To Sing Upon the Book
Oral and Written Counterpoint in
Early Modern Europe

Ronald Broude

Abstract
During the fifteenth century, many musici thought of counterpoint as an improvisational practice in which certain procedures were employed to produce a musical texture in which interest lay in the interplay of two or more melodic lines. The improvisational practice was called singing upon the book (cantare super librum): it required one singer to realize a pre-existing melody (called a cantus firmus) inscribed in a text while one or more other singers (called concentors), reading from that same text, devised, ex tempore, a counter-melody or melodies that obeyed the rules of counterpoint with respect to the cantus firmus. Similar procedures, applied in writing, produced resfacta, contrapuntal texture in textual form. Counterpoint and resfacta were alternative means of providing music for occasions both sacred and secular. During the sixteenth century, several factors combined to alter the relationship between improvised and written counterpoint, and by the end of the century the importance of the former was greatly diminished. The growth of music printing provided an abundance of music for a growing community of amateurs who could read music but were not interested singing upon the book. The composers responsible for this new music embraced emerging ideas that stressed the advantages of written music, which enjoyed permanence that improvised counterpoint lacked, which was usually more observant of the rules than improvised counterpoint could be, and which enhanced the reputations of the composers who created it. As a result of these developments, emphasis shifted from improvised to written counterpoint, from the procedures that produced a contrapuntal texture to the texture itself, and singing upon the book came to be seen by many not as an end in itself but as a way to sharpen com-

1. This paper was prepared for the Society for Textual Scholarship’s 2019 confer-
ence, the theme of which was Ephemerality. The Society is interdisciplinary,
and the paper was therefore prepared to be intelligible to an audience most of
whom would not be specialists in Renaissance music. The indulgence of such
specialists is therefore requested, since they will encounter on the following
pages elementary explanations of terminology and practice as well as simpli-
fied discussions of matters about which, notwithstanding many years of lively
debate, no consensus has been reached; for more controversial matters, refer-
ences to selections of papers representing diverse views will be found in the
footnotes.

posers’ skills. Marginalized by print, improvised counterpoint survived in a much reduced community, largely in Catholic France and Iberia, and eventually, for want of a musical community large enough to sustain it, ceased to be a living musical tradition.

In oral traditions, creation and performance are one and the same, and the entities created are ephemeral. Oral composition proceeds, inexorably, in real time, and when a performance is finished, it is — or at least until the age of electronic recording it was — gone forever, surviving only in memories that decay with time and dissolve with death. The technology of writing can produce entities that mimic certain aspects of orally composed creations, but it can also reconfigure the ways in which those entities are created and transmitted and the forms that they take. The transition from oral to script culture is therefore of interest to several disciplines.

At each such transition, there was presumably a period during which the oral and the written co-existed, and such periods are of particular importance in understanding the relationship between orality and writing. A repertoire in which there was this sort of overlap is fifteenth- and sixteenth-century counterpoint, which was governed by principles applicable to both oral and written composition. This repertoire may be exceptional in important ways, but it does provide a useful window into the dynamics of at least one triumph of writing — or, rather, into the eclipse of one oral practice. Those dynamics involved loyalty to a tradition that viewed counterpoint as a process rather than a product; the growth of a music-printing industry that provided an abundance of music for a growing community of amateurs who could read music but could not improvise counterpoint; and the emergence of a rudimentary “work concept” that portrayed musical compositions as polished and enduring artifacts that, committed to writing, overcame the impermanence and imperfections of improvised music.

Today, counterpoint has several meanings: it may mean the practice of combining two or more melodies according to certain rules; it may mean the musical texture created by this practice; or it may mean one of the melodic lines that make up such a texture. In the late fifteenth century, however, counterpoint had a different meaning: it was a procedure in which a new melody (a countermelody) was constructed by setting successive notes against the notes of a preexisting melody, called a cantus firmus, in accordance with rules governing the relationship of the two melodies. In its most basic form, contrapunctus simplex, one note of the countermelody was placed against one note of the cantus firmus; in its more elaborate
form, *contrapunctus diminutus*, several notes of the countermelody were placed against one note of the cantus firmus, again with the proviso that certain conditions be met. Fifteenth-century counterpoint involved only two voices, the cantus firmus and the countermelody, but a texture of more than two voices could be created by adding more countermelodies each of which obeyed the rules of counterpoint with respect to the cantus firmus, and, for written counterpoint, with respect to each other.²

Some fifteenth- and sixteenth-century composers and theorists distinguished between counterpoint, which was performed by singers improvising, and composition, which was the creation in writing of the texture that improvised counterpoint produced. This distinction was not consistently maintained, but an overall impression created by multiple theoretical works and instructional manuals confirms its existence, as does careful reading of particular texts (one such reading will be offered below).

The rules of late fifteenth-century counterpoint were concerned with two musical elements: intervals and motion. An interval is the distance between two pitches, measured in degrees of the scale. Certain intervals were considered consonant, pleasing to the ear, and therefore permissible in most situations: consonant intervals were the unison, third, fifth and sixth as well as their octave derivatives. Certain other intervals were dissonant and displeasing to the ear; they were permissible only in certain carefully defined situations. Dissonant intervals included the second, seventh and their octave derivatives. The fourth was treated as dissonant in some circumstances and permissible in others.

The second set of rules dealt with motion — the movement of the countermelody from one note to another over a certain span of time seen in relation to the movement of the cantus firmus over the same span of time. In practical terms, rules of motion specified which intervals could be succeeded by which intervals approached in what ways. For example, parallel fifths — two successive perfect fifths — were prohibited.

With *contrapunctus simplex*, every note of the countermelody was expected to be consonant with the note of the cantus firmus against which it had been set. But with *contrapunctus diminutus*, in which two or more notes of the countermelody might be set against one note of the cantus firmus, dissonance between the countermelody and the cantus firmus was permissible, and consonance between these two voices was obligatory only

² Crocker 1962 influentially emphasized the essentially two-part nature of fifteenth-century counterpoint.
at certain points, which were determined by the operative mensuration (a measure of time similar but not identical to modern musical meter).

The form of orally composed counterpoint practiced from the fifteenth century onwards was called “singing upon the book”, cantare super librum (the phrase was usually used with the infinitive cantare). In this practice, one singer realized the cantus firmus, which he read from a text — i.e., the book — while one or more other singers, called concentors, reading that same text, improvised a countermelody or melodies that responded to the cantus firmus while obeying the rules of counterpoint.

Singing upon the book had important features in common with oral composition in various traditions. Like the rhapsodes who retailed Homeric tales, the Anglo-Saxon scops who sang about Beowulf, and the guslar of the former Jugoslavia, the concentor singing upon the book combined in one and the same person the functions of creator and performer; he commanded skills acquired by training and sharpened by experience; he created at performance speed; he drew upon a repertoire of formulae; and his creation/performance was governed by a set constraints. On the other hand, singing upon the book can hardly be considered run-of-the-mill orality. The creator/performer was literate, for he needed to be able to read the cantus firmus. And, whereas the rhapsode, scop and guslar worked solo, the concentor performed as part of an ensemble; at the least there was one other singer, the one realizing the cantus firmus; more often there were other concentors devising other countermelodies. Finally, singing upon the book, rather than re-creating a pre-existent entity — e.g., re-telling a familiar story — addressed new material with each performance, and it seems sometimes to have involved a series of run-throughs intended to refine the rendition, as the concentors tried to fix passages that broke the rules and to polish passages that might not have broken rules but that could have been musically improved.

In the fifteenth century, the relationship between orally composed counterpoint and composition in writing was not a case in which there had existed a fully developed oral practice to which writing was, post facto, applied. At least since the eleventh century, embellishing a pre-existing melody by adding one or more new melodies had been practiced through much of Europe in both oral and written forms, although, in general, innovations probably occurred first in oral practice and only later appeared in written music. Innovations included the re-classification of intervals as consonant or dissonant and the refinement of rules governing which voices were required to be consonant with which other voices at which points.
In a world in which music was equated with performance, improvisation and realizing a fully written-out text were alternative ways of producing music. Compared to singing upon the book, realizing a text was the final stage in a relatively cumbersome and costly process, involving composers, parchment, music scribes, etc.; singing upon the book, however, was a quick and easy means of producing competent counterpoint — and in a world in which good composers and good compositions were far less numerous than they would later become, singing upon the book enabled fresh music to be performed in up-to-date styles with a minimum of bother and expense.

The rules that governed late fifteenth-century counterpoint reflected a style that had coalesced by the 1430s in what is now northern France and the southern part of the Benelux countries, from where “Northerners” carried it to much of the rest of Europe. These Northerners, whose services were much in demand in both courts and religious establishments, offered Europe not just a dazzling style of polyphony but also an easy way to produce it: the singers who emerged from the rigorous musical education provided in northern musical establishments were highly skilled in singing upon the book.

Our most important extant fifteenth-century source for singing upon the book — and, indeed, for the counterpoint of the period generally — was the composer and theorist Johannes Tinctoris (c. 1430–1511). Tinctoris was born in Barre l’Alleude (about 25 kilometers south of Brussels), and probably received his musical training in one of the musical centers nearby. As a young man, he moved to France, studying at the university in Orléans. Early in the 1470s, he took up a position at the Neapolitan court, which under Ferrante I was an important center for the movement that today is called Humanism. During his stay in Naples, Tinctoris prepared a suite of treatises that, taken altogether, covered with an unprecedented thoroughness most of the topics that would have been of interest to theorists, composers, and singers of the day. Tinctoris’ treatise on counterpoint, the *Liber de arte contrapuncti*, offered a thorough exposition of traditional

3. The first extensive effort to gather documentary evidence for Tinctoris’ biography was Woodley 1981. What began as the “Tinctoris Project”, an effort to gather biographical material, to prepare editions of Tinctoris’ theoretical works, and to provide convenient access to sources of those works, has found a home online at http://earlymusictheory.org/Tinctoris. For biographical details, updated as new information becomes available, follow http://earlymusictheory.org/Tinctoris/BiographicalOutline.
teaching, to which the author added some of his own ideas about the management of dissonance. His writings were typical of the ways in which late fifteenth- and sixteenth-century authors of both theoretical treatises and practical manuals were endeavoring to represent music as what Humanists would have considered an *ars* — a skill acquired not simply by mechanically mastering a series of procedures (which is what mere craftsmen did) but by learning the rational bases of relevant rules and by imitating approved models; Tinctoris’ use of Humanist terminology — beginning with *ars* in the title of his treatise — must therefore be approached with an awareness that it was often being applied to music in innovative and hence atypical ways, as part of a programme to make music respectable in Humanist terms.4

Tinctoris explained that counterpoint may be done in two ways. On the one hand, it could be done mentally — i.e., devised without benefit of text, by what we today would call oral composition; on the other, it could be performed from a fully written-out text:

Porro tam simplex quam diminutus contrapunctus dupliciter fit, hoc est aut scripto aut mente. Contrapunctus qui scripto fit communiter resfacta nominatur. At istum quem mentaliter conficimus absolute contrapunctum vocamus, et hunc qui faciunt super librum cantare vulgariter dicuntur.5

This important passage has been much discussed by musicologists over the past sixty years.6 It is usually translated to this effect: “Counterpoint is *made* either mentally or *in* writing [italics added]”.7 Such a translation

4. On the concept of *ars* in Humanist thought, see BAXANDALL 1971, 15–17. In effect, Tinctoris was trying to do for music what Leon Battista Alberti had done for painting a half century earlier in *De pictura*.
5. Tinctoris 1475, Liber II, cap. xx. All quotations from this work are taken from Brussels, Bibliothèque Royale, II 4147, a manuscript prepared probably in Naples in the 1480s, while Tinctoris was resident there. Brevographs have been expanded silently, and some punctuation has been added. For the convenience of readers who may prefer not to refer to this manuscript, references are made to book and chapter, which are consistent among early sources and modern editions.
6. Among the key discussions are Ferand 1957; Bent 1983, 371–91; Blackburn 1987, 210–60; and Wegman 1996, 439–44.
7. For translations rendering fit as “made” and scripto as “in”, see, for example, Seay 1972, 102–3, and Bent 1983, 302.
imposes on Tinctoris’ words the modern idea of counterpoint as a texture that can be created in two ways, by improvising (cantare super librum) or in writing (resfacta). However, as is made clear by a close reading of the entire chapter in which this passage occurs, Tinctoris was concerned here not with how counterpoint may be created but with how it may be performed. The passage may also be translated: “Counterpoint can be done [i.e., performed] in two ways, from the mind or from writing”. The latter reading, I would suggest, conveys the sense that Tinctoris intended. Throughout the chapter, Tinctoris, instead of treating resfacta as a form of counterpoint, presents resfacta as something different from and opposed to counterpoint. This is evident in the title of the chapter, in which Tinctoris promises to explain “in quo resfacta a contrapunctus differt”. It is clear also in the sentence in which Tinctoris explains that counterpoint done mentally — i.e., by singing upon the book — is absolute (absolute) counterpoint, i.e., counterpoint without qualification, or as we might say today, “real” counterpoint. Counterpoint performed from writing is something quite different, resfacta, which most musicologists agree means composed music, i.e., music created in writing and circulated in texts. And the distinction is confirmed by Tinctoris’ condition, discussed below, that in resfacta all voices must be mutually obligated whereas in counterpoint all voices need not be. For Tinctoris, then, counterpoint was produced without benefit of text by skilled concentors, whereas counterpoint done by reading from a text can-
taining all the parts was something that any singer who could read musical notation could produce.

Singing upon the book was appreciated for two reasons. On the one hand, it was valued as an easy way to produce good counterpoint quickly and easily. Esteemed for this reason, singing upon the book was prized for the quality of the music produced, and to produce music of acceptable quality required preparation. At some point shortly before they were scheduled to perform, the singers might engage in collective preplanning, deciding which concentor would sing in which range, where cadences might fall, and how to avoid potential problems. Alternatively, the singers might do several run-throughs, consulting after each to correct passages that they noticed had broken rules or to refine passages that did not break rules but that might be musically improved. And Margaret Bent has suggested that singers might have done successive run-throughs in which a voice was added at each pass. In any of these cases, when the concentors were ready to go before their public, they had a polished presentation ready. Tinctoris describes the process only in general terms:

Non tamen vituperabile immo plurimum laudabile censeo si concinentes similitudinem assumptionis ordinationisque concordiantiarum inter se prudenter evitaverint. Sic enim concentum eorum multo repletiorem suavioremque efficient.

On the other hand, singing upon the book was also a test of skill, a demonstration of the ability to produce on the spur of the moment elegant — or at least musically correct — counterpoint. Listening to skilled concentors had all the excitement of attending any exhibition of virtuosity: there was the anticipation, the uncertainty about whether or not the performer would be successful, and the satisfaction produced by his pulling off something extremely difficult. Valued for such reasons, singing upon the book required ex tempore improvisation, for preparation of any sort reduced the level of skill demonstrated. Fans who appreciated singing upon the book as a display of skill seem to have denigrated preplanned

performances: presumably, Tinctoris was answering such fans when he said that he considered concentors’ consulting not as blameworthy (vituperabile) but as admirable.

Tinctoris applied the same rules to both counterpoint composed mentally and counterpoint performed from writing, with one exception: with counterpoint performed from writing, each voice was required to observe the rules of counterpoint with respect to all the other voices — Tinctoris’ formulation was that the voices must be “mutuo obligentur”, i.e., mutually obligated — but when two or more concentors were singing upon the book it was sufficient that each mentally composed voice obey the rules of counterpoint with respect to the cantus firmus only:

In hoc autem res facta a contrapuncto potissimum differt, quod omnes partes reifacte sive tres sive quatuor sive plures sint, sibi mutuo obligentur, ita quod ordo lexque concordantiarum cuiuslibet partis erga singulas et omnes observari debeat. [. . .] Sed duobus aut tribus, quatuor aut pluribus super librum concinentibus alteri non subiicitur. Enimvero cui libet eorum circa ea, que ad legem ordinationemque concordantiarum pertinent, tenori consonare sufficit.14

The reason for this exception is easily inferred: when counterpoint was performed from a text, the composer who prepared the text controlled all the voices and had the leisure to correct breaches of the rules, but when two or more concentors were devising their lines without prior consultation, no concentor could know what the other concentor or concentors would do, so he had no way of making his line obey the rules of counterpoint with respect to the lines of those other concentors.

Notwithstanding the fact that they were considered two different activities, improvising counterpoint and writing in contrapuntal textures shared the same compositional procedures.15 Notionally, when writing, a composer simply took the part of each concentor in turn. And this was quite natural in an age in which all composers were — or had been at some point in their careers — singers. Moreover, singing upon the book and writing counterpoint were seen to complement each other: by requiring singers to make decisions on the spur of the moment, the former sharpened the skills that composers used when writing, while the latter, by providing opportu-

15. The most thorough survey of Renaissance compositional process remains Owens 1997. See also Blackburn 1987.
nity to study recurrent situations at leisure, enabled composers to develop strategies that could be applied when singing upon the book.16

Composers mimicked the procedures of concentrors by composing sequentially: each voice was composed and entered completely before work on the next voice was begun. The composer began by laying out the cantus firmus, making any adjustments in value or pitch that he might anticipate would be helpful during the next stages of composition. Next, he added a second voice, a process involving essentially what a concentor would have done: construct a countermelody in which the rules of counterpoint were followed with respect to the cantus firmus. When the second voice had been completed, the composer entered the third voice: this would have been considerably more difficult than composing the second, since the third voice would have had to obey the rules of counterpoint with respect not only to the cantus firmus but also to the first, previously composed, countermelody. Fifteenth- and early sixteenth-century layouts and the conventions of staff notation made composing counterpoint of more than two voices an awkward task.

The layouts in use reflected both the compositional process and a larger conception of musical entities as having their existence exclusively in performance. Several layouts were employed, but in each, each voice was treated as a discrete unit. In part books, each voice was entered on a separate physical piece of parchment or paper — on a fugitive leaf or on a page in a booklet containing the parts for one voice (e.g., tenor) for several different pieces. In choir books, each voice occupied a quadrant of an opening (for examples of such layouts, see Fig. 1). Such layouts would therefore have been useful only for performing, for they rendered it difficult if not impossible to imagine how the several voices would sound together.17 Because


17. Owens 1997, 48–51, suggests that composers might have been able to read such separate voices and to combine them mentally. On the other hand, Boorman 1986, 222, argues that such layouts were “useless to anyone except a complete set of performers. The act of silently studying music from such books was, if not impossible, very tedious”. Judd 2000, 9–16, seeks to reconcile these views. Like Boorman, I am inclined to doubt that the readership of such publications was able to construct from such layouts a mental “image” of multiple notes sounding simultaneously; this was, after all, an age in which silent reading of verbal texts (a much simpler process) was a skill far from universal.
Figure 1a. Part Book: Morley 1594, Cantus B1r. One of four part books; each part book is musically useless without the other three.

Figure 1b. Choir Book: Petrucci 1504, B3v–B4r. The separate parts are (clockwise from upper left) Cantus (by convention not identified as such), Altus, Bassus, Tenor.
the composition emerged only as the result of combining voices in performance, there could be little idea of the composition as an organic whole in which each voice had a carefully worked out function. In fact, new voices were often added — sometimes many years later and by agents other than the original composers — to compositions that had been regarded as completed.

Figure 1c. Musical Example in a Treatise: parts entered adjacent to each other on the same staff. Gafurius 1496, dd3r.

Figure 1d. Table Book: Dowland 1600, L1v–L2r. The parts are oriented so that the music may be performed by four singers sitting around three sides of a table.
Because part book and choir book layouts presented individual voices separately, to identify what notes in what voices were sounding at any particular moment, a composer was obliged to count mensural units in each voice, and the staff notation of the day made doing so a difficult process. Until well into the sixteenth century, there were usually no bar lines to divide staves into uniform metrical units, and, unlike modern notation, in which the spacing between notes has some relation to their value (notes of greater values are followed by more space than notes of lesser values), fifteenth-century notation spaced notes equidistantly from each other, regardless of their values (observe how notes are spaced in the examples in Fig. 1). These inconveniences made composing a second or subsequent countermelody not only tedious but conducive to error, and it must have been a taxing operation to fix a problem discovered after all the voices had been entered.  

The way in which instructional manuals of the day dealt with consonances suggests that countermelodies, whether created by improvisation or by writing, were built up in units spanning the movement from one obligatory consonance to the next. Tinctoris discussed each consonance in turn, and all the discussions followed the same plan: each began with the etymology of the interval's name and the features that define it (thus providing a theoretical grounding) and proceeded to a list of the intervals from which that consonance might be approached and followed. In effect, Tinctoris offered a catalogue of the various situations that a concentor or composer might encounter and of the acceptable options in each situation. A concentor or composer who had mastered the contents of this catalogue constructed his countermelody by reading ahead: from one obligatory consonance, he looked ahead to identify the next note of the cantus firmus with which his countermelody was required to be consonant; having identified that note, he reviewed mentally the options available to him for moving from the present obligatory consonance to the next, and he then chose from the available options the note he would sound and the consonance it would produce; finally, he worked his way, as smoothly as he could, from the present note to the note needed for that next obligatory consonance. For a concentor singing upon the book, the decision-making process must

18. An example of an error in counting is mentioned in correspondence between Giovanni Spataro and Pietro Aaron. For a discussion of this passage, see Blackburn, Lowinsky & Miller 1991, 122–3; the edition of the letter — Letter 30 — is printed on 415–26, with the relevant passage occurring on 426.
have required only a split second; for a composer, a provisional decision was probably reached in a comparable span, although more time was available to reconsider that decision. The process was repeated from one obligatory consonance to the next until the end of the cantus firmus was reached. The resulting line was not so much a carefully shaped melody as it was the result of a series of local decisions.

In his catalogue of consonances, Tinctoris dealt with two voices only — the cantus firmus and the countermelody — but later writers provided instructions for the addition of third and fourth voices (second and third countermelodies) to existing two- and three-voice textures. Such catalogues were given sometimes in prose, sometimes in tables, and sometimes in musical notation (Fig. 2 provides a sampling of tables). Although beginners might have memorized these catalogues, with practice an experienced concentor or composer would have internalized the options available in each situation, and eventually, after he had encountered each situation often enough, he would have found that providing an appropriate response — a response characteristic of him and therefore constitutive of his personal style — had become second nature to him.

The procedure by which a composer added a third voice to a two-voice texture was similar to that for adding one voice to a cantus firmus in that it moved incrementally from obligatory consonance to obligatory consonance. It was more complex, however, for it was necessary to consider not only the notes sounded by the voices already composed but also the intervals between them. Having arrived at a point of obligatory consonance, a composer located the next such point; he identified the notes of the cantus firmus and the existing countermelody sounding at that point and the interval between them; taking account of the present consonance, he mentally reviewed his options and chose one; he then worked his way from his present note to the note he had chosen. If he was adding a fourth voice to a three-voice texture, he identified the notes sounded by the three existing voices and the intervals among them. Such processes enabled a composer to construct each countermelody by proceeding in small, manageable segments, but as with the concentor working against a cantus firmus only, each countermelody was the cumulative result of local decisions. Compared to a composer, each concentor devising a voice in a three- or four-part texture had a relatively simple task, and that task was the same for all the concentors: to improvise a part that followed the rules with respect to the cantus firmus. Concentors doing a series of run-throughs, however, must have conferred between run-throughs to identify points at
Figure 2a. AARON 1523, K2r. A chart for three-voice composition, to be read: If the Tenor (left-hand) column sounds this scale degree, then the Bassus and Altus may sound the scale degrees shown.

Figure 2b. GAFURIUS 1508, G4v. A chart in a form usually used to show the mathematical relationships of intervals, but here used to show which notes are consonant with which other notes. The notes of the gamut are presented on a staff of eleven lines, with arcs on either side that connect each pitch to other pitches with which it is consonant.
A Table containing the vfull cordes for the composition of foure or more partes.

### OF THE UNISON.
- If the treble be and the base your Alt or meanes shall be, an union with the tenor a third under the tenor a fifth or sixth above the base.
- But if the base be the Alto shall be, a fifth under the tenor a third or tenth above the base.
- Likewise if the base be then the Alto may be, a first under the tenor, a third or tenth above the base.
- And if the base be the other parts may be, an eight under the tenor, a third, or 6, 10, or 12 above the base.
- But if the base be the meanes shall be, a fifth or twelfth above the base.

### OF THE THIRD.
- If the treble be and the base the Alto may be, a third with the tenor a third under it an unison or 8 with the parts.
- If the base be the Alto may be, a first under the tenor, a third or tenth above the base.
- But if the base be then the Alto shall be, a fifth or first above the base.
- And if the base be the other parts may be, an eight under the tenor, in the unison or eight to the tenor or base.

### OF THE FOURTH.
- When the treble shall be and the base then the meane shall be, a fourth to the tenor, a fifth under the tenor, a third, or 10 above the base.
- But if the base be the Alto shall be, a fifth under the tenor, a 10 above the base.

### OF THE FIFTH.
- If the treble be and the base the Alto may be, a fifth above the tenor, an eight under it, a 3 or 10 above the base.
- And if the base be the Alto shall be, a first under the tenor, an unison or 8 with the parts.

### OF THE SIXTH.
- If the treble be and the base the Alto may be, a first with the tenor, a first under the tenor, an unison or eight with the parts.
- But if the base be the Alto shall be, a third under the tenor, a fifth above the base.
- Likewise if the base be the meane likewise shall be, a tenth under the tenor, a fifth or 12 above the base.

### OF THE EIGHT.
- If the treble be and the base the other parts shall be, an 8. with the tenor, a third, or 6, 10, or 12 above the base.
- So also when the base shall be the other parts may be, a 5 under the tenor, a 3 above the base.
- And if the base be the other parts shall be, an eight under the tenor, a 3, 10, or 12 above the base.
- Lastly if the base be the parts shall make, a 12 under the tenor, a 10, or 15 above the base.
which there were problems, agreed upon solutions, and applied the solutions during the next run-through.

Scholarship over the last twenty years has stressed the degree to which both concentors and composers benefitted from training that provided them with strategies for managing material when improvising or composing. Jessie Anne Owens has stressed the degree to which composition was done mentally, and Anna Maria Busse Berger has studied the ways in which concentors and composers were taught how to store material in memory, organize material in memory, and recall from memory material needed for specific tasks. Such strategies had been used by the ancient Greeks and Romans to train their orators, whose orations were performances prepared and delivered without benefit of text. The teachings of the Ancient World descended through the Middle Ages in a rich tradition of *ars memoria* literature. Humanism, with its intense interest in Classical oratory, made such strategies a basic part of education. Although it was in their application to verbal entities that aspiring singers would first have encountered them, many of these strategies were readily transferable to musical composition.

For both oral and written composition, a function of such strategies was to simplify the task of devising a countermelody by minimizing the number of decisions that a concentor or composer would be obliged to make on the spur of the moment. The tables for managing consonances and interval successions (discussed above) provided means for managing obligatory consonances. To reduce the amount of freely composed material between such consonances, concentors and composers accumulated repertoires of melodic formulae that enabled them to cover the interval from the note being sounded at one consonance to the note being sounded at the next in a musically effective way; depending on the time between the two consonances, melodic formulae could be adjusted by altering values or by adding ornamentation, so that the right note was reached at the right moment. Contrapuntal formulae were also available to concentors and composers: these consisted of standardized successions of intervals, such as those employed to approach and form cadences.

Strategies applicable to larger units substituted for the need to invent new musical material the possibility of developing a musical idea by per-

---

22. Antoine Busnoys, for example, used what Perkins 2018, B:121, describes as “an idiomatic flourish in descending minims that can be seen as a sort of signature”.
forming a series of operations on it: such operations included diminution, augmentation and inversion. Larger scale planning was also available in the form of canon, broadly understood as a verbal instruction to derive from a given voice by a specified procedure one or more other voices. Although there exists no direct evidence of how such formulae and operations were employed in improvised counterpoint, we may draw inferences from the many such formulae and operations found in the written music that has come down to us.

Central to the practice that Tinctoris described was a sense of counterpoint as an institution sustained by a community that accepted certain constraints and followed certain procedures in order to produce a certain sort of music. This sense explains why composers of written counterpoint were seemingly indifferent to some advantages offered by writing. Aside from the obvious advantage that writing made possible multiple performances of the same musical entity, the principal benefit that composers of counterpoint gained from writing was the ability to manipulate time. Unlike a concentor improvising his countermelody in real time, a composer with quill in hand could slow time down to weigh his options, could stop time to look and plan ahead, or could reverse time to revisit and revise a passage that had created problems unnoticed when it was inscribed or had led to unanticipated ones later in the composition. The ability to manipulate time in this way is what made it reasonable for Tinctoris to insist that all of the voices in written counterpoint be mutually obligated.

A potential advantage of writing that did not gain quick acceptance was the ability to compose several voices at the same time. Today, we call this procedure “simultaneous composition”, a term that covers practices ranging from preplanning before writing voices sequentially to composing all of the voices — including a voice functionally equivalent to a cantus firmus — by proceeding through a piece in small segments, entering a few notes or a phrase in each voice and completing all the voices in a segment before moving on to the next.²³ Composing simultaneously should have had several advantages: a composer could easily keep track of his place in each voice, as he was dealing with all of the voices at the same point in his composition and with only a few notes in each voice. He would therefore have been less likely to break rules because of miscounting mensural units, and he was less prone to work himself into dead ends.

²³. That Renaissance composers may have employed simultaneous composition was proposed in Lowinsky 1946 and 1948; Lowinsky’s ideas were developed in Blackburn 1987.
Simultaneous composition was evidently known in German-speaking regions shortly after 1500: the German theorist Johannes Cochlaeus, in his *Musica* of 1507, offers both simultaneous and sequential composition as strategies available to composers: “Possunt autem omnes partes simul componi, et quelibet item primum ac seorsum”. The procedure was known in Italy by the 1520s: the Italian theorist Pietro Aaron, in his *Thoscanello de la musica*, published in 1523, lists some of the problems encountered by composers of a previous generation when composing sequentially, and observes that modern composers (“li moderni”) consider all of the parts together (“considerano insieme tutti le parti”). Yet even though composers were aware of simultaneous composition, they were slow to take advantage of it; sequential composition remained the preferred mode of proceeding into the seventeenth century. Paradoxically, the advantages of simultaneous composition were recognized even by those who advocated sequential composition: Gioseffo Zarlino in *Le istitutioni armoniche*, published in 1558, observes that composing all the parts together (“tutti le parte insieme”) is easier than adding a third part to two existing parts (“aggiungere a due parti la Terza”); the latter, he adds, is quite difficult to do.

A benefit of writing that provided even more advantages than simultaneous composition was the layout that English speakers today call score. In its fully developed form, score represents each voice on its own staff, and it combines the staves of all the voices into systems in which staves are placed one above another, co-ordinated temporally, so that the notes sounded at any particular moment line up in the same vertical plane. Moreover, score divides systems into uniform metrical units marked off by bar lines. With score, a reader — whether a performer, a composer, or a student — can conveniently see what notes are being sounded by what voices at any moment in a piece.

Score offered composers more convenience and greater control over their compositions than had previously been possible, rendering passages

---

24. Cochlaeus 1507 [3d ed.], Eiv. This book, which Cochlaeus had published under the name Johannes Wendelstein, went through three editions, the second and third being expanded versions of their immediate predecessors. The passage quoted occurs in the third edition.

25. Aaron 1523, c. lv. This passage has received much attention, since it is central to the argument about simultaneous composition propounded in Lowinsky 1946, 67–8 and pursued in Blackburn 1987, 212–19.

26. Zarlino 1558, 260: “[. . .] altro è il comporre insieme tutte le parti, & altro è aggiungere a due parti la Terza ; che è cosa molto difficile [. . .]”.
that broke rules easy to identify and easy to correct. It also enabled a composer to compose out of temporal order: he could start at the beginning, skip to a point farther along, and then fill in what lay between. And score meant that each voice could easily be subordinated to an overall conception, producing a composition that was more an organic whole and less a product of the additive process that had been a characteristic of counterpoint produced by sequential composition.

But like simultaneous composition, score was slow to gain acceptance. An essential principle of score — the inscription of two or more voices on a graph in which the horizontal axis tracks the passage of time while the vertical axes mark pitch — was understood by the beginning of the sixteenth century. That principle informed a layout that may be called the “expanded staff”, a staff that extended beyond the normal four or five lines, providing as many lines as necessary to accommodate the lowest and the highest notes in a contrapuntal texture. The largest such staff contained eleven lines and could easily accommodate four voices, but the ten-line staff (scala decemlinealis) was the configuration most frequently used. Two or more voices could be entered on expanded staves, with notes sounding simultaneously entered more or less in the same vertical plane (two expanded staves are shown in Fig. 3). Such staves were certainly known in some regions by the early sixteenth century, but they were still experimental layouts. However, beyond their occasional use in manuals on composition, expanded staves were employed only by beginners, as a means to facilitate their mastering combinations of intervals; proficient composers were expected to do without them. Andreas Ornithoparcus puts the matter thus:

Figure 3. Expanded Staves

Figure 3a. Six-line Staff. Cochlaeus 1507, F2v. The staff accommodates 2 voices. The upper-voice is printed in void notes, the lower in black notes.

Necessarium erit artis huius Tyronibus, scalem decemlinealem ut formem, formatam cancellis distinguant. Ita ut singula tempora, singulis cancellis, clavibus rite signatis, ne confusa notarum commixtione impediantur, inscribere valeant. Prenstantius tamen est absque scala condere, quod cum difficile sit, a scala incipiant adolescentes, hoc modo.²⁸

The view of such layouts as devices for enabling neophytes to gain proficiency in an oral activity is reminiscent of the use of writing by the ancient Greeks and Romans to train their orators: beginners might work out their orations on wax tablets, but mature orators were expected to compose their orations and to deliver them without benefit of text; only after an oration had been given might it be committed to writing, no doubt in a polished form incorporating second thoughts.

Notwithstanding the benefits score offered, no form of score seems to have been widely used for composing or performing earlier than the middle of the sixteenth century,²⁹ and it was not until the seventeenth century, when an unambiguously harmonic language gained currency, that score

²⁸. Ornithoparcus 1519, L3r.
²⁹. It is sometimes assumed that in the early sixteenth century scores must have been used in composing but that none has survived. See, for example, Lowinsky 1949 and Blackburn 1987, 268, 276. There is, however, no evidence to support this view, and the absence in any manual of the time of any description of composing in score argues against it. Owens 1997, 98–100, rightly expresses doubt that score was used for composing before the second half of the sixteenth century.
was securely established both as a compositional tool and a layout for dissemination in manuscript and print.

There were several reasons for composers’ seeming indifference to some of the benefits that writing offered, but all can be traced to the view of counterpoint as a particular procedure for producing a particular sort of music. A sense of professional identity must have played its part: for all the Humanist trappings in which it was described, the practice of improvising and writing counterpoint had many of the qualities of a medieval mystère, loyalty to which precluded the use of certain procedures that writing made possible. 30 For composers whose training had taught them to sing upon the book, it was natural to compose sequentially, since composing one voice at a time echoed what they had done as concentors. Composers who used simultaneous composition were managing several voices at once, and so they were no longer doing what concentors did. For such composers, simultaneous composition was not just an interesting technical advance over fifteenth-century compositional procedures; it was a new and different way of looking at counterpoint, for it shifted emphasis from where it traditionally had been — on the process of producing a contrapuntal texture — to the texture produced by that process. True, by using this new procedure, composers could produce a musical texture that was similar to — and often more complex, more polished, and musically more satisfying than — that produced by sequential composition, and they could do so more easily, but what they were doing was no longer counterpoint in the traditional sense. 31

For similar reasons, score was not a viable option for composers who saw counterpoint as a set of procedures. After all, for such composers, score was not a means to create contrapuntal texture more easily but merely a device to prepare students for the more difficult tasks of singing upon the book and composing sequentially; to employ score would have been infra dig. The relationship between orally composed and written counterpoint was reconfigured during the sixteenth century, but several factors were involved, and most of the century was required to complete the shift from

31. The situation is perhaps most easily understood by thinking of twentieth-century Jazz, which in its original form was a style that could only be performed without the use of texts. For purists, therefore, the idea of written Jazz is a contradiction in terms, and, although compositions can be written in a style that imitates performed Jazz, and actual performances can be transcribed note for note, in neither case will performances done from the texts thus produced be regarded by purists as “real” Jazz.
concern with the process to concern with the product. Some of the factors were musical. By 1600, polyphony, which had been the dominant feature of fifteenth- and sixteenth century music, was no longer the only game in town: accompanied monody, which had had a long tradition in improvised form, had begun to appear in manuscripts and prints, and we can trace the development of a texture in which interest lay not in the interplay of several melodies but in a single melody supported by a bass that generated harmonies. And by 1600, simultaneous composition and score had become acceptable: with the advantages they offered, creating textures similar to those produced by traditional procedures required less effort and less skill, and for composers whose training had not imbued them with a fierce loyalty to the old procedures, honoring the constraints of traditional counterpoint must have seemed pointless. In addition to purely musical factors, developments sociological, technological, and theoretical combined to marginalize improvised counterpoint.

The sixteenth century saw substantial changes in the make-up of that part of the musical community actively engaged in performance. Castiglione was reflecting his society's cultural priorities when he stipulated that his courtier should be musically competent. Many men and women of gentle birth could read music, but such people were not necessarily interested in learning how to sing upon the book, and the practice was therefore left to “professionals” whose training in choir schools had prepared them for careers in music. Amateurs who could read music but could not sing upon the book were therefore a constituency for written music, and during the sixteenth century composers and printers developed an industry that could not only meet the needs of this constituency but could encourage its growth.

The sixteenth century, as has been well documented, saw continuing increases in the number of printers who specialized in music — or at least who made it an important part of their catalogues — and this in turn created a demand for newly composed music. The earliest printed collections, such as Petrucci's Odhecaton and his series of motets, had substantial retrospective components, but a market for new music quickly developed, and a music industry consisting of printers and composers emerged to supply it. This new industry required several decades to sort itself out, but by the 1530s there were important music printers in several European cities —

including Venice, Paris, and Lyons — turning out ever increasing numbers of publications.33

For the composers responsible for this new music, it was natural that interest in the procedures by which they composed should be complemented by an interest in the products that those procedures produced, and thus there arose a concern with the ontological status of musical compositions. This concern had its origins in fifteenth-century Italian efforts to make music respectable in Humanist terms, but in the generations after Tinctoris it was pursued largely in German-speaking territories. Recognizing the ephemerality of musical performance, authors of theoretical treatises and instructional manuals stressed the idea that the technology of writing recorded entities — now referred to as opera — that could be performed repeatedly and that enhanced the reputations of their creators. Greater effort was now made to identify the best of these entities by title and to name the composers responsible for them.34 Movement in this direction can be seen in the distinction among musica theorica (the mathematical principles to which music gives audible form), musica practica (the application of those principles in performance) and musica poetica (music that goes beyond understanding and performance and leaves a record of performance in a work or opus, which, inscribed in a text, can incorporate a high degree of polish and can generate other similar performances). Nicolauus Listenius offered a typical expression of this idea in his Musica, one of the most frequently republished music manuals of the sixteenth century (the quotation below comes from the 1537 edition):

[Musica] poetica quae neque rei cognitione, neque solo exercitio contenta, sed aliquid post laborem relinquit operis, veluti cum a quopiam Musica aut Musicum carmen conscribitur, cuius finis est opus consumatum et effectum. Consistit enim in faciendo sive fabricando, hoc est, in labore tali, qui post se, etiam artifice mortuo, opus perfectum et absolutum relinquat.35

33. For Petrucci in Venice, see Boorman 2006; for Attaingnant in Paris, see Heartz 1969; for Moderne in Lyons, see Pogue 1969; for a general discussion of the impact of printed music, see Van Orden 2015 and the papers in Van Orden 2000.

34. On interest in attributions see Van Orden 2014 and Feldman 2000.

35. Listenius 1537, c. a3v. RISM lists 46 printings of Musica between 1535 and 1583. The expression of this idea was formulaic, and similar formulations appear in works such as Finck 1556, c. a2v, and Hebrst 1643, 1. There is a substantial musicological literature on the development of this idea, the source of which
In this context, the Latin _poetica_, which preserves the sense of the Greek πόημα, something made, suggests an artifact that has been brought into being by the application of skill, and so associates written music with a materiality that implies permanence. In fact, Johannes Herbst’s early seventeenth-century formulation of this commonplace explicitly compares writing a musical work to constructing a building. The idea of _musica poetica_ as formulated in the sixteenth century was far removed from the “work concept” that developed towards the end of the eighteenth century and that shapes much of our thinking today, but it represents a decisive shift away from the idea of music as what Classical authorities called a practical _ars_, an _ars_ of action upon the completion of which nothing remains, and towards the idea of a musical composition as a stable entity recorded by its creator in a text and therefore having its existence apart from performance.

This new attitude towards written music resolved an important inconsistency in Tinctoris’ thinking. Tinctoris had regarded “real” counterpoint as something that was improvised rather written, but his ideal had been performance in which each voice obeys the rules of counterpoint with respect to all the other voices. However, singing upon the book in more than two voices could rarely if ever have satisfied this condition: mutual obligation

---


37. Thus Quintilian, II.xviii: “aliae [artium] in agendo, quorum in hoc finis est et ipso actu perfectit nihilque post actum operis relinquit, quae πρακτική dicitur, quals saltatio est; aliae in effectu, quae operis, quod oculis subiciuntur, consummatione finem accipiunt quam ποιητική appelamus, qualis est pictura”. This passage is probably the immediate source for the idea of _musica poetica_.

38. The seminal (if controversial) essay on the “work concept” remains Goehr 1992, but for divergent views, see the essays in Talbot 2000. On ideas anticipating the work concept in the fifteenth and sixteenth centuries, see Perkins 2003 and Lütteken 2015.
could be achieved consistently only in writing. Recognizing written counterpoint as a valid form of counterpoint resolved this contradiction.

The idea that writing could enable musical entities to achieve the dignity of “works” was attractive to members of the musical community, but such use of the word “work” (opus, opera, obra, œuvre, Werk) did not necessarily reflect usage outside that community; rather, it was employed self-consciously by musici in the face of a longstanding prejudice against regarding any entity produced by one of the “practical” arts — music, drama, or dance — as a work. Works, after all, were creations that withstood the test of time, commanding respect and readers through the ages. But songs, plays and dances, because they were performed and because performance was fleeting, lacked permanence. Moreover, because performance even from fully written-out texts often involved improvisation — performers frequently added ornamentation or made other adjustments ex tempore — musical entities were particularly vulnerable to shifts in fashion: entities fortunate enough to survive a change of fashion were likely to be modified to satisfy the next wave of taste: new forms and patterns of ornamentation might be applied, and fourth voices might be added to three-voice chansons. To update in an analogous fashion a verse of Virgil or a stanza from Dante’s Commedia would have been unthinkable, and so outside the musical community performing entities were seen to lack the long-term stability required of works. And changes in musical fashions occurred with depressing regularity: writing in the 1470s, Tinctoris was famously unwilling to acknowledge the worth of any music composed more than forty years earlier. Nevertheless, within the world of music if not necessarily in the wider world, the idea of musica poetica gained currency.

Because of such developments, by the end of the sixteenth century, counterpoint had come to mean the texture rather than the procedure

39. Tinctoris had used the word “opus” to denote musical compositions (e.g., Prologus: “Quorum omnium omnia fere opera tantum, suavitudinem redolent, [. . .]”), but he had not provided the intellectual underpinning for use of the word that Germans such as Listenius were to offer.

40. Such a prejudice was still in force at the beginning of the seventeenth century, and underlies the notoriously adverse response in 1616 to Ben Jonson's publication of his collected plays and poems under the title Workes. One wit wrote mockingly: “Pray tell me Ben, where doth the mystery lurke | What others call a play you call a worke?” (Wits Recreation 1640, G3v).

41. Tinctoris 1475, Prologus: “Neque, quod satis admirari nequeo, quipiam compositum nisi citra annos quadruginta extat, quod auditu dignam ab eruditis existimetur [. . .]”.
that created that texture, and the idea that “real” counterpoint must be orally composed had disappeared. In 1610 Giovanni Battista Chiodino could publish a manual teaching how “di far Contrapunto à mente, & à penna”, and by 1643, Johannes Herbst could casually lump composition and counterpoint together. In 1597, Thomas Morley brought together in a single forceful paragraph several of the themes that had marked the transition from an emphasis on performance to an emphasis on written composition, from concern with the procedures that produced contrapuntal texture to concern with the texture that those procedures produced. In such a context, the ability to sing upon the book (which Morley calls “descant”) had no use other than to sharpen the skills of composers; producing a work, which had permanence, had become preferable to improvising a performance, after which nothing remained; and singing skillfully upon the book, which now had no purpose of its own, risked seeming suspiciously like vulgar display:

for that singing extempore upon a plainsong is in deede a peece of cunning, and very necessarie to be perfectly practiced of him who meaneth to be a composer for bringing of a quick sight, yet it is a great absurditie so to seeke for a sight, as to make it the end of our studie applying it to no other use, for as a knife or other instrument not being applied to the end for which it was devised (as to cut) is unprofitable and of no use, even so is descant, which being used as a helpe to bring readie sight in setting of parts is profitable, but not being applied to that ende is of it selfe like a piffe of wind, which being past cometh not againe, which hath beene the reason that the excellent musitions have discontinued it, although it be unpossible for them to compose without it, but they rather employ their time in making of songes, which remaine for posterity then to sing descant which is no longer known then the singers mouth is open in expressing it, and for the most part cannot be twise repeated in the same maner.

The views expressed by Morley were widely but not universally held: in the seventeenth century there remained conservative musical communities, especially in Catholic France and Iberia, in which singing upon the book remained a valued skill. In 1604, when the post of choirmaster at the

42. Chiodino 1610.
43. Herbst 1643, 5.
44. Morley 1597, 121. Errors involving transposed or inverted letters have been silently corrected.
Cathedral of Toledo became vacant, applicants were expected to demonstrate an impressive range of skills in orally composed counterpoint: in their auditions they were required to add new voices *ex tempore* to a cantus firmus and to complexes of two and three pre-existing voices, and they were asked to improvise canons enabling singers following their direction to produce counterpoint in three and four voices.\(^45\) Philippe Canguilhem has traced the continuance of a sophisticated practice in Spain into the eighteenth century. In France, Joseph-Louis Marchand published in 1739 a *Traité de contrepoint simple, ou chant sur le livre*, although he seems to have been describing a simplified skill set producing an elementary style of counterpoint for use in certain situations in religious establishments.\(^46\)

But the wide availability of printed music had reduced the need for skilled concentors, and the loss of interest in counterpoint as a set of procedures had produced a corresponding decline of interest in singing upon the book, which was, after all, the audible application of those procedures. To remain a living tradition, improvised counterpoint required a community large enough to sustain a body of singers who could carry on the practice and could train the next generations; also necessary was a knowledgeable and appreciative audience for whom singing upon the book was more than a curious practice preserved for its nostalgic value rather than for any practical purpose. Such a critical mass was lacking, and by the end of the eighteenth century, singing upon the book had ceased to be a relevant form of performance.

The rapid growth of interest in Early Music, beginning in the 1970s, encouraged two developments that might have been expected to generate a revival of singing upon the book. Renaissance music, scored up, published in modern editions, and recorded by amateur and professional groups, acquired a substantial and musically sophisticated audience, and courses in historical performance became essential components of early-music programs offered by universities and conservatories. But a musical tradition such as singing upon the book requires a mix of innovation and continuity if it is to remain alive, and once continuity has been broken the tradition cannot be revived. Thus, although in the odd classroom or cathedral

\(^45\) Canguilhem 2011, 55–8.
\(^46\) Marchand 1739. Marchand’s book was published in Bar-le-Duc (in what is now Alsace); its title specifies that the skills will be useful in religious establishments “tant en France, que de Flandre & autres”; and the author, iii–iv, names specific cities in what is now eastern France where practitioners were likely to be appreciated.
there have been experiments in teaching how to sing upon the book in accordance with rules such as those set out by Tinctoris, such projects are undertaken with the debilitating awareness that they will produce little of musical value and that they are merely historical exercises.

The Broude Trust

Works Cited

Manuscript Sources

Tinctoris, Johannes. 1475. Liber de arte contrapuncti. Bibliothèque Royale, II 4147, cc. 52r–101r.

Printed Sources


Bermudo, Juan. 1555. El Libro llamado declaración de instrumentos musicales. Ossuna: Juan de Leon.


Dowland, John, 1600. The Second Booke of Songs or Ayres, of 2. 4. and 5. Parts. London: Thomas Este.


———. 1508. Angelicum ac divinum opus musice. Milan: Gatardo da Ponte.


