

From Two-Part Framework to Movable Module*

Julie E. Cumming

In his foundational article of 1962, “Discant, Counterpoint, and Harmony,” Richard Crocker discusses the “two-part framework” in the Middle Ages and Renaissance.¹ Taking this as my point of departure I provide musical examples from across the fifteenth century for Crocker’s general observations about compositional procedure. The examples corroborate and clarify Crocker’s ideas about continuity and change, and link them to the work of later scholars (especially Jessie Ann Owens and Peter Schubert). More specifically I show the enduring use of the basic two-part framework as a compositional procedure through the whole fifteenth century, but also how it is modified and adapted to newer styles that use varied textures and imitative polyphony.

In the process I provide new insight into compositional process, moving beyond the old opposition between “successive” and “simultaneous” composition.² By identifying the location of the two-part framework in many different examples I demonstrate which voices in any passage were conceived first, and show how the framework served to articulate musical structures. I show how composed polyphony used improvisable contrapuntal formulas and help to explain how musicians composed without scores. I also show that imitative polyphony at the end of the century continued to depend on the two-part framework.

*My work on this article draws on my pleasant memories of working with Richard Crocker at Berkeley—and of writing a paper on fauxbourdon for a graduate seminar on oral transmission that he taught with Bonnie Wade. It is also indebted to the work of my colleague Peter Schubert at McGill, whose ideas and influence are found in almost every paragraph (which is not to say that he agrees with everything I say here). I would also like to thank my research assistants: Jacob Sagrans, for copying the musical examples, as well as Daniel Donnelly and Remi Chiu. The research was supported by the Social Sciences and Humanities Research Council of Canada.

1. Crocker, “Discant, Counterpoint, and Harmony.” Subsequent references to page numbers in this article will be shown as parenthetical references in the text. In the article Crocker opposes two approaches to medieval music: “linear counterpoint” and “triadic harmony” (see 1, 2, 8–9, 11–12, 14, 16).

2. See Blackburn, “On Compositional Process in the Fifteenth Century” and n. 70 below.

Let us begin by reviewing what Crocker says about the “two-part framework” in the sections of his article devoted to discant and counterpoint. Crocker defines “discant” as “a system of teaching two-part composition, in use from the 13th to the 16th centuries. Discant, so defined, shows how to combine one (and only one) note with each note of a given melodic progression” (2–3). He describes the four basic rules of voice-leading found in discant treatises of the Middle Ages and Renaissance:

- Contrary motion (9)
- Begin with a concord and end with a perfect concord (9–10)
- Similar and (later) parallel motion are permissible “propter pulchritudinem” (10)
- Discords should be mixed with concords at the proper places (10)

He points out that “during the fourteenth century the name ‘discant’ was gradually changed to ‘counterpoint’” (10).³ As he explains, the “medieval sense of function resides, as we saw, in the progression of concords, especially in the progression sixth-to-octave,” and he provides an example of cadential progressions where the sixth-to-octave progression is enriched by a contratenor voice (13–14). Crocker dubs the basic discant structure the “two-part framework” (12), and I shall use that term, although other scholars have used a variety of other terms to describe the same phenomenon.⁴

While stressing the basic continuity of these rules from 1200 to 1600, Crocker also looks at change over the period, and how the rules function in a musical context:

- Third (and fourth) voices enrich the two-part sonorities (12–15).⁵
- Movement of the lower voice of the two-part framework from the bottom of the texture in the fourteenth century (13, 14), to a middle voice in the fifteenth: “in the early Renaissance this framework is masked by other voices, above and below; the lowest part is no longer the foundation” (15). He explains, in this context, “the curious matter of the Renaissance bass” (13), which was calculated down from the tenor.
- Development of “stereotyped formulas for masking discant. These solutions... involved a good deal of parallel motion and sequence.” He lists the formulas described by Guilielmus Monachus (ca. 1480), and stresses especially what he calls a “formula of real importance for the future” (15): parallel sixths between the upper

3. On the relationship between discant and counterpoint, see Sachs, *Der Contrapunctus im 14. und 15. Jahrhundert* and Sarah Fuller, “Organum—discantus—contrapunctus in the Middle Ages.”

4. Kevin Moll has provided a detailed history of the controversies and use of terminology among German musicologists on this topic in his “Toward a Comprehensive View of Compositional Priorities in the Music of Du Fay and his Contemporaries,” his Editor’s Introduction to *Counterpoint and Compositional Process in the Time of Du Fay*, 3–64. Moll also includes a useful glossary indicating the various German terms equivalent to two-part framework in the “Glossary and Concordance of Specialized Terms,” 363–68. Margaret Bent calls the two-part framework “the dyadic grammar of counterpoint” in “The Grammar of Early Music: Preconditions for Analysis,” 25. Other common terms for the two-part framework are “discant-tenor framework” or “cantus-tenor framework.”

5. Crocker explains that “the third voice is added not as a third melody, but as an enrichment of those [two-part] chords. He says that “the third voice will proceed through the proper concords in contrary motion with one of the other two” in the 13th and 14th centuries (12–13).

voices and a bass that begins and ends each phrase on a unison or octave with the tenor, and then alternates fifths and thirds below the tenor. Peter Schubert has dubbed this the “parallel-sixth model.”⁶

- Increasing use of parallel imperfect intervals, beginning in the fourteenth century (11, 15), but greatly increased by the time of Tinctoris, when “no longer does a composer resolve thirds and sixths, but leads them in unending chains of suspended functions” (16).⁷

The two-part framework, therefore, provides us with a way to think about compositional process between 1200 and 1600. Composers normally began by constructing a two-part framework, which can be conceived of as a series of two-note sonorities. One of the parts may be pre-existent, or one of them may be written before the other; it will be composed (or organized), nevertheless, in relation to the other part, with correct vertical intervals and cadential progressions in mind. This two-part framework is the heart of the piece. Other voices can be added to that framework. As Margaret Bent points out, this compositional order may be more a matter of “conceptual priority” than of “temporal priority” as a skilled composer worked.⁸

Crocker’s description of late medieval and Renaissance music is primarily based on theoretical sources. It still rings true almost fifty years later, and his formulation has been generally accepted.⁹ The major breakthroughs in the study of late medieval and Renaissance music serve to confirm his findings, not weaken them. Among these are Jessie Ann Owens’s description of how composers worked without scores in the Renaissance;¹⁰ the now widespread understanding that “counterpoint” as used in most treatises referred to improvised polyphony;¹¹ Anna Maria Busse Berger’s work on the role of memory;¹² and Peter Schubert’s work on modular analysis of imitative texture.¹³

6. Schubert, *Modal Counterpoint*, 189–94, 243–46. Crocker shows this in an example (15) but does not explain it; for Guilielmus see Book VI, in Guilielmus Monachus, *De preceptis artis musicae*, ed. Seay, 41, and Park, “‘De preceptis artis musicae’ of Guilielmus Monachus,” sentences 53–58 (Latin: 69; English: 188). See also Sachs, *Der Contrapunctus*, 137–38.

7. Crocker also discusses Tinctoris’s emphasis on variety (16). For a very useful recent discussion, see Luko, “Tinctoris on *Varietas*.”

8. Bent, “Naming of Parts: Notes on the Contratenor,” 2.

9. In addition to the works by Bent and Moll already mentioned (and other works of theirs to be cited below), see Leach, “Counterpoint and Analysis in Fourteenth-Century Song,” and Rivera, “Harmonic Theory in Musical Treatises of the Late Fifteenth and Early Sixteenth Centuries” (though he argues for a triadic basis starting ca. 1500).

10. Owens, *Composers at Work*.

11. See Wegman, “From Maker to Composer: Improvisation and Musical Authorship,” esp. 413–28; Sachs, “Arten improvisierter Mehrstimmigkeit”; Jans, “Alle gegen eine”; and Schubert, “Counterpoint Pedagogy in the Renaissance,” 503, n. 1.

12. Busse Berger, *Medieval Music and the Art of Memory*. On counterpoint, improvisation, and memory, see 111–58 and 198–210.

13. Schubert, “Hidden Forms in Palestrina’s *First Book of Four-Voice Motets*” (a corrected version of the appendix to this article is found on <<http://www.music.mcgill.ca/~schubert>>); and “Musical Commonplaces in the Renaissance.” Schubert’s approach to “modular analysis” is based on the idea of a repeated two-part module, and inspires my approach in this article.

What Crocker did *not* do in “Discant, Counterpoint, and Harmony,” however, was to discuss examples from surviving compositions in relation to his outline of continuity and change.¹⁴ I will therefore explore the role of the two-part framework in selected pieces from the beginning to the end of the fifteenth century. I will consider the following questions.

- Which voices participate in the two-part framework?
- Is Crocker right about a move from predominantly contrary motion to predominantly parallel motion?
- Does the two-part framework stay in the same voices throughout the piece?
- If it moves over the course of the piece, how can we tell which voices participate?
- Can we connect the two-part framework with imitative texture?
- What can our study of the two-part framework tell us about compositional process?

My focus will be on the basic practice of composition. I will concentrate on freely composed motets and chansons, and works with paraphrased *cantus firmi*. I have chosen not to deal with early fifteenth-century motet textures (with two upper parts over a tenor or tenor and contratenor) or pieces with long-note *cantus firmus*.¹⁵

I. Two-Part Framework in the Superius and Tenor

The default voices for the two-part framework are the superius and tenor for the whole composition.¹⁶ We can divide the evidence for the location of the two-part framework into two types: external and internal. **External evidence** derives from the presentation of a composition in multiple sources: if the superius and tenor appear in every source, with multiple possibilities for the third (and/or fourth) contratenor voice(s), then we can say the superius and tenor constitute the framework voices. **Internal evidence** consists of musical features of the superius-tenor pair that locate the two-part framework in those voices:

14. Crocker did discuss pieces in his textbook, *A History of Musical Style*. See especially 140 and 153 on thirds and sixths; 154–59 on the “almost unrecognizable” use of the two-part framework after 1450 in the masses of Du Fay and Ockeghem; 183 and 191 on music after Josquin; 223–24, 286, for an overview, and the transition to triadic harmony.

15. Motet-style textures (with two upper parts in the same range over slower tenor and contratenor) disappear around the middle of the 15th century. Margaret Bent provides a useful catalogue of the rich variety of textures and contrapuntal relationships around 1400 in two articles: “Some Factors in the Control of Consonance and Sonority”; and “Naming of Parts.” Kevin Moll also describes a range of 13th- and 14th-century textures in “Paradigms of Four-Voice Composition in the Machaut Era.” For a study of late 15th-century composition with *cantus firmus*, see my article, “Composing Imitative Counterpoint around a *Cantus firmus*.”

16. I have chosen to use the term “superius” for the upper voice rather than “cantus” or “discantus,” for the sake of consistency, even though the term does not come into use until the late 15th century. For most of the 15th century the upper voice is not labeled in the sources. For three-voice pieces in this essay I use the terms superius, tenor, and contratenor (abbreviated S, T, Ct); for four-voice pieces I use superius, tenor, altus, and bassus (abbreviated S, T, A, B; altus and bassus are often referred to in the sources as contratenor altus and contratenor bassus, or some combination or variant of these forms).

- Lack of fourths between superius and tenor (since the two-part framework must be contrapuntally complete)¹⁷
- Cadences between superius and tenor
- Parallel imperfect intervals between superius and tenor
- Imitation between superius and tenor

I will discuss these types of evidence in a hymn setting and some fifteenth-century chansons in which compositional procedures are especially clear.

Example 8.1, Du Fay's *Ave maris stella*, is a hymn setting consisting of a chant paraphrase in the superius voice, a tenor voice, and a third unwritten voice.¹⁸ Some hymns, including this one, also include an additional composed contratenor that can substitute for the unwritten voice. These two alternatives for the third voice, therefore, provide external evidence for the location of the two-part framework in the superius and tenor, which are present in all versions of the piece.

Internal evidence is provided by the counterpoint between the superius and tenor: use of parallel sixths, cadences, and lack of fourths. The compositional structure of the hymn derives from an improvisatory technique for three voices known on the Continent as *fauxbourdon*.¹⁹ In this improvisatory technique the chant is placed in the top voice. The tenor sings parallel sixths below the superius, with octaves at the beginning and end of each phrase. The *fauxbourdon* voice sings parallel fourths below the superius.

Du Fay's hymn is based on this principle, but he adds compositional artifice. His paraphrase of the chant melody (chant notes have an x above them in example 8.1) has plenty of rhythmic variety: notice how almost every measure of the superius has a different rhythm. Because this voice is based on the chant, it had to come first.

The tenor voice was then composed (we may assume) so that the "*fauxbourdon*" option (with a third voice doubling the superius a fourth below) would work. This means that the tenor can use only sixths and octaves below the superius. Much of the time the superius and tenor are in parallel sixths (see intervals marked under the tenor in example 8.1), but Du Fay chose to insert octaves frequently in the middle of the phrase, which also provide the tenor with some rhythmic independence from the superius (see mm. 2, 4, 6, and 7), as well as some contrary motion between the parts, as in traditional discant structures.

Another kind of internal evidence for the two-part framework is provided by the use of the sixth-to-octave cadential progression at the ends of phrases in the superius and tenor. As Crocker explains, cadences in the late Middle Ages and Renaissance are normally defined by the progression from sixth to octave in contrary motion, resulting

17. See Bent, "Some Factors," and Cumming, *The Motet in the Age of Du Fay*, 32.

18. Transcribed from Modena, Biblioteca estense, MS a.X.1.11, fols. 4v–5r. Complete modern edition in Du Fay, *Opera omnia*, vol. 5, ed. Bessler, 56. For consistency I have chosen to present all the examples in this essay in note values that are half of those in the original notation.

19. On *fauxbourdon*, see Trowell, "Faburden and Fauxbourdon."

Du Fay also provides an alternate contratenor “sine fauxbourdon”; some of the time this voice is the same as the fauxbourdon voice, as in measures 1–2, but it can also go below the tenor. This contratenor is much more angular than the fauxbourdon voice and often moves in contrary motion with the other voices. The two different third voices provide very different kinds of “enrichment” or harmonization of the two-note vertical sonorities. Notice, for example, how in measure 3 the sixth in the tenor and superius is enriched by an F# above the tenor in the fauxbourdon voice, but a G below the tenor in the contratenor “sine fauxbourdon.”

Here the superius and tenor are clearly the framework voices; together they constitute the constant elements of the hymn setting. The superius paraphrases the chant, and the paraphrase has to include the appropriate figuration for cadences with the tenor. Meanwhile the tenor pitches are limited to the possibilities permitted by the fauxbourdon voice. Finally, Du Fay also envisioned an alternate third voice that would work with his two-part framework. The two “contratenor” voices enrich the two-part sonorities in different ways, and influenced the composition of the two-part framework, but they are secondary to the superius and tenor.

A two-part framework in superius and tenor throughout the piece is found, not only in genres based on improvisatory techniques, like Du Fay’s hymns, but also in fifteenth-century chansons. In chansons, however, there are many more possibilities for vertical intervals between the two voices, as in the case of Du Fay’s *Se la face ay pale* (example 8.2). Notice the variety of intervals between the superius and tenor (shown between these two voices), and the preponderance of contrary motion (in typical discant style). A superius–tenor two-part framework plus contratenor, dubbed chanson format by Reinhard Strohm,²¹ is found in most fifteenth-century chansons, as well as in three-voice “cantilena” or “song motets,” and three-voice masses and mass sections from the fifteenth century.

External evidence for the location of the two-part framework comes from the existence of several different alternative contratenor voices for the piece, shown in example 8.2.²² Contratenor A, probably the original, is found in the most sources (seven) and the earliest ones. This voice maps out its total range of a twelfth (from C to g and back again) in the first six measures. Contratenor B is found in only one source; this voice spends its time in the same range as the tenor. Finally, there is a third, low contratenor that appears in two sources—one for three voices, and one for four.²³

21. Strohm, *The Rise of European Music*, 161.

22. Many chansons from the 14th and 15th centuries have alternate possibilities for the contratenor. See Bent, “Some Factors” and “Naming”; Memelsdorff, “Lizadra donna.” See also Meconi, “Art-Song Reworkings.”

23. Superius, tenor, and contratenor A are transcribed from Oxford, Bodleian Library, MS Canon. Misc. 213, fols. 53v–54r. Contratenor B is from Escorial, Real Monasterio de San Lorenzo del Escorial, Biblioteca y Archivo de Música, MS IV.a.24, fol. 136r. Contratenor C is from Munich, Bayerische Staatsbibliothek, Cod. Germ. Mon. 810 (Schedelsches Liederbuch), fol. 70r. The complete piece is found in Du Fay, *Opera omnia*, vol. 6, ed. Besseler. Superius, tenor, and contratenor A are on p. 36; contratenor B is on p. xxxiv; contratenor C is on p. xxxv; the edition of the four-voice version is on p. 105; see critical notes, pp. xxxiii–xxxv and lxiv. The contratenor situation for this piece is described best in Fallows, A

Example 8.2. Guillaume Du Fay, *Se la face ay pale*, mm. 1–18

Three alternative contratenors. Corner brackets show imitative entries.

Numbers between S and T show intervals between those voices.

cad.

Superius

T-S: 8 8 10 12 10 8 6 5 4 3 5 6 8 8 10 8 5

Tenor

Contratenor B

Contratenor A

Contratenor C

6 cad.

3 5 5 10 10 8 6 3 5 6 5 8 3 3 3 3 5 1

13 # cad.

3 3 2 3 8 3 5 5 8 8 5 5 8 6 6 6 5 6 5 8

Internal evidence for the two-part framework includes the sixth-to-octave cadences in the superius and tenor in measures 4–5, 9–10, and 17–18 (as well as the final cadence of the piece). The superius and tenor normally cadence and rest together, while the contratenor keeps the rhythm going between phrases. There is also imitation at the octave between superius and tenor in measures 12–13, 15–16, and 16–18 (marked by corner brackets in the example). At first glance imitation might indicate independence of voices, rather than the coordination between voices we associate with the two-part framework. Exact imitation, however, has to be planned, especially when the imitative entries overlap; it does not happen by accident. Therefore the imitative entries have to be composed first, as does the two-part framework.

A later three-voice chanson from the Mellon chansonnier, Hayne van Ghizeghem's *De tous biens* (example 8.3), circulated primarily with the contratenor shown here, although there are also several different replacement contratenors.²⁴ Internal evidence includes clear sixth-to-octave cadences between the superius and tenor (mm. 2–3 and 7–8), and chains of parallel sixths and thirds between the superius and tenor (shown with horizontal lines above the staff in the example). In spite of the abundance of parallel sixths, there is no fauxbourdon here. Instead there is a low contratenor that follows the parallel-sixth model described by Guilielmus Monachus and cited by Crocker, with intervals below the tenor limited to thirds, fifths, and unisons (and their compounds, tenths, twelfths, and octaves).²⁵ Like fauxbourdon, the parallel-sixth model is also an improvisable pattern, here adapted to composed polyphony. Crocker's claim that later fifteenth-century music focused on parallel imperfect intervals holds true in this case.

However, other pieces from the same manuscript show much more contrary motion: see example 8.4, Ockeghem's *Ma bouche rit*.²⁶ The location of the two-part framework is still in the superius and tenor. Internal evidence is provided by the superius–tenor imitation in measures 1–2 and 9–10, and the sixth-to-octave cadence between superius and tenor at the end of the phrase. While there are brief sections with parallel tenths or

Catalogue of Polyphonic Songs, 362–63. The versions of the chanson that use contratenor C have different figuration in the superius, so that the impossible dissonances on the first beat of m. 4 and the last beat of m. 5 do not occur in those versions. In Trent, Museo Provinciale d'Arte, MS 1376 (usually called Trent 89), fols. 424v–425r, the three-voice version from the Schedel Liederbuch with contratenor C is transposed down a fourth, with an added "Discantus 2us," resulting in a four-voice arrangement. A facsimile of the Trent codices is available online at <<http://www1.trentinocultura.net/portal/server.pt?open=514&objID=22652&mode=2>>.

24. Transcribed from New Haven, Yale University, Beinecke Library MS 91, fols. 42v–43r; the manuscript will henceforth be called the Mellon chansonnier. A color facsimile is available online: <<http://beinecke.library.yale.edu/digitalibrary/ms91.html>>. See *The Mellon Chansonnier*, ed. Perkins and Garey, vol. 1: *The Edition*, 120–21, no. 32. For the replacement contratenors see "De tous biens plaine": *Twenty-Eight Settings of Hayne van Ghizeghem's Chanson*, ed. Cyrus, and Meconi, "Art Song Reworkings," 27.

25. See above, n. 6, and Jans, "Alle gegen eine," 108–19.

26. Transcribed from the Mellon chansonnier, fols. 38v–40r. Perkins and Garey, *Mellon*, ed. Perkins and Garey, 112–15, no. 30. For the caption I have standardized the spelling of "bouche" (rather than "bouce" as found in Mellon).

Example 8.3. Hayne van Ghizighem, *De tous biens*, mm. 1–8
 Lines above staff indicate parallel imperfect intervals.

Superius \sharp cad.

S-T: 8 8 76 3 6 7 6 8 6 6 6 6 5 3 3 3

Tenor

Ct-T: 1 3 5 3 5 3 5 8 10 8

Contratenor

5 $\sharp \sharp$ cad.

5 6 5 3 3 1 3 4 6 6 10 9 8 7 6 6 5 8

3 8 3 2 3 3 5 8 3 5 3 5 6 5 6

Example 8.4. Johannes Ockeghem, *Ma bouche rit*, mm. 1–11

Superius

S-T: 8 8 10 10 10 10 13 15 12 10 6 10 3 5 6 7

Tenor

Contratenor

6 cad.

10 10 6 6 5 3 3 6 8 10 10 10 3 10 10

cad.

sixths, there is also a lot of contrary motion (see mm. 3–7). Some cadences in this example occur between voices other than the superius and tenor (mm. 8 and 9–10), to which we will return in section II.

Many four-voice pieces from the fifteenth century (and beyond) continue to keep the two-part framework in the superius and tenor voices. Some four-voice pieces are arrangements of pieces originally written in three voices. Sometimes the arrangement simply involves adding a fourth “si placet” voice; some arrangements add a voice and rewrite the original contratenor.²⁷ In many other four-voice pieces the superius and tenor have no (or very few) fourths between the voices, and superius and tenor make all the cadences together.²⁸ In music composed toward the end of the fifteenth century, however, it becomes harder and harder to find pieces that keep the two-part framework in the superius and tenor throughout, because most pieces have passages with reduced texture, where superius and/or tenor are not sounding.²⁹

II. Music in which the Two-Part Framework Moves around the Texture

While the default voices for the two-part framework across the fifteenth century are the superius and tenor, there are many passages in pieces where this just doesn't seem to work: there are fourths between the superius and tenor that require a third voice to make good counterpoint, or there are cadences between voices other than the superius and tenor, or there are passages in reduced texture for voices other than superius and tenor. Some scholars have suggested that when these conditions apply we have moved away from the two-part framework as the basis of composition.³⁰ I argue that the two-part framework is still operative, but that it can move around the texture, and thus it can be located temporarily in a pair of voices other than the superius and tenor.

27. This is the case in the four-voice version of Du Fay's *Se la face*; see above, n. 23; other examples are discussed in Cumming, *Motet*, 233–39.

28. For mid-15th-century four-voice motets with a completely consonant two-part framework see Cumming, *Motet*, 267–70. Very occasional fourths between superius and tenor could occur without necessarily indicating movement of the two-part framework: Puylois's *Flos de spina* has only two fourths between the superius and tenor (m. 86, over pedal in bass; and the last beat of m. 114; see *Motet*, 242–43, and discussion, 246–48). Since these moments are so brief, I believe that Puylois could have included them in his framework, since he knew he would be adding a bassus voice. In “Paradigms of Four-Voice Composition,” 379–85, Kevin Moll discusses a four-voice *Salve regina* attributed to Du Fay found first in Trent 89. This piece has no fourths between the superius and tenor, but the discantus does rest occasionally, at which point the framework shifts to the lower voices. Moll's discussion accords with my approach in many respects, although his focus on the “referential pitch” (the lowest-sounding pitch) leads him in a different direction.

29. See, for example, the anonymous *Ave domina sancta Maria*, ed. Drake in Petrucci, *Motetti de Passione*, no. 14, pp. 180–83.

30. Kevin Moll grapples with these issues in his “Voice Function, Sonority, and Contrapuntal Procedure.” He refers to many of the same features as I do: cadences, imitation, reduced texture. However, while I suggest that the fundamental idea of the two-part framework does not change, it just moves around the texture, Moll suggests a new compositional model, which he calls “consolidated discant counterpoint” (inspired by Apfel's *klanglich-freier Satz*; see 46–53, esp. 49), in which “no voice is dispensable either contrapuntally or texturally” (53).

Example 8.5. Franci[gena?], *Parce Domine* (215), mm. 1–7

Note fourth between S and T, m. 4; cadence between T and B, mm. 6–7.

The image shows a musical score for four voices: Superius, Altus, Tenor, and Bassus. The music is in G minor (one flat) and 4/4 time. In measure 4, the Superius and Tenor voices have a fourth interval between them, indicated by a '4th' label above the Superius staff. In measures 6 and 7, the Tenor and Bassus voices have a cadential progression, indicated by a 'cad.' label above the Bassus staff. The Superius and Altus voices have fermatas in measures 4, 6, and 7.

In example 8.5, a motet from Petrucci's *Motetti B*, for example, there is a fourth between the tenor and superius in measure 4 (on a long note under a fermata) that casts doubt on their status as the framework voices.³¹ When we look at the end of the next phrase (mm. 5–7) we see the sixth-to-octave cadential progression between the tenor and bassus. It makes sense, therefore, to conceive of the tenor and bassus as the two-part framework for the whole passage from measure 1 to measure 7. The two-part framework then shifts to the superius and tenor in measure 8 for the next phrase.

If the two-part framework can move around the texture, how can we tell where it is for any particular passage in the piece? We cannot always be certain. However, we can be fairly sure about where the two-part framework is in a number of situations, each of which will be discussed at more length below:

- Rests in one or more parts resulting in a duet where the voices are not the superius and tenor (external evidence).
- Cadences between voices other than the superius and tenor.
- **Parallel imperfect intervals** between pairs of voices other than the superius and tenor (improvisable patterns such as fauxbourdon or the parallel-sixth model).
- Two-part **imitation** or canon in pairs of voices other than the superius and tenor (improvisable at a short time interval).
- Repeated contrapuntal combinations, or **modules**, in voices other than the superius and tenor.

31. Petrucci, *Motetti B*, ed. Drake, no. 15, pp. 184–86. The tenor of example 8.5, *Parce Domine* (p. 215), is the tenor of the chanson *De tous biens* (example 8.3). This was first observed by Christoffersen, in *French Music in the Early Sixteenth Century*, 2:107. Numbers in parentheses in example captions refer to the presence of the piece in one of the first four Petrucci motet prints published in Venice, from which I have transcribed them: 100s are in *Motetti A* (RISM 1502¹), 200s are in *Motetti . . . B* (RISM 1503¹), 300s are in *Motetti C* (RISM 1504¹), and 400s are in *Motetti Libro quarto* (RISM 1505²).

Three of these types of evidence (cadences, parallel imperfect intervals, and imitation) are familiar from section I. When we see a passage in which two voices other than the superius and tenor exhibit musical features that we already associate with the superius–tenor two-part framework (as discussed above), then we can assume that those two voices carry the two-part framework. I have also added additional types of evidence to the list (rests and modules). I have not included “lack of fourths” as a type of evidence here. Fourth between two parts can only indicate where the two-part framework is *not*; they do not tell us where it is.³²

When we look for evidence for the location of the two-part framework in pieces, the different types of evidence often appear together: parallel sixths or thirds between two voices often lead to a cadence between those voices, for example. The last three types of evidence (parallel imperfect intervals, imitation or canon, and modules) involve repetition, which becomes more widespread as we approach the end of the century.³³ Repetition does not usually happen by accident: it takes planning. Repeated material is more likely to be composed before free material—and therefore more likely to participate in the two-part framework.

Parallel imperfect intervals and canon at a short time interval also derive from improvisatory techniques (for improvised canon, see below). It makes sense for composers to build their two-part framework (wherever it is in the texture) out of very fundamental improvisatory techniques. Jessie Ann Owens describes one technique of composing without scores as follows: “Sometimes they worked first with two ‘essential’ voices and added a third.”³⁴ It was easier for composers to hold familiar improvisable structures in mind as they worked out an additional voice or voices to add to the framework.

Rests in One or More Parts Resulting in a Duet where the Voices are not the Superius and Tenor

Rests resulting in a duet are a type of external evidence: clearly, if only two voices are sounding, the framework is in those voices. Duets are a prominent feature of the texture in many genres (both three- and four-voice). Although they are not common in chansons, they often appear in motets and mass movements. When a duet includes a voice other than the superius or tenor (i.e., a contratenor voice), then the two-part framework shifts to the two voices singing for the duration of the duet. It may seem trivial to say that when only two voices are sounding, they constitute the two-part framework. However, the use of duets increases over the course of the century, and their appearance in different pairs of voices is an important step in the emancipation of the two-part framework from a prescribed position in the superius and tenor voices.

We have already seen one example of duets in example 8.4, Ockeghem’s *Ma bouche rit*. For most of the piece the two-part framework is in the superius and tenor, but rests in measures 1, 9, and 10 cause the framework to move briefly to the superius and

32. Kevin Moll also finds that focusing on fourths is not fruitful in “Voice Function,” 50.

33. See Cumming, “From Variety to Repetition.”

34. Owens, *Composers at Work*, 196; and see 7: “composers of vocal music did not use scores for composing, but instead worked in separate parts or quasi-score.”

Example 8.6. Leonel Power, *Quam pulchra es*

Duets carry two-part framework. Boxes indicate modules; dotted boxes show repeated melody.

The musical score is presented in three systems, each with three staves: Superius (top), Tenor (middle), and Contratenor (bottom). The key signature is one flat (B-flat) and the time signature is 3/8.

- System 1 (Measures 1-4):** The Superius part has whole rests. The Tenor part begins with a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3 marked "cad.". The Contratenor part begins with a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3.
- System 2 (Measures 5-8):** The Superius part has a dotted quarter note G4, followed by quarter notes A4, B4, and C5, ending with a whole note D5 marked "ev. cad.". The Tenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3. The Contratenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3. There are flats (b) under the first and last notes of the Contratenor part.
- System 3 (Measures 9-12):** The Superius part has a dotted quarter note G4, followed by quarter notes A4, B4, and C5, ending with a whole note D5 marked "cad.". The Tenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3. The Contratenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3.
- System 4 (Measures 13-16):** The Superius part has a dotted quarter note G4, followed by quarter notes A4, B4, and C5, ending with a whole note D5 marked "cad.". The Tenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3 marked "b cad.". The Contratenor part has a dotted quarter note G2, followed by quarter notes A2, B2, and C3, ending with a whole note D3. Dotted boxes indicate repeated melodic phrases in the Superius and Tenor parts.

Table 8.1. Leonel's *Quam pulchra es* excerpt (example 8.6): duets and cadences

Measures (decimals are beat nos.)	Semibreves with only 2 vv. sounding	Voices	Predominant parallels	Cadences (pitch, m.)	Interval progression at cadence
1–4	12	T & Ct	6ths	G, 4	6–8
5–9.2	0 (3 vv.)	S, T S, Ct	3rds (S & T) 10ths (S & Ct)	G, 8	3–[3] (evaded)
9.3–12	9	S & T	6ths	G, 10 B, 12	6–8 6–[10] (evaded)
13–14	5	S & Ct	3rds	—	
14–16.2	3	T & Ct		A, 16	6–8
16.3–17	3	S & T		D, 17	3–1

contratenor (mm. 1 and 9) and the tenor and contratenor (m. 10). The duet in measure 9 also includes a cadence between the superius and contratenor. The duets in measures 9 and 10 also bring out the imitation between the superius and tenor, as the superius in measure 9 is imitated by the tenor in measure 10, down a fourth.³⁵

The changing use of duets can be seen even more clearly in the evolving style of the English cantilena in the first half of the fifteenth century. In many early fifteenth-century English cantilenas there is a central duet section (e.g., Dunstable's *Beata mater*; Forest's *Alma redemptoris mater*) between the superius and tenor voices.³⁶ As we approach mid-century, however, shorter duets are integrated into the texture and appear between all the possible voice pairs. A striking example is found in example 8.6, from Leonel Power's *Quam pulchra es*.³⁷

The excerpt begins with a duet for the two lower voices, tenor and contratenor, in parallel sixths, ending with a cadence (see table 8.1 for measure numbers and cadences). After a three-voice section there is a duet for superius and tenor (with a cadence in the middle), then duets for superius and contratenor (in parallel thirds), tenor and contratenor (with a cadence), and then superius and tenor again (with a cadence). Each new duet is a shift in the position of the two-part framework. This piece demonstrates that composers could work in short two-part units that move around the texture already in the 1440s. As can be seen in table 8.1, most of the duets include parallel motion and cadences. This brings us to our next topic.

35. The imitation may be initiated by the tenor voice in mm. 7–8 (beginning with the tenor's last note in m. 7), leading to the cadence between tenor and contratenor at the end of m. 8 that is the same as the cadence between superius and contratenor in m. 10.

36. Cumming, *Motet*, 86, 90–91; 185–94.

37. Transcribed from Modena, Biblioteca estense, MS α .X.1.11, fols. 111v–112r. The complete piece is in Leonel Power, *Complete Works*, ed. Hamm, 60; this excerpt is mm. 26–44; for Hamm's discussion see pp. xviii–xix. Hamm uses irregular barring in his edition of this piece; I have normalized the barring to three-beat measures, and numbered the measures from the beginning of the excerpt.

Example 8.7. Guilielmus Monachus, normal 6th-to-8ve cadence in S and T
Described in *De preceptis artis musicae* (bk. VI, sentences 53–58). Numbers indicate intervals in relation to the tenor.

Supranus
6 6 8

Contratenor
Altus
3 4 5 or 3 or 1

Cantus firmus
(Tenor)
3 5 8 or 1

Contratenor
Bassus

Example 8.8. Guilielmus Monachus, inverted cadence between S and T
Described in *De preceptis artis musicae* (bk. VI, sentence 62).

Supranus
3 1

Cantus firmus
(Tenor)
fa mi fa
modus suprani

Cadences between Voices Other than the Superius and Tenor

As we have seen, cadences in the late Middle Ages and Renaissance are defined by motion from sixth to octave in contrary motion. Normally this happens between the superius and tenor voices (especially clear examples can be found in example 8.3, *De tous biens*, measures 2–3 and 7–8). This two-part cadential framework can be harmonized or enriched by the contratenor (or bassus and altus) in a variety of ways, but the normal ways of proceeding for these voices are also fairly conventional.³⁸

Guilielmus Monachus describes normal cadential motion between superius and tenor (example 8.7) as part of his description of the parallel-sixth model. Note his multiple options for the contratenor altus and bassus.³⁹ He then goes on to say “two exceptions

38. See Crocker, 14, example 1, for three-voice cadences, and n. 20 above.

39. *De preceptis*, bk. VI, ed. Seay, 41 and example 59; ed. and trans. Park, sentences 53–58; 69 (Latin); 188 (English). Seay and Park use the same example numbers. This is the passage cited by Crocker (15), and it describes the technique found in example 8.3, *De tous biens*.

Example 8.9. (a) Guilielmus Monachus, cadence between T and B (bk. VI, sentence 59); (b) Franchinus Gaffurius, example of cadence between T and B (*Practica musica*, bk. IV, ch. 11).

(a)

Cantus firmus (Tenor) fa mi fa
 modus suprani
 6 8
 Bassus modus tenoris

(b)

Cantus
 Contratenor acutus
 Tenor # cad.
 Baritonans

are made to the former rule” and describes the exceptions.⁴⁰ One involves the reversal of superius and tenor roles, resulting in an inversion of the normal cadential progression (third to unison instead of the normal sixth to octave; see example 8.8):

if the cantus firmus or cantus figuratus [i.e. the tenor voice] should still hold the **mode of the soprano** (*modus suprani*)—that is it should be made as follows, fa mi fa, sol fa sol, mi re mi, la sol la ... the soprano will make its penultimate a third over the tenor, in such a way that the last note will be a unison with the tenor.⁴¹ [He also describes what the other voices should do.]

This kind of inverted cadence is very common, even in pieces where the two-part framework stays in the superius and tenor (see the final cadence of example 8.6, Leonel’s *Quam pulchra*, and the first cadence of example 8.14 below, Tinctoris’s *Virgo Dei*).

Guilielmus also describes another exception (example 8.9a), where the cadential sixth to octave takes place between the tenor and bass. He describes it as follows:

if the cantus firmus [i.e. the tenor voice] holds the modus of the soprano (*modus suprani*), for instance fa mi [mi] fa, sol fa fa sol, la sol sol la, then the contratenor bassus can hold the modus of the tenor (*modus tenoris*), that is, make its penultimate a low sixth beneath the tenor, and the last note an octave below.⁴² [He also describes what the other voices should do.]

40. *De preceptis*, bk. VI; ed. Seay, 42; ed. Park, sentence 59, 70 (Latin); 190 (English).

41. *De preceptis*, bk. VI, ed. Seay, 42; ed. Park, sentence 62, 70–71 (Latin); 190 (English). I would like to thank Peter Schubert for bringing this passage to my attention.

42. *De preceptis*, bk. VI, ed. Seay, 42; ed. Park, sentence 59, 70 (Latin); 190 (English).

Example 8.10. Loyset Compere, *Crux triumphans* (106), mm. 20–25
Cadences between T and B.

The image shows a musical score for four voices: Superius, Altus, Tenor, and Bassus. The Superius and Altus parts are in treble clef, while the Tenor and Bassus parts are in treble clef (with the Bassus part written in a lower register). The Tenor and Bassus parts are boxed together, and two 'cad.' labels are placed above the Tenor staff, indicating cadences between the Tenor and Bassus parts. The score shows the melodic lines for each voice part, with the Tenor and Bassus parts showing a clear cadential relationship.

Gaffurius also provides an example of a tenor–bass cadence (Example 8.9b).⁴³ Cadences between tenor and bass are found often in the four-voice repertory: in the excerpt from Compere’s *Crux triumphans* shown in example 8.10 we see two in a row.⁴⁴

Gaffurius also provides an example with a cadence between the altus and bassus (example 8.11a).⁴⁵ This kind of cadence is also common in the repertory, as can be seen in Compere’s *Propter gravamen* (example 8.11b).⁴⁶ The last two bars of Compere’s altus are almost identical to Gaffurius’s, but a third higher.

Note that Guilielmus invents the terms “modus suprani” and “modus tenoris” to describe the normal motion for soprano or tenor at the cadence *when that motion is found in a different voice*. As far as I know, Guilielmus is the first theorist to develop terminology for voice function at the cadence. Several other theorists from the early sixteenth century discuss characteristic cadential motions in their discussions of counterpoint found at the ends of phrases, and even provide the motions with labels (see table 8.2).⁴⁷

43. Gaffurius does not discuss cadences explicitly, but he does outline similar compositional procedures in bk. IV, ch. 11, “The Composition of the Different Parts of Counterpoint”; see *The “Practica musicae” of Franchinus Gafurius*, trans. and ed. Young, 149–53. His first example of correct counterpoint includes the normal sixth-to-octave cadence between superius and tenor; see 150; and Gaffurius, *Practica musicae*, ed. and trans. Miller, example 34, p. 140. For the tenor–bassus cadence (discussed in the same chapter) see Young, 151, and Miller, example 36, p. 141. See also the facsimile edition, Franchinus Gaforus, *Practica musicae*, “De compositione diversarum partium contrapuncti,” sig. dd [viii]–ee i.

44. Compère, *Opera omnia*, vol. 4, ed. Finscher, 11–12. I spell Compere without the accent, as in Renaissance sources.

45. *Practica musicae*, ed. Miller, example 35, p. 141; ed. Young, 151.

46. Compère, *Opera omnia*, 4:47, mm. 52–54.

47. For Guilielmus Monachus see *De preceptis*, ed. Seay, 41–42; ed. and trans. Park, sentences 53–63; 69–71 (Latin); 188–191 (English). For Johannes Cochlaeus see *Musica active*, 2nd ed. [ca. 1505]; Hugo Riemann, “Anonymi Introductorium Musicae (c. 1500),” 30 (1898), 17–18 (“De cantilenarum conclusionibus”); and *Tetrachordum musices* (Nuremberg, 1511), tract IV, ch. 10, no. 14 (sig. F–Fv); ed. and trans. Miller, 79–80. Bernhard Meier discusses Cochlaeus’s treatment of cadence in “Die Harmonik der cantus-firmus-haltigen Satz des 15. Jahrhunderts”; translated in Moll, *Counterpoint and Compositional Process*, 149–70.

Example 8.11. Examples of cadences between A and B: (a) Franchinus Gaffurius (bk. IV, ch. 11); (b) Loyset Compere, *Propter gravamen* (107), mm. 52–54 (parallel tenths in S and B).

(a)

The image displays two systems of musical notation for voice parts. The first system, labeled (a), consists of four staves: Cantus (soprano), Contratenor acutus (alto), Tenor, and Baritonans (bass). The second system consists of four staves: Superius (soprano), Altus (alto), Tenor, and Bassus. In both systems, the final measure of the second system is enclosed in a box and labeled 'cad.', indicating a cadence. The notation includes various note values and rests, with some notes marked with a fermata.

In all three of these theorists the terms are only used when describing a situation where the “modus suprani” or “modus tenoris” is found in a voice *other than* the soprano or tenor. In other words, these terms are only needed when the superius–tenor sixth-to-octave default for cadences is not operative, and they need a way to describe the transfer of normal voice function to another voice or voices at the cadence.⁴⁸

For Andreas Ornithoparcus see *Musice active micrologus* and *Andreas Ornithoparcus his Micrologus, or Introduction*, trans. Dowland. Facsimiles of both are found in *Ornithoparcus/Dowland: A Compendium of Musical Practice*, ed. Reese and Ledbetter, bk. IV, ch. 5 (“De cantilena partibus ac clausulis Caput Quintum,” 99–101/“Of the Parts and Closes of a Song,” 203–205). Both Cochlaeus and Ornithoparcus include an explanation of the different bass motion for the *clausula in mi*.

48. In *The Modes* (90–101) Bernhard Meier assigned the terms “clausula cantizans,” “clausula tenorizans,” “clausula basizans,” and “clausula altizans” to the voice roles at the cadence. He does not, however, reveal where he got these terms. When we consult Eggebrecht’s *Handwörterbuch*, however, it appears that these terms first appear only in the 18th century, in the treatise of Johann Walter (1732). See Schmalzriedt, with Mahler and Sunten, “Kadenz,” 8.

Table 8.2. Conventional motion of voices at the cadence, according to theorists
ca. 1500

Theorist (date)	Motion of superius (+2; degrees 7-8)	Motion of tenor (-2; degrees 2-1)	Motion of Contra- tenor bassus	Motion of Contra- tenor altus
Guilielmus Monachus (ca. 1480)	modus suprani	modus tenoris	modus contrae (-5; degrees 5-1 or 7-3)	
Johannes Cochlaeus (ca. 1505)	discantus formula	species tenoris		
Johannes Cochlaeus (1511)	discantus forma			
Andreas Ornithoparcus (1517) (trans. John Dowland, 1609)	clausula discantus (close of the meane)	clausula tenoris (close of the tenor)	baritonantis clausula (close of the base) (-5 or +8)	tenoris acuti clausula (close of the high tenor) (various options)

The fact that the cadential voice *functions* can move from voice to voice suggests that the two-part framework can move around the texture as well. Since Guilielmus introduces the normal cadence formula in relation to a parallel-sixth two-part framework in superius and tenor, we can assume that a cadence between tenor and bass (or any pair of voices) is usually the conclusion to a phrase in which the two-part framework is found in those voices. This hypothesis is borne out when looking at a wide variety of fifteenth-century music. We have already seen this happening in the duets in the Leonel motet (see table 8.1 and example 8.6 above). But it also happens when there are more than two voices sounding, especially in four-voice music, as we have seen in the Compere examples (examples 8.10 and 8.11b).⁴⁹ If in doubt about where the two-part framework lies, find the cadence and then work backwards to the beginning of a phrase, as I did in example 8.5, *Parce Domine*.

Final cadences in the fifteenth century are almost always between superius and tenor. Cadences between voices other than the superius and tenor provide variety, and allow the composer to differentiate between more and less important cadences: the composers can mark selected internal cadences as weaker by putting them in a different pair of voices.⁵⁰ Thus moving the two-part framework and its concluding cadence around the texture can serve multiple compositional roles in the overall construction of a piece.

49. In three-voice chansons, sixth-to-octave cadences involving the contratenor are fairly rare, especially outside of duets, and they tend to occur in imitative contexts and what might be considered the middle of the phrase. See example 8.4, *Ma bouche rit*, where the cadence is between tenor and contratenor in m. 8, and between superius and contratenor in m. 9, at the end of a duet. For another example in the Mellon chansonnier, see *Est-il merchy*, by Busnoys (Mellon, ed. Perkins and Garey, no. 7, pp. 52–53, mm. 13–16). Here the cadence formula appears between the tenor and contratenor in m. 15; it is repeated between superius and tenor two beats later (but the tenor then evades the cadential arrival).

50. For an analysis that makes exactly this argument about the relative weight of cadences, see Judd, “Some Problems of Pre-Baroque Analysis,” 214–16. In her “Fig. 3: Formal Articulation” (206) and her “Fig. 5: Cadence Table” (214) she refers to the superius–tenor sixth-to-octave cadences with suspensions in Josquin’s *Ave Maria* as “Formal Cadences” and cadences with “structural voicing” respectively, and sees cadences with the sixth to octave in voices other than the superius and tenor as weaker. It turns out that in this piece all of these weaker cadences also use reduced texture (duets and some trios).

Improvisable Patterns Involving Parallel Imperfect Intervals between Pairs of Voices Other than the Superius and Tenor

Guilielmus Monachus describes several different types of improvisable polyphony for three and four voices, almost all of which feature parallel imperfect intervals between two of the voices—parallel sixths or thirds between superius and tenor, and parallel tenths between superius and bassus.⁵¹ When we find these models in composed polyphony, the voices in parallel often function as the two-part framework for that section of the piece. Long strings of parallel intervals do not happen by accident; they must have been composed first.

Most of the time we find parallel sixths between the superius and tenor (see example 8.3 above, *De tous biens*, or the Appendix, Josquin's *Virgo prudentissima*, mm. 21–23). In the early fifteenth century (and in select passages in later music) we find parallel sixths in fauxbourdon textures (example 8.1 above), with parallel fourths between the superius and contratenor (or altus). Later in the century we find them in superius and tenor in the parallel-sixth model, with alternating thirds and fifths below the tenor as described by Guilielmus. While it is easy to find parallel sixths in duets (see Leonel's *Quam pulchra*, example 8.6 and table 8.1), it is less easy to find parallel sixths in voices *other* than superius and tenor for more than a few notes in full-textured passages. This may be because Guilielmus's parallel-sixth model fixes the relative ranges of the voices, so that moving the parallel sixths to another pair of voices does not work in a standard four-voice texture.

Parallel thirds are essentially just an inversion of parallel sixths, and similar rules apply,⁵² although it is easier to find parallel thirds in pairs of voices other than the superius and tenor. For an example of parallel thirds in the tenor and bass, see the Appendix, Josquin's *Virgo prudentissima*, measures 26–29. These voices also move to a third-to-unison cadence, measures 29–30. In general, when we find parallel thirds and sixths we can point to those voices as the bearers of the two-part framework.

Parallel tenths, however, are more complicated. The parallel-tenth model involves three voices: outer voices (superius and bassus) in parallel tenths, and a voice in the middle. It is difficult to decide in this case which pair of voices carries the two-part framework. Guilielmus, Gaffurius, and Ornithoparcus all discuss the parallel-tenth model, but their discussions are not very clear, and none of them provides a complete explanation of the contrapuntal rules.⁵³ The evidence from these three theorists suggests three choices:

51. See chs. IV and VI in *De preceptis*, ed. Seay, 29–30, 33–43; ed. Park, 43–45, 52–74 (Latin), 159–61, 168–96 (English). For discussions of Guilielmus Monachus see Jans, "Alle gegen eine"; Sachs, *Der Contrapunctus*, 132–38; and Sachs, "Arten improvisierter Mehrstimmigkeit." See also Schubert, *Modal Counterpoint*, 190–94, 245–46.

52. See Schubert, *Modal Counterpoint*, 192–93.

53. *Ibid.*, 193–94. Schubert explains that one of the outer voices has to follow the rules for invertible counterpoint at the tenth against the middle voice. For the discussion in Guilielmus Monachus, see *De preceptis*, end of bk. VI, ed. Seay, 52–53, example 62; ed. Park, sentences 69–71, example 62, 73–74 (Latin); 194–96 (English). For Gaffurius, see *Practica*, bk. IV, ch. 12, ed. Miller, 144–45, example 40; ed. Young, 154–55. For Ornithoparcus see *Ornithoparcus/Dowland: A Compendium*, bk. IV, ch. 4, pp. 22–23, 98 (Ornithoparcus), 202–203 (Dowland).

Example 8.12. Henricus Isaac, *Alma redemptoris mater* (318), 2. pars, mm. 30–34
Parallel tenths in S and B, cadence between S and T.

The image shows a musical score for four voices: Superius, Altus, Tenor, and Bassus. The Superius and Bassus parts are in parallel tenths. A cadence is marked between the Superius and Tenor parts. The score is in G major and 4/4 time. The Superius part starts on G4 and moves up to G5. The Bassus part starts on G2 and moves up to G3. The Tenor part starts on G3 and moves up to G4. The Altus part starts on G3 and moves up to G4. The cadence is marked between the Superius and Tenor parts.

- We can consider the parallel-tenth model a three-part framework
- We can consider the outer voices in parallel tenths as the two-part framework (as we did for the parallel-sixth model), and the tenor as a later addition
- We can consider the tenor (whether pre-existent or newly composed) plus one of the other voices (superius or bassus) as the two-part framework, and the remaining voice as a doubling voice (just as the fauxbourdon voice doubles the top voice in Du Fay's hymns).

I would not rule out any of these possibilities completely, and in fact they may all be true in different compositional situations. However, I lean toward the third option, and would suggest that the voices with the sixth-to-octave cadential motion are the framework voices. The following examples serve to demonstrate how this works.

Example 8.11b above, Compere's *Propter gravamen*, has parallel tenths in the outer voices. The sixth-to-octave cadence occurs between the altus and bassus. I would therefore suggest that in this case, the altus and bassus constitute the two-part framework, the superius was added next, doubling the bass at the tenth above, and the tenor voice would have been the last voice added to the texture.

In example 8.12, from Isaac's *Alma redemptoris*, we also have parallel tenths in the outer voices.⁵⁴ Here, however, the superius and tenor make the cadential sixth-to-octave progression. I therefore suggest that the superius and tenor constitute the two-part framework, that the bass, doubling the superius a tenth below, comes next, and that the altus is last (this would be the traditional order of composition in any case). Thus in the case of parallel tenths, we should find the voices that make the cadence in order to identify the voices that constitute the two-part framework.

54. Transcribed from Petrucci, *Motetti C.* Modern edition found in Just, "Heinrich Isaacs Motetten in italienischen Quellen" and in Cumming, "Composing Imitative Counterpoint," 278–83.

Example 8.13. Josquin des Prez, *Liber generationis* (303), 2. pars, mm. 159–65
Stretto fuga at the fifth below in T and B.

The image shows a musical score for three voices: Altus, Tenor, and Bassus. The music is in common time (C). The Tenor and Bassus parts are in stretto fuga at the fifth below. The Altus part is added later. The score shows the first few measures of the piece, with the Tenor and Bassus parts starting with a rest and then entering with a note. The Altus part enters later with a note. The Tenor and Bassus parts are in stretto fuga at the fifth below.

Two-Part Imitation or Canon in Pairs of Voices Other than the Superius and Tenor

In imitation or canon one voice repeats the other's music after a designated time interval. Imitation does not happen by accident: we can therefore assume that imitative passages were composed first, and constitute the two-part framework. Two-voice imitation after a single time unit at the fourth, fifth, and octave can be improvised: when the lead voice follows the correct rules for melodic interval choice, the counterpoint works (this has been dubbed *stretto fuga* by John Milsom).⁵⁵ As in the improvisable patterns involving parallel imperfect intervals, the melodic and vertical interval choices in *stretto fuga* are very constrained, and thus easy for an improviser or composer to retain in the mind when adding additional voices. *Stretto fuga* is very common in fifteenth-century polyphony.⁵⁶

Two-part imitation in fifteenth-century music usually occurs between the superius and tenor voices (see example 8.2, *Se la face*; example 8.4, *Ma bouche rit*, example 8.6, *Quam pulchra*, mm. 1–8). In four-voice music we also often find two-part imitation in the superius and tenor parts. However, imitation also occurs between other pairs of voices, in both three- and four-voice music. I suggest that we can assume that when there is two-part imitation or canon, the voices in imitation constitute the two-part framework. Example 8.13, from Josquin's *Liber generationis*, provides a very clear example.⁵⁷ The tenor and bassus are in *stretto fuga* at the fifth below; they constitute the two-part framework, and we can assume that the top voice (the altus) was added later.

55. The basic rules for melodic interval choice in *stretto fuga* are as follows: at the fifth above and fourth below, one can go down even-numbered intervals (seconds, fourths, etc.) and up odd-numbered intervals (thirds, fifths, etc.). At the fifth below and the fourth above, one can go down odd-numbered intervals and up even-numbered intervals. *Stretto fuga* at the fifth can use unisons, *stretto fuga* at the fourth cannot (unless the *stretto fuga* is accompanied by a third voice). For *stretto fuga* at the octave and unison, one can go up and down thirds and sixths, and repeat notes; at the octave above, one can go down one fifth and up one fourth; at the octave below, one can go down one fourth and up one fifth. On *stretto fuga* in two voices see Milsom, "'Imitatio,' 'Intertextuality,' and Early Music" and Schubert, *Modal Counterpoint*, 156–59. For *stretto fuga* for more than two voices, see Schubert, "From Improvisation to Composition."

56. Peter Schubert and I discuss the use of *stretto fuga* in composed polyphony from the second half of the 15th century in "The Origins of Pervasive Imitation."

57. See *New Josquin Edition*, vol. 19, ed. Just, no. 13, p. 56; Critical commentary, 125–58. Example 8.13 is an excerpt from the three-voice *secunda pars* (the first and third *partes* have four voices).

Repeated Contrapuntal Combinations, or Modules

Up to now we have looked primarily at *melodic* repetition: a single line of music repeated in another voice (even if the repetition is simultaneous, as in parallel motion). We now turn to the repetition of contrapuntal combinations, dubbed modules by Jessie Ann Owens, and explored fully by Peter Schubert.⁵⁸ Modules involve contrapuntal repetition: two or more melodic lines are repeated together, along with their vertical intervallic relationships (modules can also be repeated in invertible counterpoint). A module can be any length: from a succession of two vertical intervals to a whole phrase. While we do find three-, four-, and even five-voice modules, typically modules are two voices; these two-part modules are the basis for most sixteenth-century imitative polyphony, as Schubert has shown.⁵⁹

We have seen one type of contrapuntal repetition before—the cadence. The two-part sixth-to-octave progression can be seen as a kind of module that is often repeated during a piece. Just as the presence of a cadence indicates the location of the two-part framework, so do other kinds of modules. The voices included in a repeated contrapuntal combination, or module, constitute the two-part framework for the extent of the module. The repeated counterpoint has to come first, and then free material can be added to it. As we will see, modules often coincide with one or more additional indicators of the location of the two-part framework (duets, cadences, parallel motion, or imitation). Modules are found in almost all Western polyphonic music; however, they become much more common in the last quarter of the fifteenth century, along with increasing repetition and imitation.

In example 8.6 above, Leonel's *Quam pulchra*, the opening duet between tenor and contratenor is repeated immediately (in inversion at the octave) by the superius and tenor: this is a module (boxed in the example). The two-part framework therefore moves from tenor and contratenor to superius and tenor.⁶⁰ A similar example from later in the century is example 8.14, Tinctoris's *Virgo Dei*.⁶¹ Here we have a tune (marked by a dotted box in the example) that is passed from the superius (mm. 2–6) to the tenor (down a fourth, mm. 6–10), and then to the contratenor (down another fifth, mm.

58. Owens, "The Milan Partbooks," 284; *Composers at Work*, 251; Schubert, "Hidden Forms." Bernhard Meier identifies some four-voice modules (without using the term) in "Die Harmonik," 27–44; translated in Moll, *Counterpoint*, 149–70.

59. See "Hidden Forms," where Schubert explains how modular analysis works; and "Musical Commonplaces," where he shows how the theorists Montanos and Cerone base their musical commonplaces on two-voice modules.

60. In example 8.6 the lower voice (the tenor) of the opening module becomes the top voice (the superius) of its repetition in mm. 5–7, so it might not be immediately obvious to the ear that the module is repeated, especially given the addition of the contratenor in mm. 5–7. Not all repeated melodies involve repeated modules: the repeated melody at the end of this example (shown by a dotted box in mm. 13–17) does not involve modular repetition, except for the cadential motion heard at the end of the second and third time through the tune. The third time through the tune is varied, however, so the repetition is concealed.

61. Transcribed from the Mellon chansonnier, fols. 80v–81r. *Mellon*, ed. Perkins and Garey, no. 57, pp. 194–95. This motet is found both in the Mellon chansonnier (ca. 1476) and in Petrucci's *Motetti A* (1502).

Example 8.14. Johannes Tinctoris, *Virgo Dei* (130), mm. 1–13

Dotted boxes show repeated melody; solid boxes show one module, wavy boxes show another.

9–13). This is imitation, but it is far from obvious to the listener, because the first and second entries of the repeated melody are not preceded by rests, and the second and third entries are concealed in the middle of the texture.

The primary module associated with the repeated melody in example 8.14 is the cadence figure found at the end of the first time through the melody (mm. 4–6, in a rectangular box in the example). The repeated module extends one beat to the left in the second and third times through the melody (rectangular boxes, mm. 8–10 and 11–13). Another module occurs during the second and third times through the melody: a scalar ascent through a sixth is used against the first half of the melody, though in a slightly different rhythmic position (in a wavy box in the example, mm. 7–8 and 10–11). The two-part framework is clearly in the superius and tenor for the first two systems (the module, with its cadence, is inverted the second time), and it shifts to the tenor and contratenor for the third system (while the superius drops out).

Example 8.15. Antoine Busnoys, Magnificat [sexti toni], 3. *Quia respexit*, mm. 1–3
Numbers identify melodies, boxes show modules.

Another example of a module that moves from one pair of voices to another is found in example 8.15, an excerpt from Busnoys's Magnificat.⁶² Here the module is heard first in the tenor and contratenor, then up an octave in the superius and tenor, while the contratenor continues with free material. This looks more like normal imitation. We hear the upper melody of the module presented in the tenor and then imitated in the superius. The two tunes in the module (labeled 1 and 2 in the example), however, are presented one after another only in the tenor voice, unlike in more traditional imitative textures, where the voices come in one at a time.

Another example by Busnoys makes the connections between modules and imitative polyphony even clearer. In example 8.16, *Pour entretenir mes amours*, Busnoys begins with two voices notated in the contratenor part.⁶³ If we ignore the upper voice in the contratenor at the beginning, we will see that this piece begins with a point of imitation moving from low to high: contratenor, tenor, superius. We can label the music heard in each voice before the next entry as tune 1. As the second voice comes in, the continuation of the first voice (tune 2) serves as a counterpoint to tune 1 in the first voice (tune 1 is like the subject of a fugue, and tune 2 is like the countersubject). The combination of tunes 1 and 2 makes a module, heard between the tenor and contratenor, and the superius and tenor. The module includes a cadence between the two voices.

Clearly, Busnoys liked his module so much that he decided to create an almost unheard-of *divisi* at the very beginning in the contratenor part, resulting in the same module inverted at the octave.⁶⁴ This example shows very clearly how the two-part

62. Transcribed from Brussels, Bibliothèque Royale de Belgique, MS 5557, fol. 73r. The complete piece is found in Busnoys, *Collected Works*, Part 2, ed. Taruskin; for this movement see 112–13. In “Hidden Forms,” Peter Schubert would call this presentation type a “Non-Imitative Module,” or NIm; see 488, figure 1a, and 490–95.

63. Mellon chansonnier, fols. 19v–20r. See Perkins and Garey, *Mellon*, ed. Perkins and Garey, no. 15, pp. 74–75; and vol. 2, *Commentary*, 243–44; two sources (one of them Mellon) include the divided contratenor, two do not.

64. For a discussion of this *divisi* and its implications for performance practice, see Urquhart and de Savage, “Evidence Contrary to the *a cappella* Hypothesis.” They show that double notes are not uncommon (Appendix 2, pp. 373–5), but that extended passages such as this are very rare (he finds only three examples in addition to *Pour entretenir*).

Example 8.16. Antoine Busnoys, *Pour entretenir mes amours*

Periodic Entries (PEn); numbers identify melodies, boxes show modules.

framework moves with the module, from the contratenor, to the tenor and contratenor, and finally to the normal position in the superius and tenor. Once the module reaches the superius and tenor the two-part framework remains in those voices, and they reach another cadence in measure 5.

The opening of *Pour entretenir* (without the added voice in the contratenor) is an example of the imitative presentation type Peter Schubert has dubbed “Periodic Entries,” or PEn (see figure 8.1).⁶⁵ Periodic Entries have three or more overlapping entries that enter with the same melody after the same time interval of imitation (which is why it is called “periodic”), resulting in a repeated module. The overlap between the first half of the melody (labeled “1” in figure 8.1) and the second half (labeled “2”) results in a repeated module that combines the two halves of the melody vertically. This type of imitation is quite different from the two-part imitation and/or canon that we saw in examples 8.2 (*Se la face*), 8.4 (*Ma bouche rit*), and 8.13 (*Liber generationis*). Only when the module—and the two-part framework—can move around the texture is this kind of imitation possible.

Some Periodic Entries have fairly long time intervals of imitation, as in example 8.16, Busnoys’s *Pour entretenir*. Others have much shorter time intervals, as in the anonymous motet *O claviger regni* (example 8.17).⁶⁶

65. See Schubert, “Hidden Forms,” 488, figure 1c, and 498–504.

66. See *The Sixteenth-Century Motet*, ed. Sherr, 3: 169.

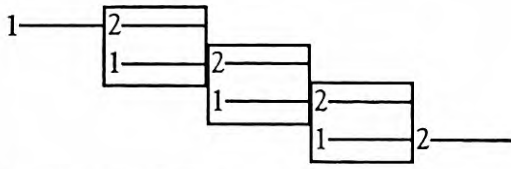


Figure 8.1. Periodic Entries (PEn)

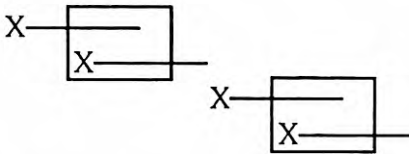


Figure 8.2. Imitative Duos (ID)

This is actually an example of embellished four-voice *stretto fuga*, an extension of the improvisable two-part *stretto fuga* discussed above. Here the time interval is only one measure, so the two-voice module (shown with vertical boxes containing a semibreve in one voice and two minims in the other) is also only one measure long.

Other imitative presentation types also feature repeated modules. In Imitative Duos (ID; see figure 8.2), a duo beginning with imitation in two voices is then repeated in two other voices, resulting in a repeated module. For an example, see the Imitative Duos at the beginning of the Appendix, Josquin's *Virgo prudentissima*, where the module heard first in the superius and tenor is repeated in the altus and bassus.⁶⁷

In much fifteenth- and early sixteenth-century music modules coincide with the reduction of the texture to two voices for one or more iterations of the module. This technique (known as paired duos) is a well-known feature of Josquin's style, but it begins as far back as Leonel's *Quam pulchra* (example 8.6). The same modular techniques are found in sixteenth-century music, but in general there is less reduced texture, and more free material is heard in other voices along with the repeated module.⁶⁸

Now that we know how to recognize the location of the two-part framework within a piece, we can turn to a whole motet from the late fifteenth century (see Appendix, Josquin's *Virgo prudentissima*⁶⁹) and trace the movement of the framework over the

67. Schubert, "Hidden Forms," 488, figure 1b, and 495–498.

68. See the numerous examples by Palestrina of the different presentation types in Schubert, "Hidden Forms."

69. My edition is based on Petrucci's *Motetti A*. For the most authoritative edition, see Josquin des Prez, *New Josquin Edition*, vol. 25, ed. Elders, 57–60.

Example 8.17. Anon., *O claviger regni* (431), mm. 1–7
 Periodic Entries (PEn) in four-voice *stretto fuga*.

The image shows a musical score for four voices: Superius, Altus, Tenor, and Bassus. The score is in mensural notation. Annotations include a box labeled '+8' above the Altus staff, a box labeled '+8' above the Tenor staff, and a box labeled '-12' below the Bassus staff. Dashed lines connect notes between staves to illustrate these intervals.

course of the piece. It is not always possible to determine exactly where the framework voices are in the texture, but most of the time we can be fairly confident.

In the Appendix I have inserted vertical lines to show where the framework changes voices, while comments above the staff indicate which are the framework voices, and why. A few markings may need clarification. Towards the end there are two examples of four-voice imitation (mm. 62–64 and 68–70) with very short time intervals of imitation (*four-voice stretto fuga*). They work just like the Periodic Entries in example 8.17, *O claviger regni*. At the very end there is imitation between the superius and tenor, leading to the final cadence, so I suggest that the two-part framework is in the superius and tenor. At the same time, the canon is constructed so that the superius and tenor exchange descending fourth figures over the held altus and a repeated bass line, resulting in a four-voice module. Similarly, in measures 39 to 44, there is a three-voice set of Periodic Entries in the upper three parts, and I have labeled the one-measure modules consisting of a and b as the two-part framework; but with the bassus repeating its melody (labeled “c”) we could also consider the passage as a set of repeated three-voice modules. In three- and four-voice modules it is often difficult to determine which voices came first, and thus to determine where the two-part framework lies. Overall, however, in *Virgo prudentissima* we can see how the two-part framework moves around the texture, often in very short units, and how the shifting framework and modular composition make possible the highly imitative texture.

III. Conclusions

The superius and tenor voices remain the default location of the two-part framework for the whole fifteenth century. Over the course of the century, however, we find more and more pieces in which the framework moves around the texture over the course of the piece. We can identify the location of the two-part framework by looking for one or more of the following: two-voice passages, sixth-to-octave motion at the cadence, parallel imperfect intervals, two-part imitation or canon, and repeated contrapuntal combinations, or modules. Toward the end of the century the two-part framework changes

position frequently, since imitative texture in more than two voices with overlapping entries necessitates two-part modules that move from one pair of voices to another.

Reexamining the two-part framework also provides a new view of compositional process in the fifteenth century. The use of improvisable contrapuntal formulas (such as the parallel-sixth model or *stretto fuga*) as the basis of the two-part framework helps to explain how musicians could compose without scores, as Jessie Ann Owens describes. The structures that composers knew how to improvise were easy for them to hold in their minds, making the process of adding additional voices relatively simple. The new emphasis on repetition and the interest in varied textures toward the end of the century leads to more canon, parallelism, imitation, and repeated modules—and these modules went on to become the basis of sixteenth-century imitative textures, as Peter Schubert has shown.

Understanding how the two-part framework works also suggests that the contrast between “successive” and “simultaneous” composition is a false dichotomy.⁷⁰ All compositional process is successive—the composer has to do one thing after another. All composition is simultaneous—even in the early fifteenth century composers composed a melody or paraphrased a chant with reference to what they would compose against it. Take, for example, the hymn setting: the melodic details and cadential formulas of the superius line, based on the chant, had to take into account cadential motions in the tenor, while the tenor pitches were chosen in relation to consonances with the unwritten fauxbourdon voice. An imitative texture, as in a motet around 1500, is just as “successive” as a non-imitative texture from the early fifteenth century. The difference is that the compositional units are shorter—each phrase is built around a two-part framework, but the position of the framework shifts from phrase to phrase.

When we think about compositional process in these terms Pietro Aaron’s famous statement about composing can be understood in a new way:

According to the practice and method of older composers, a composition must first begin with the cantus. Then the tenor should follow, the bass third, and finally the fourth, called alto. . . . It is easily observed, however, that the composers of our time do not follow the custom of older composers to put these four parts together always in this order.⁷¹

I read this passage as a description of the transition over the course of the fifteenth century from the two-part framework that remains in the superius and tenor voices for the whole piece, to the possibility of a two-part framework that can start in any pair of voices and move over the course of the piece: from two-part framework to movable module.

70. This contrast was laid out by Lowinsky in “The Concept of Physical and Musical Space in the Renaissance,” with reference to Pietro Aaron’s observations in *Libri tres de institutione harmonica* of 1516. He elaborated on it in “On the Use of Scores by Sixteenth-Century Musicians.” Bonnie Blackburn extended and refined his work in “Compositional Process,” recognizing that “the phenomenon called ‘simultaneous conception’ arose early in the fifteenth century and that it existed side by side with successive composition not only throughout this century but also the next” (211).

71. *De institutione harmonica* (1516). Translation from Blackburn, “Compositional Process,” 213.

Appendix

Two-Part Framework in Josquin des Prez, *Virgo prudentissima* (105)

Vertical lines indicate where the two-part framework changes voices. Annotations above the staff indicate which voices probably constitute the two-part framework and why.

S & T (module, canon, duo)

Superius

Vir - go pru - den - tis - - - -

Altus

Tenor

Vir - go pru - den - tis - si - ma, - - - -

Bassus

7 A & B (module, canon, duo)

7

- si - ma, - - - -

Vir - go pru - den - tis - - - -

Vir - go pru - den - tis - si - ma, - - - -

14 S&T (canon, cadence)

14

quo - - - - pro - gre - de - ris, quo - pro - gre -

- si - ma, quo - - - - pro - gre - de - ris, - - - - quo pro - gre -

quo - - - - pro - gre - de - ris, quo - - - -

quo pro - gre - de - ris, - - - -

Appendix (continued)

20 **cad. parallel 6ths** **cad. # A&B**

de - ris, quo pro - gre - - - de ris, de - ris, quo pro - gre - - - de - ris, pro - gre - - - de - ris, quo pro - gre - - - de - ris, pro - gre -

26 **T&B (parallel thirds, cadence)** **S&A canon**

de - ris, pro - - - gre - de - ris, qua - si - - - de - ris, qua - si - - - au - ro - - - ra, qua - si au - ro - - - ra,

32 **A&B mod. 10ths** **S&B mod. 10ths**

au - ro - ra, qua - - - si au - - - au - ro - - - ra, val - de ru - ti - qua - si au - ro - - - ra, val - de ru - ti -

Appendix (continued)

37 T&B cadence a & b modules: a b

- ro - - - - ra, val - de ru - ti - lans? fi - li - a
- lans, val - de ru - ti - lans, val - de ru - ti - lans? -

43 a' b cad. S&B PEn A,T,S, modules

fi - li - a Si - on, fi - li - a Si - on, to - - - - -
lans? fi - li - a Si - on, fi - li - a Si - on, fi - li - a Si - on, fi - li - a Si - on, fi - li - a Si - on, fi - li - a Si - on,

49 S&A triadic canon against long note

to - ta for - mo - - - - sa et su - a - - - - -
ta for - mo - - - - sa et su - a - - - - -
ta for - mo - - - - sa et su - a - - - - -

Appendix (continued)

55 T&B (cad.) (start w/ A&B parallel 3rds?)

vis es, —
vis es, to - ta for - mo - sa et su - a - vis
et su - a - vis
to - ta for - mo - sa et su - a - vis

61 4-voice PEn (stretto fuga) IDs: T&S B&A

es, pul - chra ut lu - na, e - le - cta
es, pul - chra ut lu - na, e -
es, pul - chra ut lu - na, e - le - cta
es, pul - chra ut lu - na, e -

67 4-v. PEn; S&T (imitation, 4-v. mods) cad.

ut sol, e - le - cta ut sol.
- le - cta ut sol.
ut sol e - le - cta ut sol.
- le - cta ut sol, ut sol, ut sol, ut sol.

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