippe for kindly sharing with me some parts of his work before the publication and to Michael Anderson for identifying the chant.

<sup>2</sup> It is the same case described by Bellotti for Banchieri's *Aria francese* (pp. 53-54).

some long rising or falling figure [scale?] seen as most appropriate. Because sometimes the *paso* comes back in such a way that one *paso* is more appropriate than another, which is left to the judgment, i.e., reason. And it should not be forgotten that beginnings are to be peaceful, i.e., entering more restfully, because then one can diminish [note values] gradually.<sup>3</sup>

The musical score consists of four systems, each with a treble and bass staff. The first system (measures 1-7) features a treble staff with a long note and a bass staff with a melodic line. Annotations include '1' above the treble staff, 'A' and 'B' under the bass staff, and 'Tirate' with a flat sign. The second system (measures 8-14) has a treble staff with a long note and a bass staff with a melodic line. Annotations include '3' above the treble staff, 'B\_R' and 'Tirate' under the bass staff, and '(cf mm. 3-4) 1' above the treble staff. The third system (measures 15-21) has a treble staff with a long note and a bass staff with a melodic line. Annotations include '3' above the treble staff, 'B\_R' and 'Tirate' under the bass staff. The fourth system (measures 22-28) has a treble staff with a long note and a bass staff with a melodic line. Annotations include '(cf mm. 7-8) 2' above the treble staff, 'A' and '2' under the bass staff, and a flat sign. A legend at the bottom indicates that 'A, B' in brackets represents a 'motive' and a bracket with a line above it represents an 'opportunity'.

Example 3

Lusitano's *contraponto fugato* on the alleluia *Dies sanctificatus*.

According to these guidelines, an improvisation has a form, it doesn't just meander around. It has a rhetorical construction, a beginning, middle and an end. However, Ex. 3 is a bit more complicated than the verbal description would have us expect. The motive seems to be the first two measures in the bass, but later on we find parts of it sounded alone (fragment B retrograded

<sup>3</sup> «Es de saber que la mejor manera que se puede tener en echar el contrapunto es tomar un *paso* en principio y después de aver cantado otros *pasos* tornar al primero como tema, y luego algun *paso* largo descendiente o subiente, según mas conforme fuere visto. Por que algunas vezes viene el *paso* rodando de tal modo que le conviene mas un *paso* que otro, lo qual es dexado al bivo yuez, que es la razon. Y no se deve olvidar que los principios sean pacíficos, esto es entrando con algun *mas* reposo, por que pueda ir de grado en grado disminuyendo», (*Chanter sur le livre à la Renaissance* 2013, pp. 12-13).

and fragment A alone). The CF provides opportunities to place the motives. For instance, motive A can be placed against CF opportunities number 1, 2, and 3 (a rising whole step, a falling minor third, and a rising minor third). Lusitano does not take advantage of every one of these, so he must have some other formal considerations in mind. This piece exemplifies the principle of alternating *tirate* with *pasos*, but varying both each time they appear. In this piece he repeats the whole A+B subject, then inserts a *tirata*, then returns to a varied version of the *paso* (A does not overlap B, and B is retrograded), then another *tirata*, then a single A separated more from a retrograded B, then two more *tirate*, and finally two widely separated As and a coda, or *supplementum*. In sum, the first *tirata* is short (2 breves) and ascends, the second is longer (3 breves), with two descents, and the third is the longest (4 breves), with two ascents.

This treatise example illustrates the kinds of possibilities for musical variation that *contraponto fugato* offers. Excellent examples of real music of this type can be found in Diego Ortiz's ricercars on *la Spagna*. Example 4, from Ortiz, begins with several *tirate*, in the manner of an invention, intonation or toccata, and gradually introduces *pasos*. *Paso* A has been bracketed and labeled in measures 14-15. The next time it appears it has a note added at the front (m. 18), which it will keep in all subsequent appearances. The third time it appears (mm. 20-21), it has two notes added at the front. The middle of the piece is set off by a very long repeated segment that combines two *pasos*, A and B, that 'miraculously' fit over two different 4-breve CF segments.<sup>4</sup> The piece ends with motive A, now with three notes added at the front, sounded twice at the same pitch level while the CF descends, and finally dropping a fifth, as if no longer able to resist the implacable descent of the CF. At this last iteration it loses its end, deteriorating into generic cadential material.

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<sup>4</sup> Ortiz suggests that the keyboard player fill in middle parts, as in Bellotti's Banchieri examples (pp. 53-54). Added motives must accommodate both bass and solo line. John Milsom has described Morley's technique of fitting the same counterpoint over different CF segments as 'polyandric' (MILSOM 2008).

The image displays a musical score for a piece titled 'ricercar on la Spagna' by Diego Ortiz. It consists of five systems of music, each with a treble and bass staff. The first system starts at measure 1. The second system begins at measure 8 and includes a bracketed section labeled 'A'. The third system starts at measure 15 and contains two bracketed sections labeled 'A'. The fourth system begins at measure 22 and features three bracketed sections labeled 'B', 'A', and 'B'. The fifth system starts at measure 30 and contains three bracketed sections labeled 'A'. The bass staff throughout the piece consists of a series of chords, likely representing figured bass notation.

Example 4  
Diego Ortiz's ricercar on *la Spagna*.

My method of teaching this is to present the student with some motives that can be transposed (as long as they maintain their solmization syllables), and a CF. Ex. 5a shows three positions for the motive 'sol sol sol la fa'. The x-shaped notes mean that the last note can be of any rhythmic value. The first step is to find places to lay the motives above or below the CF. We think of these as pillars that will later support a wall; for the moment, we don't connect them. First we run through all the possibilities by trial and error. We could start on D above the first note, but not on G or C. Then we start over again on measure 2. Soon we have a score with all possible motives sketched in above the beginning of *la Spagna* (Ex. 5b).

After having found all the places we could put motives, we find ways to connect the motives with scale passages. We decide to move in semiminim scales, modeling on the *tirate* of Lusitano, as shown in Ex. 5c.



Example 5

a) motives to be used in practice



b) the beginning of *la Spagna* with possible motive placements sketched in



c) a complete solution.

We know that *contraponto fugato* was a sung technique widely practiced in the liturgy; if the CF has words, singer would use same words. On the other hand, instrumental *contraponto fugato* is exemplified by the Ortiz ricercars, where the added line is played on a single-line instrument (viol). Banchieri's treatise examples are filled with fast arpeggios, suggesting an instrumental application (BANCHIERI 1968). Lusitano's Ex. 3 is harder to classify because, while he uses the verb 'cantar', the range is extremely low and very wide. We can conclude that *contraponto fugato* is equally well suited to both instrumental and vocal performance, and the skill is probably easily transferred; the only difference might be one of melodic styles.

### **Stretto Fuga**

This technique was identified and named by John Milsom (MILSOM 2005). It can be found in 15<sup>th</sup>-century music and examples of it are found in Hothby's treatise (BRAND 2010; FROEBE 2007). It has been discussed verbally in only four treatises in the later Renaissance (SCHUBERT forthcoming) and in later

music it has also been called ‘Fantasia’ (BUTLER 1974; PORTER 2000). Because I have discussed the rules for *stretto fuga* in two parts elsewhere, we can turn immediately to how it can be done in three parts.<sup>5</sup>

For our purposes it will suffice to compare the two authors who discuss it in the Renaissance, Zarlino and Sancta Maria. Zarlino only mentions it in the later 1573 edition of the *Istituzioni armoniche*, where he seems quite excited about it (ZARLINO 1966). He describes it as a sung phenomenon. Sancta Maria, on the other hand, is writing explicitly for organists. He is very thorough in his discussion of two-part *stretto fuga*, but only offers one example of *stretto fuga* in three parts (SANCTA MARIA 2007, f. 68<sup>r</sup>).

A quick study of these two examples (Ex. 6 and 7) reveals the rules for the lead voice. Zarlino is starting his voices at the fifth below and the octave above, so his legal melodic intervals from measure to measure are the unison, the third and fifth down, and the fourth up. Sancta Maria is writing at the octave below and the fifth above, so his legal melodic motions from measure to measure are unisons, thirds and fifths up, and fourths down.

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<sup>5</sup> At the conference, two- and three-part improvisations were demonstrated.



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Musical notation for measures 1-7. The score is in 3/4 time and consists of three staves: Treble, Alto, and Bass. The key signature has one flat (B-flat). The music features a three-part stretto fugue with overlapping voices.

8

Musical notation for measures 8-14. The score continues with three staves. Measure 14 ends with a double bar line.

15

Musical notation for measures 15-21. The score continues with three staves. Measure 21 ends with a double bar line.

22

Musical notation for measures 22-28. The score continues with three staves. Measure 28 ends with a double bar line.

Example 6  
Zarlino's three-part *stretto fuga* (ZARLINO 1966, p. 315).

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Example 7  
Sancta Maria's three-part *stretto fuga* (SANCTA MARIA 2007, f, 68<sup>r</sup>).

Comparison of these two examples reveals two striking stylistic differences:

1. We find crossed voices in Zarlino and unisons between the voices. But in Sancta Maria the voices never cross, and there are only occasional unisons. Crossed voices would make it difficult to keep track of the parts on a keyboard.
2. Zarlino adheres to the principle of constant variety, while Sancta Maria has one very long and obvious sequence (mm. 15-23).

These two qualities may contribute to defining the stylistic difference between vocal and instrumental improvisation.

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