Recombinant Melody: Ten Things to Love About Willaert's Music

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Willaert's music was much celebrated in its own time. Today, however, musicologists find little to praise outside of its sonorous richness and sensitivity to text.[1] Its seamlessness and contrapuntal density seem to be respected but not loved. Michele Fromson writes that in spite of

> widespread and continued historical interest in his music, individual pieces have had a difficult time entering the musical mainstream. With the exception of a handful of especially tuneful chansons, madrigals and motets, few compositions have gained favor with modern performers or listeners, raising perplexing questions about the aesthetic quality of his music that still await satisfactory answers.[2]

In the following pages, I propose that the powerful expressive potential of this music lies beneath the apparently seamless surface in the details of its contrapuntal complexity. Singling out a handful of "especially tuneful pieces" is a dead end—most of Willaert's music is melodically very uniform. However, it is this very uniformity that permits the contrapuntal manipulations that are the basis for an expressiveness based not on melody alone, but on combinations of melodies. Performers willing to examine the details of its construction and draw conclusions about Willaert's intentions will discover a highly expressive music, leading to lively performance, filled with contrast.

The key to these contrapuntal manipulations is the recombination of tiny melodic fragments.[3] One of Willaert's techniques of recombination is to splice motives together in new pitch relationships. In the Renaissance this technique was called *inganno*, and I will begin with a description of the earliest reference to it by Willaert's most famous pupil, Gioseffo Zarlino.

Zarlino on *Inganno*

Inganno is referred to as a type of *fuga* by many authors around 1600.[4] We can trace its roots back to Tinctoris' definition of *fuga*, "sameness of the parts of a piece [*cantus*] as to [rhythmic] value, [solmization] name, shape [i.e. ligature or not], and sometimes as to the placement of its notes and rests" ([1495] 1983).[5] *Inganno* as a type of *fuga* depends solely on the sec-

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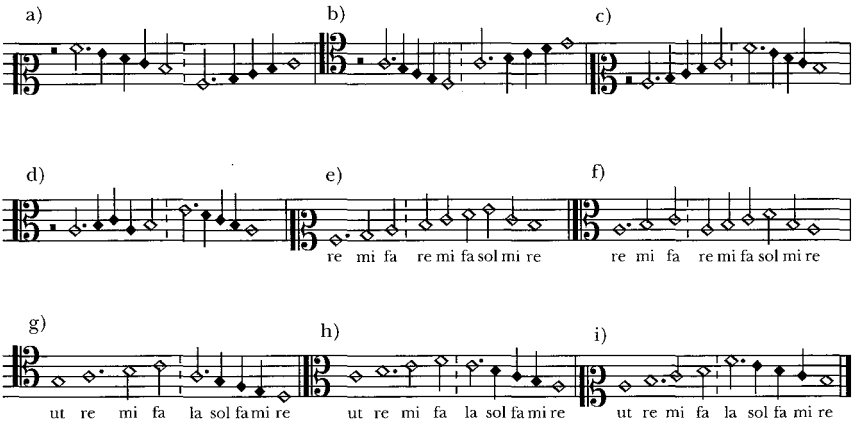
ond of Tinctoris' five elements, the solmization syllable; two melodies in which the notes have the same solmization names will be in *fuga*, although the notes and the contour will be different.

Artusi ([1603] 1968) is usually cited as an authority in connection with *inganno*, but it is actually Zarlino who first described the technique, in a hitherto overlooked passage from the *Istitutione harmoniche*, which appeared nearly a half century earlier than Artusi's treatise (Zarlino [1558] 1965, III:59). The passage in question, which occurs in the context of a discussion of writing in three parts, is given below, divided into phrases to facilitate commentary:

[1] *Si potrà etiando, con grandissimo commodo, (il che è anco lodevole) porre in Consequenza le parti tra loro;*	[1] One thing that is very easy to do (and also praiseworthy) is to put the parts in consequence with each other,
[2] *non con quell'ordine istesso, & dispositione, come si usa nelle Fughe legate: ma con un'ordine interrotto;*	[2] not with the same order and placement as is used in strict *fuga*, but with the order interrupted; [this can be done by]
[3] *ponendo parte delle figure ascendenti, & parte discendenti;*	[3] placing some of the notes higher and some lower,
[4] *& porre solamente il numero delle figure, che siano di uno istesso valore;*	[4] using only the [same] number of notes, which must be of the same values;
[5] *ponendo tallora una Imitatione di figure al contrario, cioè porre la Guida, o Principale, che procedi per un numero di figure ascendenti, & il Consequente, che con l'istesso numero discendi;*	[5] sometimes placing an imitation of the notes in contrary motion, i.e., to put the guide, or leading voice, that proceeds with a certain number of notes ascending, and the consequent, which descends with the same number.

Although not named, *inganno* is discussed in phrase 3, and it depends upon the figurative meaning of "ascendenti" and "discendenti" as "higher"

Example 1: Zarlino's illustrations of *inganno.*



and "lower." Guy A. Marco translates these words as "ascending" and "descending," interpreting the phrase as a description of melodic inversion (Zarlino [1558] 1968, III:59,186). However, since melodic inversion is clearly described in phrase 5, we may wonder why Zarlino would have repeated himself. A look at the musical illustration (ex. 1) that accompanies Zarlino's text proves that phrases 3 and 5 describe two different phenomena.[6]

The illustration consists of three short series of related melodies: **a–d**, **e–f**, and **g–i**. In each series, the first melody is what Zarlino would call the "guide" and the following ones, which have the same number of notes and the same rhythmic values, are various possible "consequents." Thus, example 1a is a guide and examples 1b–d are consequents; example 1e is a guide and example 1f is its consequent; and example 1g is a guide followed by two consequents, examples 1h and 1i. I will focus on the second and third series for the moment because they clearly illustrate the discussion in phrase 3 of the text.[7]

In series **e–f** and **g–i**, each of the consequents contains only one change of direction, hardly enough to qualify as examples of melodic inversion. Rather, some of the notes have been shifted in space with respect to the others. Given the guide (ex. 1e), one constructs the consequent (ex. 1f) by leaving the first three notes of the guide in their original location, then placing the remainder in a lower register. Each portion, or sub-motive, retains its contour, and the only change of melodic direction occurs at the dotted line, where a step up in the original is replaced by a third down.

The second portion of the consequent lies "lower" with respect to the first portion than it would if it were strictly transposed.[8]

The third series of examples (exx. 1g–i) works the same way, except that both halves of the melody are transposed: in example 1h, the first half of the consequent has been shifted up a fourth and the second up a fifth; in example 1i, the first half has been moved up a fourth, the second up an octave. The choice of transposition level in *inganno* is governed by the need to maintain the tone/semitone positions within a given segment.[9] (Because these patterns of tone and semitone are expressed in the Renaissance by names of solmization syllables, these names have been added below exx. 1e–i.[10]) The literal meaning of *inganno* is "deception," and what is deceptive about the consequents is that *fa–la* in the last series, for instance, can appear disguised as a descending third, an ascending second, or an ascending third. The general principle is to break the guide into two sub-motives, and "splice" them together differently in the consequent.

The second sub-motive "ascends" or "descends" in the same way that hills can be said to "ascend" from the sea: the hills lie above and retain their contour.[11] This figurative translation permits us to distinguish phrase 5, with its explicit mention of "imitation of the notes in contrary motion" (i.e., imitation by inversion), from phrase 3. In addition to explaining the musical examples, this distinction eliminates the worry that Zarlino might have repeated himself in phrase 5.

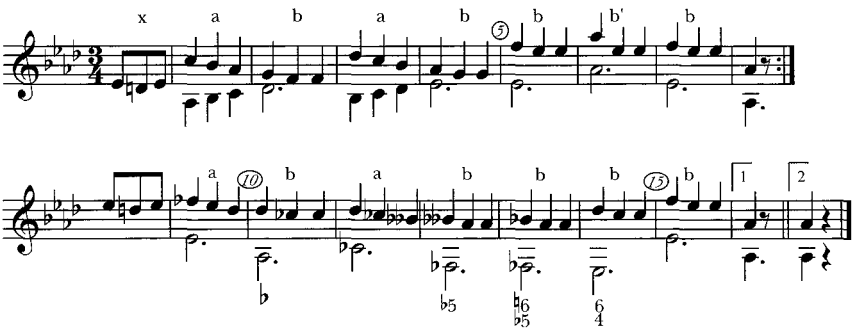
This passage has been overlooked for many reasons: the process of melodic variation is not given a name, solmization is not mentioned, and examples are not labeled. Moreover, the text is misleading, and the whole discussion is buried in a chapter about composition in three parts, far from discussion of other *fuga* types. We may speculate that Zarlino associated *inganno* with three-part writing because he knew Willaert's three-part *ricercars*, remembering them as a rich source of *inganni.*

Most recent writers treat *inganno* as a "learned" means of generating new *soggetti* either for discrete subsequent sections or for "progressive development" within a long piece.[12] However, it is more than an aid to invention. I propose that it is a melodic technique that interacts with other parameters of the music in a variety of ways. But before looking at changing transposition levels in Renaissance music, let us see how it functions in more familiar repertoire.

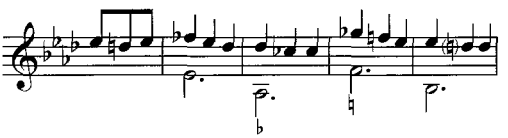
Splicing in a Schubert Waltz

"Musical variation" is one of the hundreds of universal human behaviors listed by anthropologist Donald E. Brown, along with "right-handedness as population norm," "childhood fear of strangers" and "special speech for special occasions" (1991).[13] From this vantage point, taking in all of hu-

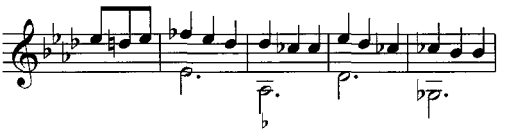
Example 2a: Reduction of Schubert, *Trauer-Walzer*, op. 9, no. 2.



Example 2b: Alternative mm. 9–12, with ascending step sequence as in mm. 1–4.



Example 2c: Alternative mm. 9–12 with circle of fifths sequence.



mankind, Willaert's Italy doesn't seem so far from Schubert's Vienna, and it will seem less far-fetched to compare melodic splicing in a waltz with that in a *ricercar.*

The entire B section of Schubert's little *Trauer-Walzer* op. 9 no. 2 (ex. 2a) is a variation of the A section: the one-measure sub-motives in the A section have been spliced together differently in the B section (sub-motive **b'** is the only exception). In example 2a, I have aligned the two sections, labeled one-measure sub-motives throughout, and sketched the bass line, with figures, under the melody.

The Melodic Effect of Splicing

The B section begins with the same upbeat figure **x**, but the initial major sixth between **x** and **a** in the A section is transformed into a minor second. This alteration is the probable origin of the sorrowful title of the waltz, introducing a "sigh" motif and moving to the parallel minor. Motive **a** is

spliced to motive **b** not by a descending step but by a unison. Motive **b** is connected to the second motive **a** by an ascending step instead of an ascending sixth. In fact, the first five transformations share a common feature: melodic compression (sixths and a seventh become seconds and seconds become unisons), all attributable to the mournful affect. To conclude the waltz, the contracted joints between motives are now opened up again: the B𝄫–A♭ semitone in m. 13 is replaced with whole tone B♭–A♭ (reversing the order of events at the joint between the A and B sections, where the F–E♭ whole tone is replaced by the semitone E♭–F♭); and fourths between the various versions of motive **b** (foreshadowed by the E♭–A♭ fourth between mm. 4–5) allow a return to the same cadence in major that concluded the A section.

Harmony and Splicing

The melodic alterations introduce chromaticism and motions to distant keys. The second pair of bars in the B section (mm. 11–12) moves to ♭VI of A♭. (Schubert notated these two bars in sharps, but I have renotated them in flats to clarify the F♭–E♭ relationship.) These measures recall the opening sequential progression, I–IV, ii–V, but altered now to a sequence of descending thirds. In the return to A♭, beginning with the climactic augmented sixth chord in m. 13, the interval expansion coincides with the return to the major, and it seems the sorrow passed quickly after all.

To understand clearly how the splices interact with the harmony, we have to look at both melodic motions and the chord factors they embody. The first note of motive **a** in the B section is the ninth of the chord, which passes down to the seventh; at this point the melody is already on the note that will make the 4–3 appoggiatura over the A♭, so a melodic unison follows. The last note of motive **b**, the C♭, is already on the root of the following chord, so it need only rise a step to achieve the 9–8 appoggiatura characterizing motive **a**. This would not have worked if the next harmony had been as it was in the A section. In examples 2b and 2c, I propose some other splices across the boundary between mm. 10–11, with different types of sequence.[14] Whether one thinks that the harmonies entail the melodic splices or vice-versa is not the point: the two domains, melody and harmony, are codependent.

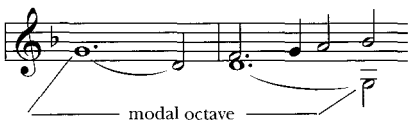
Melodic Splicing in a Willaert *Ricercar*

In his famous three-part *ricercars*, Willaert not only uses "pitch splices", but he inserts, deletes, telescopes and recombines motivic material.[15] We might be inclined to consider these as simply more aspects of Willaert's usual tiresome learnedness, with no impact on form or expression. However, in the following analysis of the first three sections of Willaert's fourth *ricercar*,

Example 3a: Solmization names in different hexachords.

Notes a fifth apart:	B♭	F	C	G	D	A	E	B
Hexachords:								
Hard			fa	ut	sol	re	la	mi
Natural		fa	ut	sol	re	la	mi	
Soft	fa	ut	sol	re	la	mi		

Example 3b: The modal fourth and fifth outlined.

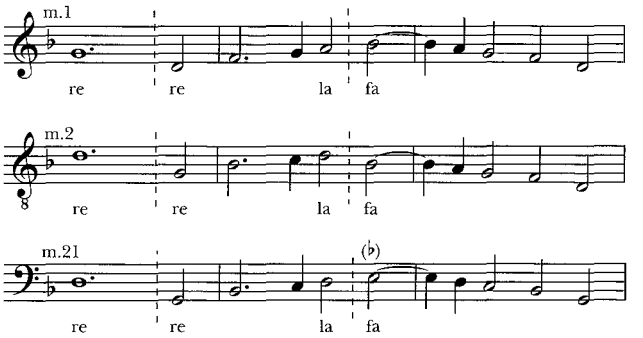


I will discuss ten techniques that depend on some type of melodic recombination, and show how they function with respect to other parameters (such as mode, phrasing, range, spacing, and successions of vertical sonorities), and how they provide expressive performance opportunities. The reader will find an annotated score in the appendix, with an explanation of analytical symbols used there, along with my rationale for dividing the piece into sections.

1) *Tonal Answer and Mode.* Any melodic fourth answered by a fifth (or vice-versa) qualifies as *inganno*, because any two notes a fifth or fourth apart can have the same solmization name in two different adjacent hexachords (see ex. 3a; in the natural diatonic system, adjacent hexachords will be the hard and the natural; in the one-flat system, the natural and the soft). In our *ricercar*, the opening pair of pitches of both subject (G–D) and consequent (D–G) can be called *re–re* (from the natural and soft hexachords, circled in ex. 3a), and the first intervals of each voice taken together outline the G–D–G octave of the G Dorian mode, which is the mode of the piece (see ex. 3b).

Inganno is an ancestor of tonal answer in fugue. The original function of tonal answer (as explained by Mattheson) was to make the modal fourth and the fifth correspond within the modal octave.[16] The significance of tonal answer is that it anchors each line in a polyphonic fabric to a moorings in the modal pitch space. In our case the moorings are the notes D and G. In example 3b, the soprano line moves from the mooring in the middle of its range, G, to that in its lower extreme, D, while the tenor moves from its upper extreme, D, to its middle, G. Regardless of range, each line shares

Example 4: Different versions of the first *soggetto.*



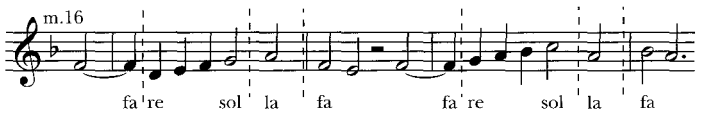
the same fixed points with the others. This alteration of imitative entries is almost never found in the music of Josquin, and seems to have developed in the 1530s; it is found often in early Willaert and in the work of Jachet of Mantua.

2) *Range and Mode.* In this *ricercar,* we hear not just two, but three different versions of the opening *soggetto* (see ex. 4). The bass in m. 21 is a kind of hybrid of the original cantus and tenor. This entry starts out like the tenor, but at the sixth note it imitates the soprano version (see dotted lines). The function of this *inganno* is to keep the bass line within the modal octave—if it had continued imitating the tenor, the bass line would have dropped to low D.[17]

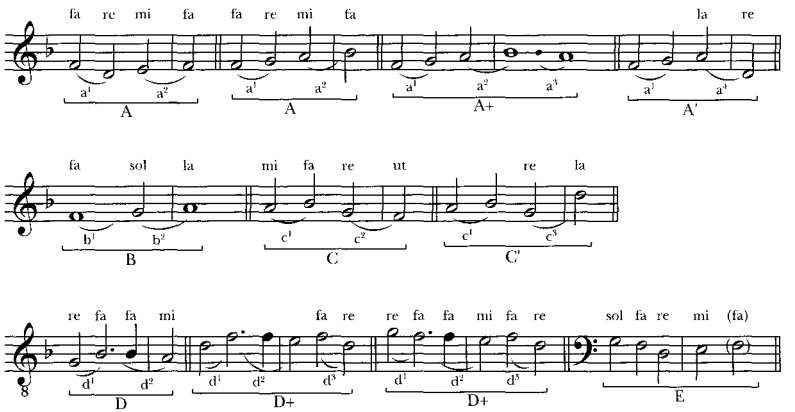
3) *A "Running Start."* In the passage cited above, Zarlino refers to *inganno* in terms of a guide and a consequent that are stated by different voices; however, we often find it used when a *soggetto* is repeated in a single line. Sometimes two melodic fragments begin identically, but the second acquires more intensity—because of the addition of new material or change in some other domain, such as register—so the first sounds like a false start.[18] In the cantus, mm. 16–20, a motive begins twice on F, but the second time the run of semi-minims (*re–mi–fa–sol*) is stated a fourth higher because of *inganno* between *fa* and *re* (see ex. 5). Thus the first statement of the motive can be taken as a preparation for the eventual ascent to high C. The two alterations at the end of this *soggetto* result in the substitution of A (*la*) for the expected D (*la*), presumably to keep the second statement from rising too high (the soprano line never rises above C in this piece). Just as interval compression and expansion in Schubert create a different affect or energy, so here does the expansion of the second version of the *soggetto.* (A longer running start can be observed in the cantus in mm. 51–56; see appendix.)

Several of the following items (nos. 4–6 and 10) involve the combina-

Example 5: A "running start."



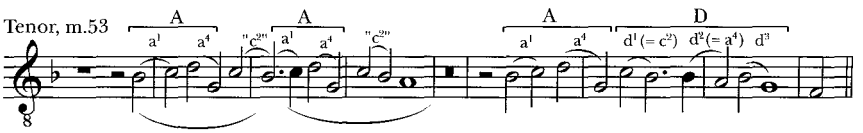
Example 6: Motives and sub-motives in the third section.



tion of two motives or sub-motives into a longer whole. This technique is used most conspicuously in the third section of our *ricercar.* This section is twenty breves long and contains five *soggetti,* each two semibreves long. Example 6 shows the *soggetti* in their various forms. For example, *soggetto* A exists in two forms, each containing two submotives ($\mathbf{a}^1$ and $\mathbf{a}^2$, shown with slurs and labeled). There are two A motives because sub-motive $\mathbf{a}^1$ can be realized as an ascending step or a descending third; they can be considered the same and given the same name because these forms of $\mathbf{a}^1$ are related by *inganno.* Two other versions of *soggetto* A exist as well, one that has an extended ending (A+), and one (A') in which submotive $\mathbf{a}^2$ is replaced by $\mathbf{a}^4$ (when $\mathbf{a}^4$ is used, only the ascending step version of $\mathbf{a}^1$ is used). The other *soggetti* have been labeled according to the same principles. *Inganno* occurs within motives **a** and **d**, and between certain pairs of motives when they are tacked together (for instance, we find **a** and **b**, **a** and **c**, and **a'** and **e** combined more than once in a variety of ways). Sub-motives that occur out of context (i.e., without their fellows) are shown in quotation marks (as when $\mathbf{c}^2$ in the tenor, mm. 54–55 occurs without $\mathbf{c}^1$).

4) *The "Time-Shifted" Ostinato.* The five notes of the tenor (shown with a slur below the staff) starting at m. 53, can be analyzed into sub-motives

Example 7: A "time-shifted" ostinato.



a[1], **a**[4], and **c**[2], which are repeated exactly, albeit in a metrically displaced fashion (ex. 7). Willaert is fond of placing such direct repetitions of a motive against developing material (direct repetition of several parts simultaneously is, of course, not allowed).[19] The purpose of this repetition is not clear until we look at the following measures. There we see that the same six notes appear again, this time with *soggetto* D tacked on to make the cadence. In retrospect, we can now see the time-shifted ostinato in mm. 53–56 as an incomplete attempt to cadence, left hanging until *soggetto* D (whose first two notes, **d**[1], are the same as **c**[2]) completes the intended action.[20]

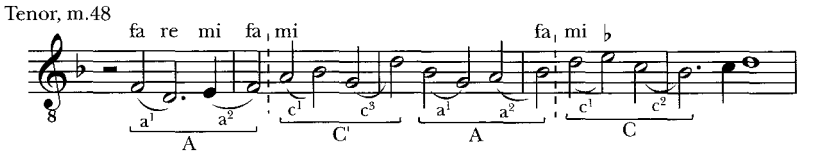
Another time-shifted ostinato may be observed at the end of section 1 (appendix, mm. 29–32), where *la–fa–sol–la–re* is sounded twice at the same pitch level in the bass; the final G (*re*) is implicit. Because the long notes are shifted from the offbeats to metrically stable beats, its purpose might be to slow the momentum and to stabilize the rhythmic surface, preparing the final cadence of the section.

5) *"Climax" or Melodic Sequence.* Joachim Burmeister calls the repetition of a melodic idea at different pitch levels (both ascending and descending) by the rhetorical term "climax" (1993:81). The tenor in mm. 48–52 consists of two statements of *soggetto* A and *soggetto* C tacked together (see ex. 8). The first time motives A and C were tacked together in the bass at m. 44, *fa–mi* was realized as the descending third F–D. Now the connection is up a major third both times (F–A and B♭–D, marked with dotted lines), an instance of *inganno* at joints between *soggetti.* These skips, along with the transposition of both *soggetti* up a fourth and the use of motive C' (containing the ascending skip of a fifth) instead of C, contributes to the overall ascent of the line from low D to high E♭. The repetition is reinforced by the accompaniment of motive A in the tenor with motive C in the bass, and motives C' and C in the tenor with motive A in the soprano (see appendix, mm. 48–51).

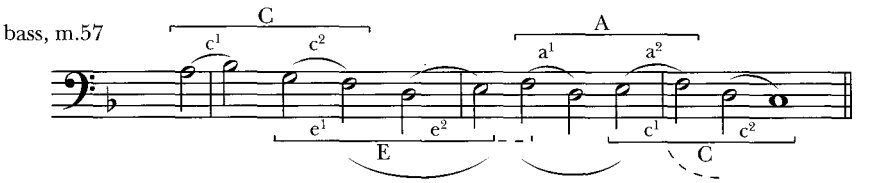
Another climax may be observed in the soprano in the opening duo (see appendix, mm. 12–15). Here entire cadential blocks are transposed up a fifth, making a harmonic move as well as a melodic one, and recalling the **b** motives that return to the tonic in the Schubert waltz.

6) *The "Telescope."* Some sub-motives are intervallically identical from

Example 8: A "climax."



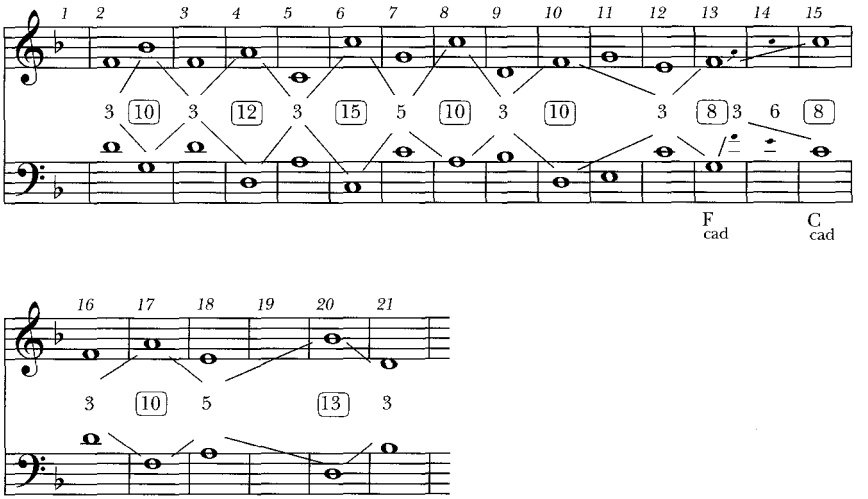
Example 9: A "telescope."



one *soggetto* to another. Willaert exploits this by eliding two *soggetti* on their shared pair of notes. In the bass at m. 48, for instance, **a²** (A–B♭) "becomes" **c¹**. The puns made on the sub-motives culminate in a thrillingly incomprehensible telescoping of four *soggetti* in the bass, as shown in example 9. Individual motives threaten to lose their individual identity and a new shape emerges: the time-shifted ostinato *fa–re–mi*! (The ostinato is shown by large slurs beneath the staff.) Here is a blurring of boundaries that is almost Romantic in its excess.

7) *Registral Expansion in Pitch Space.* The long opening duo contains regular waves of continuous contrary motion, creating an accordion-like effect of widening and narrowing space between the parts. This results from changes in interval of imitation coupled with changes in melodic direction. In the appendix, the intervals of the registral extremes have been indicated beneath the tenor line (wide intervals are circled, narrow ones are not). The progression from one extreme to the other is almost always continuous: "blips" in which a brief change of direction occurs are shown with parenthesized vertical intervals (always 5–6).[21] In example 10, the widest and narrowest points have been extracted, revealing a surprisingly regular rhythm of expansion and contraction. The widest intervals occur in mm. 2, 4, 6, 8, and 10; four out of the five occur on the fourth minim beat. This kind of regular "breathing" breaks off for the cadential blocks, then recurs at a slower pace after the guide becomes the lower voice at the end of m. 16. This regularity sets the duo apart from the more

Example 10: Contrary motion in the opening duo.

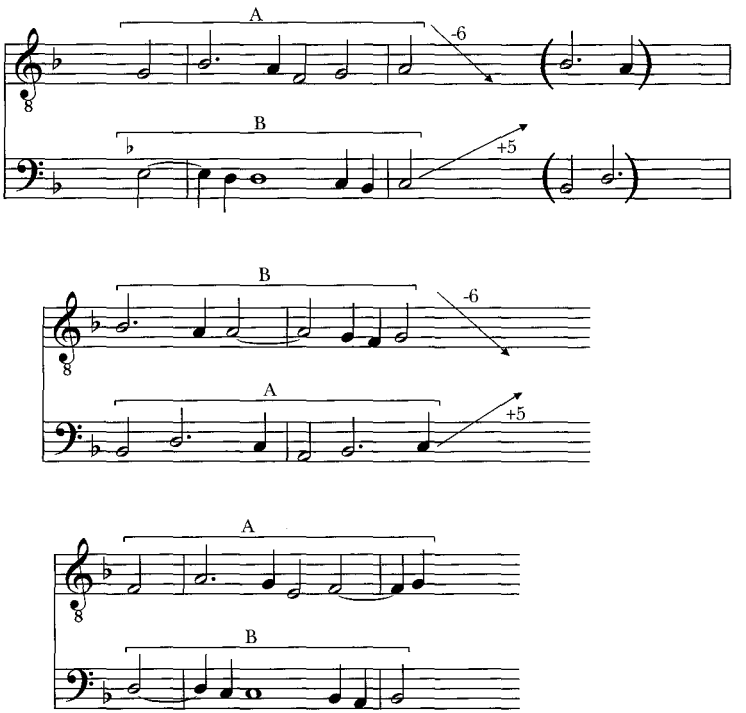


complex music to follow.

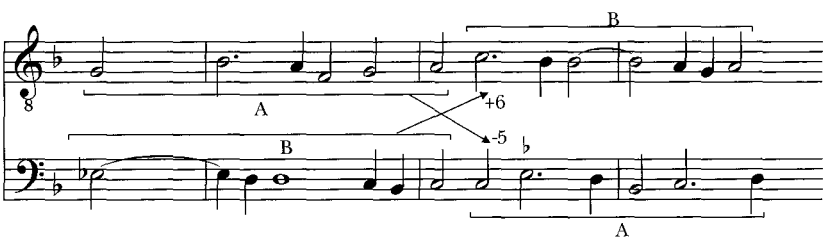
8) *Varied Repetition of Blocks.* In section 3, a duo between the lower voices initially seems a counterpart to the opening duo between the upper voices. However, it is constructed according to entirely different principles. Unlike the opening duo, which is constantly developing new material, each voice here repeats two melodic fragments in alternation (A and B in brackets in ex. 11a). The two fragments make a combination that is immediately inverted at the tenth, and then again at the tenth (vertical intervals have been labeled in ex. 11a—the rhythmic alteration in the second A phrase avoids parallel fifths that would result from parallel sixths in the original). Each motive is transposed down a sixth and up a fifth. Once Willaert has sounded the first combination, he could splice B to A in ten different ways (any pair of intervals summing to eleven).

One alternative splice (similar to those proposed for the Schubert waltz) is shown in example 11b, where the top voice moves down a fifth and the lower up a sixth. How is Willaert's choice superior to ours? For one thing, moving the lower voice up a fifth allows him to tie the last note of A to the first note of B, creating more rhythmic variety and the illusion of seamlessness across the block boundary. This rhythmic elision is one reason we barely notice that we are hearing the same combination of melodies three times. Also, since A down a seventh falls roughly into the same range as the original B and vice versa, Willaert has chosen those transposi-

Example 11a: A block inverted at the tenth and reinverted.



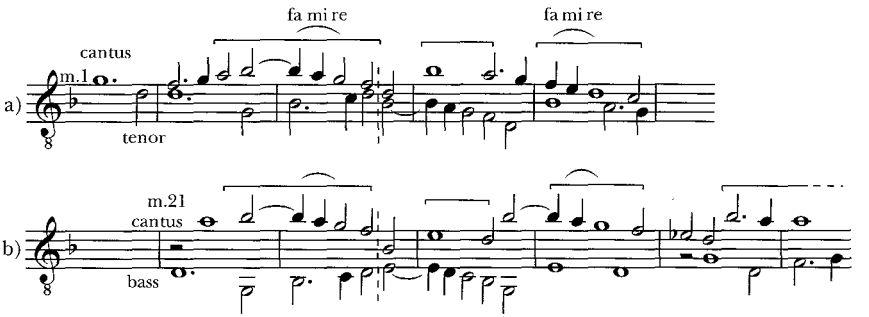
Example 11b: An alternative splice between blocks.



tions that least disturb the mysterious growling of the duo—each line in this section ends up covering a range of only a diminished fifth![22]

9) *The Effect of Inganno on the Countermelody.* As we saw in example 4, the bass entry of the principal *soggetto* at m. 21 is a hybrid of the tenor and soprano (it begins like the tenor but continues like the soprano beginning at the fourth beat of m. 22). Yet against both, Willaert uses the same countermelody in the cantus, altering it to accommodate the new transpo-

Example 12: *Inganno* and the countermelody.



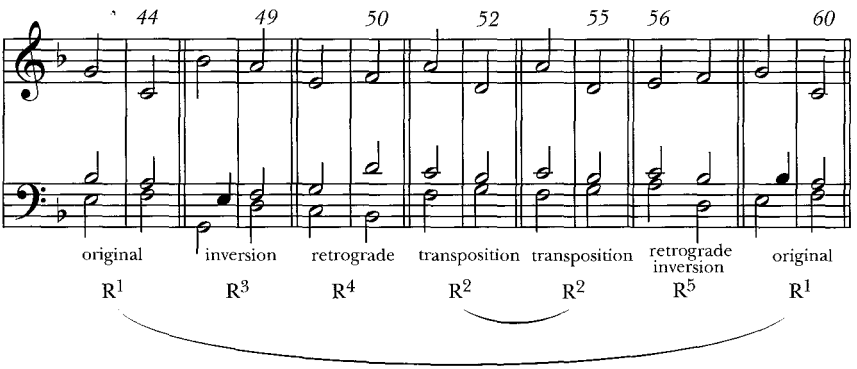
sition level. These alterations create a surprising melodic effect, as I will show.

The two versions have been aligned in example 12, where brackets enclose fragments of the cantus countermelody that make the same interval progression against the bass. The registral placement of the three fragments is revealing. The material under the first bracket is the same except that there is an extra octave between the parts because the bass is an octave lower than the corresponding tenor; in the second fragment, the bass is only a fifth below where the tenor was, and the cantus, instead of also going up a fourth, drops a fifth, so the vertical distance is the same as in the original; in the third fragment, the extra octave is restored.

Placing the cantus E♭–D an octave lower not only keeps the cantus in a reasonable range, it varies the overall cantus melody wonderfully. Instead of hearing a descent from high B♭ twice in a row (ex. 12a), it is as if Willaert had inserted the relatively low E♭–D into the line (ex. 12b) before recapturing the high B♭ for another descent at the end of m. 24, so that the second high B♭ sounds delayed. The sleight-of-hand is possible because the opening line contains a repetition of *fa–mi–re* (shown under slurs). In the original (ex. 12a), it occurs in two different pitch locations, but in the new version, because it has to accommodate the *inganno* of the principal *soggetto*, it occurs in the same place.[23] To drive the point home, Willaert sounds B♭–A again over the beginning of the next entrance of the *soggetto* in the bass (mm. 25–26).

10) *A Harmonic Signpost.* The third section contains a recurring a three-voice contrapuntal combination. It is two minims long and consists of two voices moving stepwise from a fifth to a third while the third voice skips a fifth down. (The combination has been marked at each occurrence in the appendix as double brackets labeled R^{1-5}.) The combination seems unre-

Example 13: Harmonic signposts.



markable at first, even "generic," but its transformations and deployment are suggestive. The combinations have been extracted in example 13. The prime forms (R^1) frame the outer limits of an arch, and the transpositions (R^2) the center. The center stands out prominently against the beginning and the end because of its tonal emphasis on *re–la* fifths (A–D skip and vertical G–D) as opposed to the *ut–sol* fifths in mm. 43 and 59 (G–C skip and vertical F–C).

In the spaces between the outer limits and the middle we find other forms of the same combination loosely distributed, sometimes with voices shuffled (R^{3-5}). These forms are related to the original by the standard operations of inversion, retrograde, and retrograde inversion.[24] The different forms of the contrapuntal signpost emerge smoothly from the normal series of motives because of puns on many two-note sub-motives: $\mathbf{a}^4$ is both a transposition of **x** and the inversion of $\mathbf{c}^3$; $\mathbf{a}^3$ and $\mathbf{d}^2$ are the same; and $\mathbf{c}^2$ and $\mathbf{d}^1$ are the same.

Conclusion

Three important general conclusions can be drawn from the foregoing discussion. One is that the different sections of the piece are distinguished not only by their *soggetti*, texture and cadences, but by the way the *soggetti* are deployed, by compositional techniques unique to each section. The first section, the long duo, is based on imitation that is constantly developing, not on a recurring *soggetto*. This section is divided into two sub-sections separated by repeating cadential blocks, and each sub-section is characterized by a consistent widening and narrowing of the space between the parts. The second section introduces its own new, relatively long *soggetto* in a three-part texture. This *soggetto* repeats regularly in a murky duo in which the parts exchange material at regular time intervals, keeping within

a narrow range. The third section rotates five short *soggetti* and their submotives through many complex combinations, climaxing in the telescoping of six submotives.

Another important conclusion is that it is precisely the featureless, "generic" nature of Willaert's material that makes his motivic variation and recombination possible. The uniform melodic surface hides little fragments that are grouped into larger ideas (e.g. the *fa–mi–re* motive in ex. 12). Once we have accepted that the lowest common denominator in this music is a mere two minims long, we can see how Willaert assembles them into motives, and then how he makes puns on the sub-motives they contain. Just as Schubert tacked together one-measure motives with new harmonies, Willaert is constantly varying the combinations of his short motives.

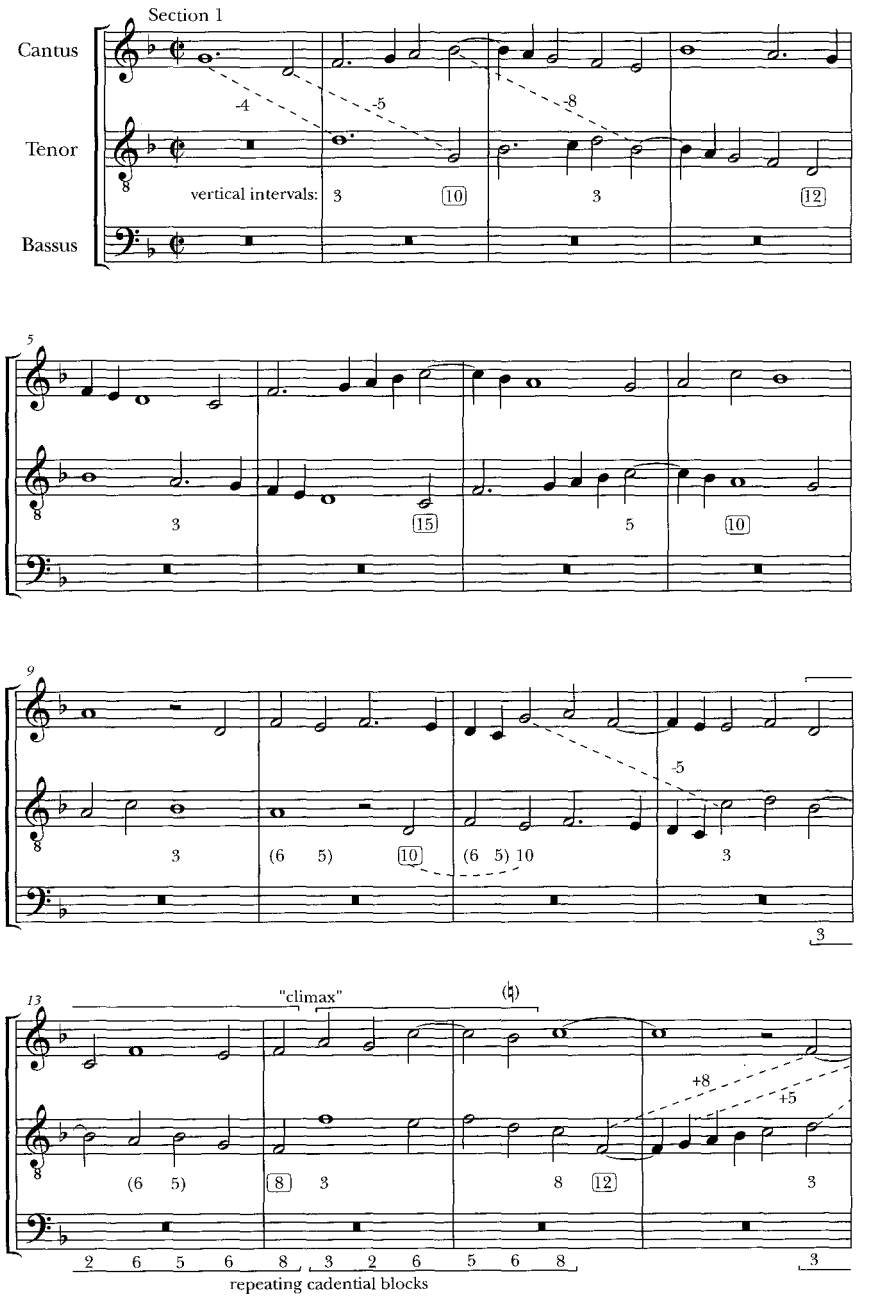
Finally, we must face the problem of how to realize the implications of such small-scale ideas in performance. Just as the modulating middle section of the Schubert waltz offers opportunities for contrasting dynamics, color, rubato, and articulation, so do Willaert's various gestures. It is the performer's task to find ways to reveal groups that have syntactic meaning. For instance, in the second section, to reveal the inverted blocks, one might allow a little lift between the end of motive B and the beginning of motive A, along with some kind of accent on the first note of A. Similarly, glancing at the third section of this piece, we see an apparently undifferentiated march of minims. To reveal the climax in the tenor (ex. 8), the performer should make audible the two large upward swoops (rather than choosing, for instance, to group the last three notes of C' with the first two of A because they spell a G minor triad). In general, crescendo opportunities are offered by climax, by the "running start," by "telescoping," and by registral expansion;[25] diminuendo opportunities are found at the ends of meaningful motives, at cadences, and in the broadening of the "time-shifted" ostinato.

Willaert was one of the pioneers of the splicing techniques described here. They are not often found in the music of the Josquin era, but they permeate the works of later masters such as Palestrina and Lassus. However, it was not only these technical innovations that earned Willaert Zarlino's admiration; it was also the expressivess and variety of his compositions. Our appreciation of his music will be enhanced by understanding his brilliant technique and interpreting the expressive intentions behind it.

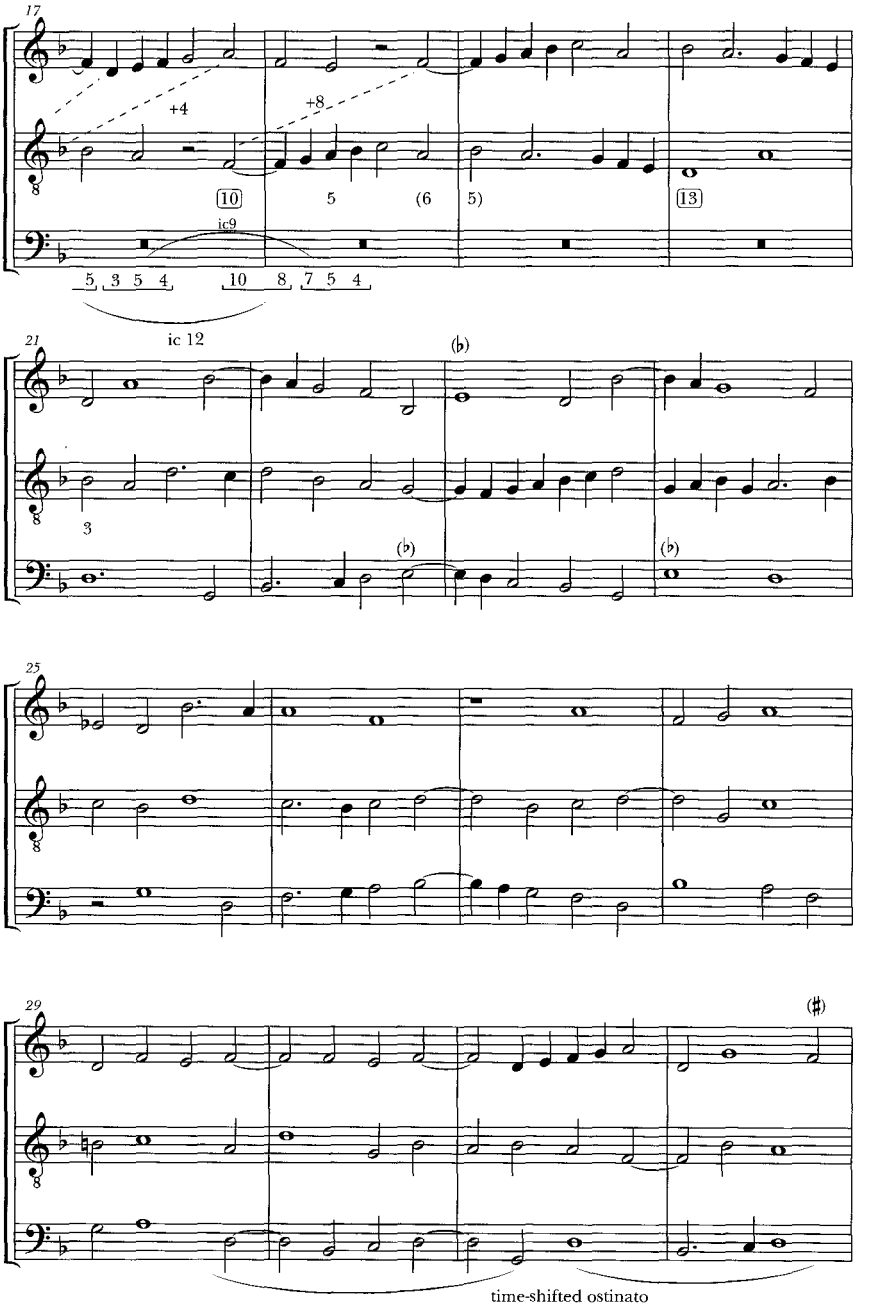
Notes to Appendix

The *ricercar* is divided into sections based on the traditional notions of

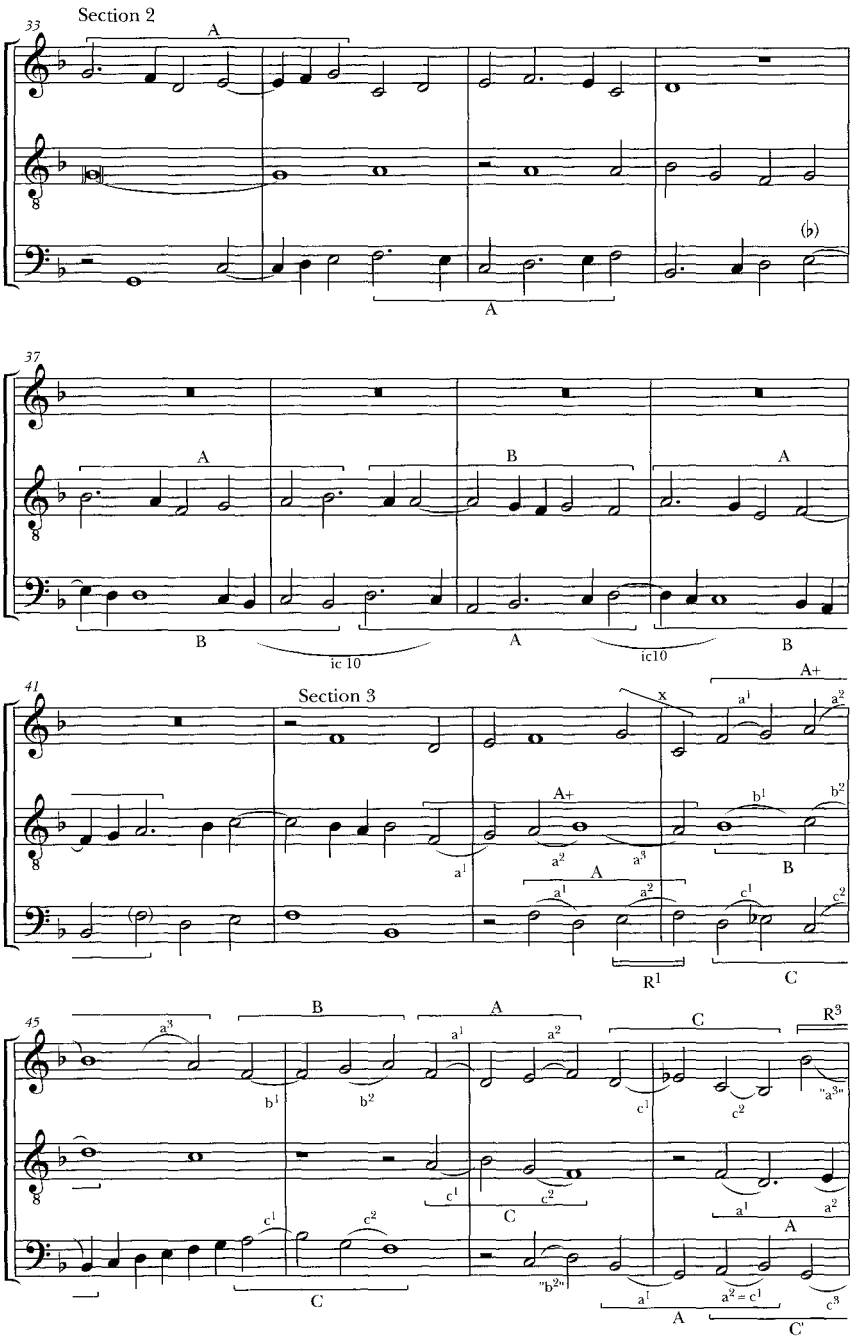
Appendix: Adriano Willaert, *Recercar Quarto,* mm. 1–16. See pp. 110-11 for full explanation of notation.



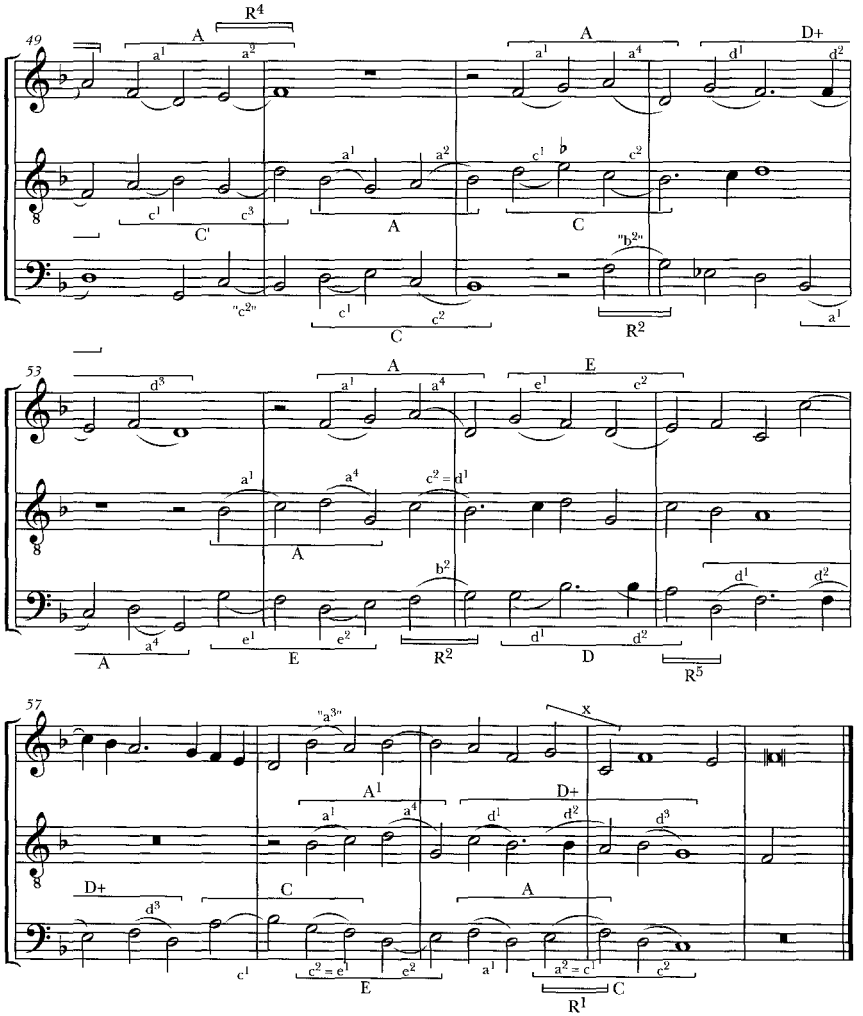
Appendix cont., mm. 17–32.



Appendix cont., mm. 33–48.



Appendix cont., mm. 49–61.



characteristic *soggetto* and cadence. The first section (mm. 1–32) is dominated by the same *soggettto* and ends with the first three-voice cadence (a cadence in m. 24 is evaded). The second section is characterized by a new *soggetto* (labeled A; labeling of *soggetti* begins anew in each new section), and ends with a cadence to B♭ in m. 42. Section 3 begins with a new *soggetto*

A in the cantus (because this statement is time-shifted it is not the "normal" form of the tune and is not labeled); it ends with a three-voice cadence to F in m. 61.

As in my article "A Lesson from Lassus," imitations are indicated with dotted lines connecting the first notes of the guide and consequent. When the pitch interval of imitation changes, a new dotted line appears with the new pitch interval of imitation (e.g., "-5" means imitation at the fifth below). Repeating blocks are indicated with brackets beneath the score and vertical intervals. Invertible counterpoint is labeled "ic" with the interval of inversion (e.g., "ic10" means counterpoint inverted at the tenth).

Notes

1. Robert Judd notes the popularity of the music in its day, based on the number of editions, and cites some unfavorable judgments from musicologists. See the introduction to Judd ([1551] 1994:xiii).

2. See *New Grove Dictionary of Music*, 2nd ed., s.v. "Willaert" (by Michele Fromson).

3. Another important scholar who has focused on tiny melodic bits is Benito V. Rivera. In a paper on Willaert's "Quando fra le altre donne" given at the conference "Ingenious Repetition: Form and Expression in Renaissance Polyphony" (McGill University, February 12–13, 2000), Rivera concluded: "I direct my interest to imitatively recurring fragmentary, quasi-molecular, figures that are used to highlight a particular word or group of syllables in a text. It is almost loosely analogous to pointilism, and I suggest that this is where listeners may find Willaert's music very appealing indeed."

4. See Artusi ([1603] 1968:45–57). I have also cited examples from Rodio and Angleria; see Schubert (1995: n.14).

5. "Fuga est idemtitas partium cantus quo ad valorem, nomen, formam: et interdum quo ad locum notarum et pausarum suarum."

6. Only example numbers, solmization syllables, and dotted lines have been added.

7. The series consisting of examples 1a–d illustrates a confusing mixture of melodic inversions and *inganno*.

8. Zarlino's contrast of *inganno* with *fuga legata* suggests that *legata* means not only that the consequent is determined by the guide for the entire duration of the piece, but that mixing different types of *fuga* (e.g., changing transposition level, inserting inversion) is not allowed.

9. Some composers have used *inganno* more freely, often disregarding accidentals. See, for example, Haar (1975) Harper (1978–79). But throughout this study I will maintain the strict meaning.

10. An alternative term for *inganno* is *fuga in nome*.

11. The figurative meaning of these words is also found in many sixteenth-century Italian treatises where the authentic modes are said to "ascend" above their finals, while the plagals "descend." See for instance Lanfranco ([1533] 1970:105,107 [N.B. 107 is misnumbered as 117.]) However, it must be mentioned that some authors believed melodic descent to be characteristic of the plagal modes,

and ascent of the authentic ones; see Schubert (1991).

12. See Jackson (1968) and (1971); Haar (1975); Harper (1978–79); Ladewig (1987); Newcomb (1991:x–xvii); Sartorelli (1992); and Trantham (1993–94).

13. The list is reprinted in Pinker (2002:435).

14. The reader is invited to improvise the return to A♭ from the resulting locations.

15. The fourth *ricercar* is transcribed in Judd ([1551] 1994:43–54). This *ricercar* was originally published two years earlier by Giovanni Tiburtino in *Fantesie, et recerchari a tre voci* (1549).

16. See Mattheson ([1739] 1981, III:714), where he calls tonal answer "conciliatio modorum."

17. The concept of modally-determined ranges is expressed in Zarlino's doctrine of "collateral" modes. See Zarlino ([1558] 1965, IV:31). Zarlino's placing of clefs in example 1 suggests that he thought of *inganno* as a way of adapting a melody to fit in a different range or voice part.

18. This use of repetition is a bit like one of Burmeister's meanings of the word *pallilogia.* Benito Rivera cites some examples of *pallilogia* from sixteenth-century rhetorician Melanchthon in connection with Burmeister's use of the term. These examples contain repeated words at the end of a phrase, at the beginning, and between two phrases. Rivera shows that Burmeister changed his mind about what the term meant, and the musical examples of his latest thinking show direct repetition of a complete idea. In the examples that resemble a "running start," an incomplete phrase taken up again and intensified or completed, as in Melanchthon's examples "the Gaul, the Gaul whose love . . ." or "it cannot, it cannot, I say . . ." See Burmeister (1993:xvii–xx,179).

19. See my discussion of restrictions on direct repetition (2002:511).

20. I have labeled sub-motive C–B♭ as $\mathbf{c}^2$ in example 7 because that is how it was most recently heard (mm. 51–52). Thus the sub-motive gradually changes function. What we call these orphans is of course open to interpretation.

21. "Blips" consisting of dissonance, like 4–3 suspensions, have not been noted.

22. The last note of *soggetto* B in m. 41 is altered (F replaces A) to better prepare the cadence to B♭ and to foreshadow the *soggetto* of the third section. Another imitative passage in which a motive repeats, varied by *inganno* and creating invertible counterpoint, has been labeled in the score—see mm. 16–18 in the appendix.

23. Another example of repeating blocks, varied by *inganno* and combined with climax, has been labeled in the score—see mm. 12–15 in the appendix.

24. Because these operations on combinations are not widely practiced, an explanation is in order. We can describe the inversion, for instance, in two ways (accidentals may be disregarded). 1) Write the original on a single staff, hold the page up to the light, turn it over top to bottom, and look through the paper—what shows is the inversion of the contrapuntal combination; 2) write the lowest line of the original (E–F) on top, and invert it melodically (B♭–A); the second voice, a fifth above the lowest in the original, should be written a fifth below the highest and be melodically inverted (E–F); the third voice, a sixth above the middle voice, should be a sixth below the new middle voice and be melodically inverted (G–D). I am grateful to Jon Wild, Christoph Neidhöfer, and Anton Vishio for their

comments.

25. One need only read the diagonal lines in example 10 as crescendos and diminuendos. Richard Taruskin, directing his Renaissance chorus Capella Nova, often asked for climaxes towards low extremes of register in the bass part.

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