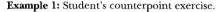
# "Are My Ears On Wrong?": Hearing Polyphony, ca.1375–ca. 1450

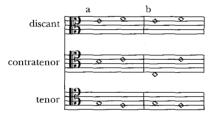
# Ernest H. Sanders

"... certainly historians have a right to impose their own modern categories on the past which they are trying to understand ... we may hope to gain a better understanding if we try to recapture its categories *as far as that is possible.*" (Kristeller 1966:29)<sup>1</sup>

#### **Counterpoint: Elements and Progression**

Discipulus: Ecce contrapuncti exempla mea a te heri ad conficiendum mandata. Sed quartam, dissonantiam pessimam, inter contratenorem discantumque, semel in exemplo secundo, at in primo adeo bis video. Si tamen in fine secundi contratenorem in tertiam super tenorem, id est in sextam de discantu ponam, nonne duas consonantias imperfectas formans totam dissonantiam vitare possim?





Magister: Si supranum seu discantum sit in ottava cum tenore tunc contratenor debet poni in quinta cum tenore: et sic erit in quarta cum discantu: que quidem quarta resonat diatesseron et est auditui pessima dissonantia: Nam quarta non est species contrapunti: sed quia tenor et discantus positi in ottava resonant diapason perfectissimam concordantiam, et contratenor cum tenore in quinta positi reddunt bonam diapenthe consonantiam: ideo contratenor cum discantu in quarta positi non videntur discordare. Nam ibi sunt due concordantie perfecte diapason scilicet et diapenthe et unica dissonantia scilicet diatesseron: quoniam igitur maius occupat minus et minus a maiore confunditur due prime concordantie tam suaviter ad aures accedunt et eas amicabili auditu occupant, quod vix discordantia ab audientibus percipi potest.

Student: Here are my examples of counterpoint that you told me yes-

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terday to complete. But I see that there is a fourth—a very bad dissonance between contratenor and discant, once in the second example, but in the first even twice. If, however, I put the contratenor a third above the tenor at the end of the second [example], i.e. a sixth from the discant, wouldn't I, [thus] writing two imperfect consonances, be able to avoid any dissonance?

*Teacher*: If the *supranum* (or discant) forms an octave with the tenor, then the contratenor must be written a fifth from the tenor; and thus it will be in the position of a fourth from the discant, which fourth sounds a fourth and is heard as a very bad dissonance indeed. For the fourth is not an element of counterpoint; but because the tenor and discant, placed an octave apart, produce the most perfectly concordant sonority of an octave, and the contratenor together with the tenor placed at the fifth produce the good consonance of the fifth, therefore the contratenor together with the discantus placed at the fourth are not perceived as a dissonance. For there are two perfect consonances, i.e. octave and fifth, and a single dissonance, namely the fourth. Hence, because the greater overrides the lesser and the lesser is confounded by the greater, the first two consonances reach the ears so agreeably and fill them with such pleasurable aural perception that the dissonance can hardly be perceived by listeners.

The "teacher's answer" in this fictitious conversation with an apocryphal student of the 1450s is, in fact, taken verbatim from a treatise dating from the second half of the fifteenth century.<sup>2</sup> It is quoted in Klaus-Jürgen Sachs's comprehensive and richly informative discussion of contrapuntal instruction in the fourteenth and fifteenth centuries, as detailed by the professional theorists in their treatises. (They might better be thought of as teacher-reporters.) Sachs appends the following commentary to the passage:

By dint of the "good" consonances the fourth no longer "seems" dissonant. This circumstance reflects a basic fact of the contrapuntal teaching (*Satzlehre*) of the 14th and 15th centuries: the consonance (*Zusammenklang* = sounding simultaneity) of three (or four) voices was not a unitary complex (perhaps in the sense of "chord"), but the result of several successively effected intervallic collocations of two pitches each [i.e., presumably, octave and fifth or third and sixth]; an element of a higher order than the single interval (*Einzelintervall*) was not available to the contrapuntal (*satztechnischen*) thinking of that era. (Sachs 1974:125–26)

The reason, however, for the theorist's disregard of the issue opened

by the "student's" question would seem to lie in the latter's newly attained habit of substituting the received rules of counterpoint, i.e. over a cantus firmus, for the aural phenomenon, whose natural primacy the quoted passage makes absolutely clear. In the first place, the author maintains the terminological distinction between the Greek and Latin words for the concept of interval, heard and notated, respectively. Secondly, he emphasizes the hearing experience with the words resonare and auditus, i.e., in this context, the sound of a simultaneous conjunction of three pitches and its aural perception. The complex sonority presented by the composer had called forth the conventional rationalization, which provides a theoretical and didactic explanatory basis for the procedures the student had to learn. But if that sonority was heard as an intervallically discrete simultaneity. there would be no reason for the lessened audibility of one of the intervals. As the last clause of the cited passage indicates, it is the auditory experience of a particular concord (substantially and terminologically different from "chord") that legitimates the discord of one of the three intervallic ingredients of the alloy, whose sonority in fact neutralizes the dissonance of the fourth to the point of non-existence. Thus it is not that the contratenor and discant do not "seem" to be dissonant, but that the apparent (on paper) dissonance is so unreal that it "can hardly be perceived" and is in fact an acoustic phantom.<sup>3</sup> It is a matter of perception (*percipi*), not deception ("seems"-Sachs). And therefore the "teacher" would not think it necessary to address the "student's" question; while the written conjunction of a third and a sixth may well seem inoffensive, it is less persuasive when heard, especially at endings, because the ear does not hear distinct simultaneous intervals, but the conjoint quality of particular aggregate simultaneities. Similarly, the combination of an octave and a fifth, with the latter located between the two top voices, should in the terms of the treatise's explanation be consonant, because the two good intervals presumably outweigh the bad one between the two lower voices. But in fact the unacceptable aural experience of the total sonority negates this assumption as well. The ear, then, disproves the eye, and in the end didactic circumlocution turns out to interpose itself unhelpfully between composer and listener.<sup>4</sup> Notwithstanding his acoustic perception, the "theorist" formulates a problematic postscript to what was heard by the listeners, including, first of all, the composer.<sup>5</sup> Like harmony textbooks, counterpoint treatises are didactic simplifications.

Sachs continues his evaluation of fifteenth-century contrapuntal procedures as follows:

the apportionments within any intervallic constellation are subject to a firm sequential procedure: as a rule, the [generally preexisting] tenor... is equipped with a complete discant and only thereafter is the two-part counterpoint (*Satz*) expanded to three-part texture by means of the addition of a contratenor. (Sachs 1974:126)<sup>6</sup>

But, especially with the demise of the isorhythmic motet, the notion of strictly successive composition is merely a reflection of the schoolroom (then and now), not of the composer's study. Polyphony for more than two parts is generally—at least to the end of the nineteenth century—a shifting composite of composites, with the varying relative prominence of the horizontal and vertical (linear and sonorous) elements determined by genre and historically conditioned convention and taste. Inevitably there are perceptual limitations vis-à-vis the varying combination of simultaneously unfolding lines—as against the more or less successive conceptual process. No perception of any polyphonic music for more than two parts can continually control both the horizontal and the vertical dimensions. The richer the music (or, for that matter, any work of art), the more legitimately multifarious are its perceptual opportunities, with their variable twin obligation of linearity and simultaneity (Leech-Wilkinson 2002:211).

It is an important historical cliché that from the late thirteenth century to the beginning of the twentieth, the art of music exhibited a constant pressure to expand the two-voice framework,<sup>7</sup> first from the octave to the twelfth, thence to two octaves (late fourteenth century), to three octaves (ca. 1500)—the limit, more or less, of choral voicing—and thence to the emancipation, gradual predominance, and expanding ambitus of instrumental ensemble music (including orchestral), ultimately delimited by piccolo and tuba. The beginning of this tendency of pushing apart the limits of the field of contrapuntal operation eliminated the possibility of voice exchange, which in the thirteenth century had been a fairly common device on both sides of the Channel, though more prominently in England, and is unquestionably rooted in the concept of recurring sonorities (simultaneities), articulated by means of reciprocal imitation in voices of equal range. Voice exchange necessarily receded around the turn of the century, when the octave barrier was breached.

Voice exchange, a totally strict kind of imitation, "of course, entails working on two parts simultaneously" (Blackburn 1987:218). There must have been, during the period at issue, a degree of successiveness in the notational and, to some extent, in the conceptual process, as there is with any composer anytime. But notational procedure does not necessarily reflect the conceptual procedure that *inter alia* assigns functional roles to the voices, no matter whether a composition was conceived around 1400 or 1700 (basso continuo). The old dispute about successiveness vs. simul-

taneity<sup>8</sup> seems to mechanize the more or less hesitant changes in the creative process, which doubtless involved *tabulae compositoriae* well before their earliest extant evidence from the beginning of the fifteenth century.<sup>9</sup> No matter how prodigious one presumes the powers of memory and concentration to have been prior to the seventeenth century, the mental processes involved in the composition of contrapuntal works for three or more voices must have proceeded from some degree of "score vision," i.e. at least, in relatively uncomplex cases, an imaginary *tabula compositoria*, before the notation of parts.

Early evidence for a similar procedure is found in the quasi-score collection of *clausulae* (other than the abbreviations collected in MS, F, fols. 178–183<sup>v</sup>) of the thirteenth century that, in addition to their greater or lesser self-sufficiency, must be seen as convenient and necessary notational models-for composers and performers-for the contemporary motet repertoire, whose novel part notation, though an exemplar of economy, gave no secure clue to the rhythms of the voices and their coordination (Sanders 1973:509–10).<sup>10</sup> The notation subsequently regulated by Johannes de Garlandia and Franco is the basis for the precise and likewise economical part notation, with its system of ligatures, that encoded and preserved the composers' concepts. But that notation, standard from the later thirteenth century for medieval and Renaissance polyphony, cannot be taken as reflecting the compositional process with its varying mixture of simultaneity and successiveness that has always characterized the creation of complex polyphony (to be understood in terms of the more encompassing German Mehrstimmigkeit). On the whole, the notion of totally stratified composition (as well as hearing) seems no more tenable for the Ars Nova and subsequent eras than it was before. As Oliver B. Ellsworth has put it succinctly,

it is erroneous to assume that the accomplished composer had to compose each upper voice successively . . . The one conclusion that we may safely draw is that composition by two stages—from structural counterpoint to ornamental discant—is the method by which the medieval composer first learned his craft. Any conclusion about the advanced professional can be only so much speculation. (1977:109)<sup>11</sup>

Margaret Bent's observations that the "original notation is the only Urtext" and that "all transcription translates" put the matter exactly right with respect to the historical circumstances (1994:382,390), not, however, for composition or study, but for performers (and for current editors), since no singer or player of ensemble music at any time—except, probably, the leader—needs anything other than his part for practice, rehearsal, and performance (unless memorized). But her concern that some "analytic information or overlay may be conveyed in our [scored] transcriptions that is rarely apparent in the original layout in parts" (390), should be resolved by the thought that such a circumstance is bound to have had similar compositional antecedents before the final stage of part notation.

A major aspect of these issues, now as then, is the imprecision or lack of terminology, which has bedeviled modern musical discourse, as is evident from the definitions given—or not given—in the following reference works:

(1) *Pitch Class.* Both *The New Grove Dictionary* (1980; 2001) and *The New Harvard Dictionary of Music* (1986) restrict the term essentially to twentieth-century music.<sup>12</sup>

(2) *Dyad. The New Harvard Dictionary* defines dyad as "Two pitches whether sounded simultaneously or successively. [Actually, this is the definition of an interval.] The term is used principally with reference to non-tonal music." *Webster's New International Dictionary of the English Language* (1934) defines dyad as "a chord of two tones." An appropriate definition would be "A constellation of three or more pitches of two pitch classes."<sup>13</sup>

(3) Chord. Both editions of the New Grove define chord as "The simultaneous sounding of two or more notes." The New Harvard Dictionary offers a similar definition: "Three or more pitches sounded simultaneously." In Webster's second edition (1934), chord is defined as "A combination of tones which blend harmoniously [!] when sounded together because the pitch frequencies are in the ratios of small whole numbers; specif., the common chord, or triad. Chords as treated in harmony have at least three tones..."; the third edition (1961) offers a briefer definition: "A combination of two or more tones sounded together, esp. tones that blend harmoniously because of the simple ratios of their pitch frequencies." A reasonably precise definition of chord would be: "A constellation of at least three pitches of no fewer than three pitch classes in music exhibiting harmonic features."<sup>14</sup>

(4) — There is not and never has been a name for the first vertical constellation in the first of the "student's" two exercises. It can be circumscribed, albeit clumsily, as a (non-triadic) concord consisting of three pitch classes.

It seems, then, that the interpretive conclusions, as summarized by Sachs, which, while not concerned with critical approaches to the works, have been accepted by nearly all musicologists, for want of proper terminology bring on a perceptual loss of the auditory reality. Though environmentally attenuated, concords (of greater or lesser consonance) pervade the contrapuntal texture. They are no less real than the most obvious examples, as, for instance, the very beginnings of the *organa* of the early thirteenth century and in the relatively static sonorities used by Dufay for emphasis, e.g. in his *chanson Resveilles vous et faites chiere lye* of 1423 and his two settings of the Marian antiphon *Alma redemptoris mater*, surely predecessors of the richly euphonic series of chords at the end of the *Kyrie* of his mature *Missa Ecce ancilla domini*, which in turn precedes the appearance of final triads in the later fifteenth century, as, for instance, at the end of the *Credo* of Dufay's *Missa Ave regina celorum*.

# Cadences

The "student's" two counterpoint exercises represent cadences prominent in polyphonic works of the first half of the fifteenth century. The use of the second cadence, the so-called octave-jump cadence, increased as the century went on, though the first, known as "double-leading-tone cadence," maintained its traditional role, gradually losing its prominence. A significant musicological controversy of half a century's duration concerning the cadential role of the contratenor (the successor of the thirteenth-century duplum) in the fifteenth century and its evolutionary significance was recently addressed again in a wide-ranging article by Margarent Bent, in which she identifies Sanders, Lowinsky, and Randel as "Besseler's followers in America" (Bent 1998a:44).<sup>15</sup> In his admirable book Bourdon und Fauxbourdon (1950), Heinrich Besseler had offered the following formulation, stemming from an attractive, though incautious excess of enthusiasm: "... the ingenious octave leap [the second of the two cadences on page 51, above] was invented to achieve a dominant-tonic formula in addition to the parallel cadence [the first cadence]" (1950:33). This was promptly attacked one year later by Rudolph von Ficker, who argued that in compositions of that time superius and tenor, which generally exhibit flawless counterpoint, are the two essential voices and that therefore the contratenor "would be entirely dispensable. Its function is mainly restricted to filling and clarifying [?] the framework provided by the essential voices, which consists of already complete sounds" (1951:116). Besseler defended his position by pointing out that in such a composition "no voice is dispensable any longer [if, in fact, it ever was] without destroying the character of the work" (1952:141). His views are reflected in the New Grove Dictionary's 1980 entry on "Cadence," which was revised and updated by

### William Drabkin and Harold Powers:

The advent of triadic harmony in 15th-century polyphony is reflected above all in the new types of cadential formulation. The movement of the principal parts, the cantus and tenor, was still governed by the linear resolution of intervals . . . , but the contratenor was free to move by leap; the [three cadential] configurations in ex. 10 [in which the tenor displays the traditional 2–1 step, while the contratenor moves by (a) octave leap to the fifth above the final pitch of the tenor; (b) a fourth ascending to the tonic and forming a unison with the tenor; (c) a fifth descending to the octave below the tenor's tonic, are] all true progenitors of the perfect (authentic) cadence . . .<sup>16</sup>

The most important of Besseler's more recent opponents are Sachs, Bent, Ernst Apfel, and, primarily, Dahlhaus (1968).<sup>17</sup> The many essays (prior to Bent's) addressing this subject-all in German-were recently published in English by Kevin N. Moll, who provided a notably informative and insightful introduction (1997).<sup>18</sup> Dahlhaus, addressing himself to the article in which the present author had raised the question why the double-leading-tone cadence gradually failed to be retained (i.e., Sanders 1967:35),19 inferred ("Der Satz suggeriert . . .") that "only the supposition of 'dominantic tonality' can explain [its] displacement . . . by the tritone cadence ...," i.e. through the lowering by a half-step of the raised fourth, thereby producing a "fragment of a dominant-seventh chord" as an evolutionary way station. But the matter under discussion is not the factitious assumption of the in fact non-existent half-step lowering of the traditional raised fourth degree, but its elimination in favor of the lower fifth. Dahlhaus proceeds to dispose of the problem of the parenthetical hearing of the contratenor in the octave-jump cadence by mentioning "the possibility that the parts were differentiated from one another by tone color." And so he implausibly asserts that "what was heard [sic] was the progression from an imperfect to a perfect consonance [i.e. major sixth to octave] . . . whose effect was supplemented, but not changed by the contratenor, no matter whether the framework it filled out brought about a cadence by way of a double leading tone, or by jumping up an octave or a fourth."20 (The descent by a fifth, which was also practiced, is not mentioned.) This in effect describes a molecular (vs. gestalt) hearing process in conflict with the incontrovertible fact that the lowest of its constituent pitches determines the nature and definition of any simultaneity-a fact so self-evident that it is hardly ever mentioned in the literature on acoustics and psychoacoustics.<sup>21</sup> The other side of this counterpoint coin is the fourteenth-century practice

of occasionally condensing the tenor and contratenor of motets into a *solus tenor*, generally consisting of the lowest pitch of each interval, no matter which of the two voice parts contained it.<sup>22</sup>

As was indicated earlier, the contrapuntal self-sufficiency of cantus and tenor is a technical convention not inevitably reflecting the conceptual matrix giving rise to the three (or four) voice parts; nor should it prejudice perception, particularly at cadences. In fact, the cadential progression fastidiously labeled 5–1 by Bent (1998a:40) seems to have had a lusty existence as a V–I already in the early fourteenth century—in England, whose inhabitants' ears, in contrast to their neighbors' across the Channel were, in terms of taste, differently disposed toward the occasional reception of certain sonorities and their consecutive arrangement.

**Example 2:** GB-Ob20, f. 35; GB-Cgc512, f. 254; US-PRU, Garrett 119, ff. 4a, 3b, 2a, 5b. *Early Church Music* 14 (61).



It was this particular aural disposition, which caused English composers of the later fourteenth and early fifteenth centuries to engage in their extravagant manipulations of the cantus firmus (in the middle voice, migrant, and in various transpositions<sup>23</sup>), that proves their lack of concern for the perceptions and conceptions mandated by Dahlhaus. Analogously, when after the appearance of the *contratenor bassus* Tinctoris, a superbly intelligent and informed observer, in his *Diffinitorium* (1475) defined the tenor, i.e. of a cantus-firmus setting, as the referential basis or referential mainstay (*fundamentum relationis*) of a composition, he certainly did not say or mean to imply that it also necessarily had the function of a *fundamentum concentus*.

As, in contrast to chords and their systemic connections (e.g. in music of the eighteenth century), concords have more limited functionality,<sup>24</sup>

the new progressions of the contratenor justify no harmony textbook. But on the other hand, the significance of "the development from the 'parallel cadence' by way of the 'octave-jump cadence' to the 'fourth-leap cadence'" cannot be disposed of as the "mere consequence of the contratenor's displacement under the tenor [because] the fifth under the penultimate [interval] of the tenor cadence is merely the only possible [alternative] consonance . . . (Dahlhaus 1968:80). This statement, too, fails to address the question it is meant to answer.<sup>25</sup> And the fact that the double-leading-tone cadence endured beyond the middle of the century (Dahlhaus 1968:81) merely attests the temporary co-existence of two practices, a matter familiar from, for instance, the later nineteenth century. In fact, Sachs deduces from the evidence (before 1487) that the tenor's loss of its foundational role (*Klangträgerfunktion*) has such essential consequences that one could just about [!] be led to deny it the validity of its name (Sachs 1974:127). Moll summarizes conclusively:

[when] the voice added to the two-part framework . . . comes to occupy the lowermost tone of a cadential sonority—and especially if this is a major cadence—this referential pitch cannot simply be explained away as an irrelevant appendage: it will *inevitably* [emphasis added] be experienced as a sonorous foundation or platform. . . .  $(1997:60)^{26}$ 

In any case, the "abasement" of the penultimate cadential tone in the last third of the fourteenth century initially appeared not in the contratenor, but in the tenor, the lowest voice in the fabric, where it is entirely logical for this process to have begun. A considerable number of instances of the tenor's moving from the new penultimate pitch (the "dominant") to the tonic can be found in the French and, to a much lesser extent, Italian polyphony of that period (Apel 1970-72).<sup>27</sup> Far fewer such cadences appear in the repertoire of early fifteenth-century music (Reaney 1955-83).28 Five such final cadences can still be found in Dufay's chansons (1995)<sup>29</sup>, which the chronologies offered by Charles Hamm and Graeme M. Boone attribute to the composer's early period (1420s-30s) (Hamm 1964; Boone 1987:249).<sup>30</sup> (Greater scholarly concern with treatises than with compositions might account for the puzzling fact that all these significant occurrences have so far been unobserved or unreported.) As with other striking conceptual changes in the history of musical composition-such as the growing recognition, in the last quarter of the eighteenth century, of the subdominant as the proper key for slow movements of works in the major mode-there is no etiological testimony accounting for the rather rapid disappearance of the tenor's V-I cadence. It may well be attributable to the singers' discomfort with the lowered range of such tenor parts. But the fact that it appeared in the tenor in the first place and maintained itself in the contratenor which ultimately became the contratenor bassus, proves that all the new cadence formations resulted from the desire for or ready acceptance of the sounding cadence whose customary designation as V–I is clearly justified for this repertoire as well. Technically, its growing predominance is due to the same principle of the expanding two-voice framework that had brought about the disappearance of voice exchange around 1300.

### **Tonality and the Historical Distance**

Cadences articulate and define. A second controversy of equally long standing revolves around the issue of cadential definition of tonality, specifically in the fifteenth century. In conjunction with her discussion of what Besseler and his followers regard as V-I cadences in a three-part texture (no matter which of the two lower voices has either or both of those successive pitches), Bent justly finds fault that he "observed triads [and] modulations ... and labeled these as tonal functions" (1998a:40). But Besseler's fault would seem to lie more in his proleptic Riemannesque labeling and less in his hearing. As Dahlhaus put it, "pitch relations need not be reducible to chord relations in order to fall under the concept of tonality" (1968:17).<sup>31</sup> If, as we must, we fashion the definition of tonality comprehensively enough<sup>32</sup>, it will, one hopes, lose its anachronistic offensiveness. Tonality, so conceived and broadly defined, is a principle governing musical compositions that begin by identifying a particular pitch class as its center of operations, define it further by means of other cadential or semi-cadential way stations, and conclude on the established tonic.<sup>33</sup> Such a definition of tonality allows it to encompass, when evidently applicable, chant as well as medieval and Renaissance polyphony<sup>34</sup>, in addition to works reflecting later harmonic principles, regardless of their theoretical formulations (e.g. Rameau or Riemann). Many works composed a long time before 1700 impress their tonal cohesion on listeners who, aware that that the freight of centuries will necessarily affect the historic propriety of their perception, are far from being "students of medieval music who adopt the perspective of modern listeners" (Bent 1998a:18).<sup>35</sup>

The underpinnings of a song may vary, as in different harmonizations of the same chorale melody by Bach or in fifteenth-century *chansons* with exchangeable contratenors, but will not usually affect its basic tonal nature, when and as it prevails.<sup>36</sup> It is for this reason that the setting of a tune from the first half of the fourteenth century, when the twelfth was the largest contrapuntal interval (ex. 3a), can be replaced with a factitious harmonization (ex. 3b) in a style in which a seventeenth was easily man-

Example 3a: Cambridge, Gonville and Caius College, 334/727, p.1. Mater Christi nobilis.



Example 3b: Harmonized version of example 3a (inner voice omitted).





aged (Sanders 1967:41,49).<sup>37</sup>

It is an operation—anathema on its performance!—that is not a lot more blameworthy than Mozart's Handelian manipulations. But it should help to relieve the apparent discomfitures of many observers who have dealt with these issues and listen to fifteenth-century polyphony.<sup>38</sup>

# Excursus (Res facta)

In the fifteenth century, compositions with their component articulations were known generically as res factae-in all probability, Tinctoris's Latinization of the French term choses faites ---as well as compositiones or cantus compositi. At the beginning of his article on res facta, Bandur establishes that "toward the end of the fifteenth century the term res facta designates a musical work that is firmly fixed in writing and whose voices are fully worked out." It goes without saying that the class of things for which this term stands had existed for a long time before it first appeared around 1472 in Tinctoris's Diffinitorium. He who confects such a written work of music is a *compositor*, the "creator who solely and by means of rational planning ... produces new polyphonic structures, i.e. becomes the author of a res facta [or compositio]," which "can hardly be conceived without the support of a procedure involving writing."39 (It is, in fact, the equivalent predecessor of the term opus perfectum et absolutum in Listenius's treatise of 1537 [Cahn 1989:11-26].) Tinctoris's consequent distinction between compositio and contrapunctus evidently can be traced back to the beginning of the century (Prosdocimus de Beldemandis 1412).40

Margaret Bent's recent interpretations of Tinctoris's term res facta (and of a good many other terms [1983]) have been thoroughly discussed by Bonnie J. Blackburn (1987:246-65); they were also addressed more briefly by Klaus-Jürgen Sachs (1983) and Peter Cahn (1989:17-26).<sup>41</sup> The recognition of compositional activity actually goes back to Perotinus (the first full-fledged composer), Petrus de Cruce, and Phillipe de Vitry, and, of course, to Franco, who used the same verb (fieri, the passive form of facere) to explain how discant was composed.<sup>42</sup> Bent's essay, which deprives a res facta of the evidence that it is indeed a chose faite, namely the necessitybeyond any archival purposes-of written notes (and words), and thus entrusts it to possible mnemonic conception and retention, is also contradicted by copious pictorial documentation.<sup>43</sup> In view of all available evidence, it is surprising, therefore, to read in a recent publication that a tenorista, i.e. a leader of a small group of singers performing contrapunctus super librum, would be different from a compositor "only to the extent that [the latter] converted similar 'coordinations' into mensural notation" (Wegman 1996:452). It strains belief that, for instance, Dufay's Masses should "only" be the distillations of contrapuntal activity of such limited

compositional potential as even well-prepared counterpoint on the book. Still more puzzling is the conclusion that "a 'maker,' at bottom, is someone who writes down music that might just as well have been sung collectively" (Wegman 1996:478).

"The tonality of the sixteenth and that of the nineteenth century are stages in a coherent evolution" (Dahlhaus 1968:18). Awareness of this fact, however, obliges the historian to be mindful of the lack of identity of the various historic stages of tonality, for it is that critical awareness that must shape the perceptions and descriptions of compositions. A demonstration of tonal cohesion in a chanson by Dufay loses its credibility if its terminology and the concepts it reflects are foreign imports from a later time. But, conversely, the composition loses nothing of its integrity, if principles originally familiar from and applicable to a later time are recognized as functioning, mutatis mutandis, in a chronologically removed repertoire. Such a procedure is, in fact, a necessity, to be applied with appropriate historical tact,44 no matter whether a listening historian has failed to recognize such a feature or has refused to do so for the justified fear of historical or teleological contamination. But though the knowledge conveyed by an analytical method and its terminology may come from a different era, their adjusted use is entirely proper in the absence of a historically more appropriate vocabulary, due to the lack of contemporary commentators' (teacherreporters') concern.<sup>45</sup> In those circumstances, the traditional conceptual associations need not be regarded as disqualifying the application of a term to a phenomenon of a different time.

The identification and description of such phenomena are the historian's obligation. As Dahlhaus puts it,

a [recorded] fact (*Tatsache*) in music history... must show up as part of a context, of a historiography or description of a historic construct in order to be a historic fact. Events of the past, *res gestae*, become historic facts only in a *historia rerum gestarum*... The chain of continuity converts facts into historic facts... History is not the past *per se*, but whatever historic insight may be able to apprehend from it—what the historian catches in his net. (1977:68)

Elsewhere, he refers to facts as being "chosen on the basis of a [special] historic-epistemological interest and as actually evolving from mere source data into historic facts by way of a conceptual system for which the historian bears responsibility" (1977:70). Yet, the historian is of course not an inventor: "Structures and linkages are embedded in the warp (*vorgezeichnet*) of the reality as it confronts the historian in the sources, but become ap-

parent only through conceptual systems drawn up by the [professional] historian" (1977:71).

In a recent paper, Shai Burstyn addressed the issue of the uncertainties of transhistorical perception and the obligations on the chronologically removed reader, viewer, or, more specifically, listener (1997).<sup>46</sup> Ultimately, however, even the most expert historically informed performance of non-contemporary music, though it may be thought to remove the immanent distance at least superficially, cannot eliminate the elastic hermeneutic tension between past and present.<sup>47</sup> But the issue may appear less troublesome when one realizes that J. S. Bach would most likely have had little compunction about performance of keyboard works composed by him before his visit to Potsdam in 1747 on a new instrument like the fortepiano that he said (perhaps under royal duress) to have much enjoyed after King Frederick asked him to try it out. Though the limits of transhistorical acculturation cannot be expunged, imagination honed by scholarly research will produce empathic approximations not reined in by the strictures of determined antiquarianism.<sup>48</sup>

Several years ago, in an important essay, Thomas Christensen, under the influence, as he acknowledged, of Hans-Georg Gadamer's *Wahrheit und Methode* (1960), pointed to our inherent inability to

suppress completely our own knowledge, values, and tastes for the sake of some distant and ultimately elusive literal replication . . . All observation, whether analytical or historical, is filtered through culturally tinted lenses . . . it is only when one recognizes and affirms . . . one's 'presentness' that true historical understanding arises . . . the gap between . . . the present and the past . . . becomes an essential condition for understanding. (Christensen 1993a:23,24,27)<sup>49</sup>

Thus, Dahlhaus's statement regarding the tonalities of the sixteenth and nineteenth centuries reflects no facile "realism"; neither does it infect the unprejudiced appraisal and explication of a specific work of art with any but the most elemental notions of etiology or those of "embodiment of an essence."<sup>50</sup> Both Dahlhaus and, more insistently, Leo Treitler have addressed the radical conceptual change which has affected historiography. Writing nearly thirty years ago, Dahlhaus commented that "for some decades historians have felt threatened by a loss of interest in history. . . The maxim that one must know the origin of a matter in order to understand its essence has lost the self-evident basis that . . . still sustained its belief in the early twentieth century" (1977:12), a loss that must be largely attributed to the waning of the tradition of meliorism prevailing in the

eighteenth and nineteenth centuries, whose beginnings in music history can be traced back as far as Tinctoris in the 1470s and to Anonymous 4 before him.<sup>51</sup> But the uncertain notion of progress should not lead to the invalidation of causality. Brahms, to cite one notable example, responded to questions regarding his delay in composing symphonies by citing the tread of the giant. It seems legitimate to derive from this historical fact the well-known conclusion that his first symphony was to a considerable extent affected by at least one of Beethoven's (as Brahms himself grumpily acknowledged) and, for that matter, to infer similarly that the grim Sisyphean finality of the finale of his Fourth Symphony-particularly of its codahelps to account for his failure to produce another symphony during the remaining twelve years of his life, even if in the latter case Brahms gave no specific hint.<sup>52</sup> Such an inference, far from impairing the work's integrity, can intensify the poignancy of its perception. Alban Berg's hortatory habit of didactically using social occasions with an available piano to play the Tristan chord as the progenitor, because of its irresolution, of tonality's dissolution is another well-known example. And, for that matter, awareness of later developments provides support for the recognition, through the filtered haze of the past, of the rise of the V-I cadence in the fourteenth century's last quarter and of the radical increase of tonally-centered structures in the course of the fifteenth; both features may well be regarded as related. The soundness of such observations and conclusions depends on their demonstrable substantiality-a truism whose validity is wrapped up in Dahlhaus's "historian's net."

#### Notes

My thanks go to Ian Bent, Lewis Lockwood, and Daniel Leech-Wilkinson for reading this contribution, to the latter especially for bibliographic information, as well as to Glenn Stanley for his helpful editorial comments. I am particularly grateful to Chris Hatch for persuading me to address the main issues discussed in this article and inevitably offering perceptive suggestions.

1. The emphasis is added. The titular question, of course, was asked in a different context by Charles Ives; it remains unanswered.

2. Except for the substitution of *diatesseron* for *quarta* in the penultimate sentence for the reasons indicated below. The proverbial sound of the initial clause of the last sentence seems to be due to the writer's vague memory of a plain Boethian sentence in Book I, chapter 9 of *De Institutione Musica* (Boethius [1867] 1966:196), where, however, title and content of that chapter reflect Boethius's advocacy of the governance of *sensus*, i.e. *auditus*, by *ratio*.

3. As Sachs points out (1974:62,124), the changed perception of the consonant quality of the fourth occurred and was codified soon after Perotinus took the historic step of writing polyphony for three voices, which caused the fourth to be regarded as a dissonance between the two lowest voices. "Sed nota," writes Anonymous 4, "quod diatesseron raro in duplicibus determinatur, sed saepius in triplicibus et *quadruplicibus bene cum alia consonantia*" (quoted in Reckow 1967:71). (But note that the fourth is rarely validated for two-part polyphony, but more [most?] frequently in music for three and four voices, rightly so together with another consonance [below it].) Hearing thus overrode the (Pythagorean) rules, since the author in effect counts the fourth as consonant only in these radically new dimensional circumstances, thus depriving it of its independent contrapuntal validity; see also note 22 below. On fourteenth-century concepts of the contrapuntal fourth, see Fuller (1987:56, n.12).

4. This was clearly and emphatically observed as long as forty years ago by Richard Crocker (1962:9). Similarly, Oliver B. Ellsworth concluded in 1977 that "the treatises in practical music theory, almost without exception, are directed toward the beginning student at the lowest possible level. Significantly, the traditional title for the *Volentibus introduci* treatise [first half of the fifteenth century]... is *Optima introductio in contrapuncto pro rudibus* [for the unskilled] . . . and that title would apply equally well to any counterpoint treatise of the fourteenth or fifteenth centuries." A student at the "intermediate or advanced level . . . would probably learn directly from the tutelage of an accomplished teacher [most likely a composer] . . ." (1977, 2:105–12). See also Sarah Fuller (1986:39–40), who with respect to the fourteenth century concludes that "syntactic practices . . . can only be deduced through direct examination of compositional practice." And, for that matter, theorists of the eighteenth and early nineteenth centuries are not usually not too helpful to a student eager to get inside a Beethoven score.

5. While composers do not footnote their compositions (at least not before the second half of the twentieth century, especially in doctoral composition programs), it is a universal truism that, as Elizabeth Eva Leach concludes of Machaut, the "exceptionality and skill [of] a composer [reside] in his canny exploitation of the musical surface in relation to the . . . expectations provided by its underlying simple counterpoint" (2000:75).

6. An early formulation of this view was given by Thurston Dart ([1954] 1960:150–51). But, especially with the rise of composition for three or more voices, however, it is a truism to state that, while a composer is necessarily a contrapuntist, a contrapuntist is not necessarily a composer. See also note 4.

7. This is Arthur Mendel's felicitous translation of Hindemith's term *übergeordnete Zweistimmigkeit* (Hindemith 1942:113).

8. The first to clarify this vexing issue was Crocker (1962:12–13). Recent discussions are found in Blackburn (1987:212–19,265–68), and in William E. Thomson's quirky (and abysmally proof-read), but spirited *Tonality in Music*, in which he castigates the view that "pre-Bachian composers . . . had no way for considering . . . matters such as chords and their interrelationships [as] conceptual perversion [and] patent nonsense" (1999:19). Richard Norton persuasively recognizes the existence of "harmonic thinking," as he puts it, "from that moment... when two or more voices [properly: more than two voices—see nn. 3, 22] were sounded together . . . Had this not been the case, the fourth would not have been demoted in status, despite its elemental security within the assumed mathematical purity of Pythagorean *harmonia* . . ." (1984:134). His book has been repeatedly and justly criticized for its frequently extravagant and polemic rhetoric.

9. It is a document of 1407-08 referring to "six tabletes pour faire le contrepoint

desdiz enffans [of the above-mentioned boys]" (Higgins 1990:9,25). What was an expense item—though surely a relatively minor one—for the boys is likely to have been a tool for the composer that as standard equipment may have been taken for granted and thus remained actuarially unrecorded. The earliest secure evidence of *tabulae compositoriae* as aids in the sketching of polyphony "does not predate the second half of the 15th century." See *Die Musik in Geschichte und Gegenwart*, 2nd ed., s.v. "Partitur" (by Klaus-Jürgen Sachs). See also Hamm (1962:167).

As regards "Composing Without Writing," a subject to which Jessie Ann Owens devotes a chapter of her book on the craft of musical composition during a later time (1450–1600), "all the evidence allows us is to speculate about the methods" (1997:73) and, one should add, its extent. See the *Excursus* below.

10. As to the untenable musicological issue of *abbreviatio* (edition), see my forthcoming *The Notation of Notre-Dame* Organa Tripla *and* Quadrupla (nn. 86, 12).

11. It may well be justifiable transhistorically to cite Heinrich Koch's view of the creative process in the 1780s: "I don't know how some of my readers . . . could have conceived the notion as if I might . . . have wanted to convey the insight that in the conception of a composition harmony must be the first to arise in the composer's soul" (quoted in Ian Bent 1984:29).

12. The indispensable term "pitch class" was coined by Milton Babbitt (1965:55). For the closely related German term, see *Riemann Musik Lexikon*, 1968, s.v. "Tonigkeit."

13. Ninteenth-century examples are the first fourteen measures of the first movement of Beethoven's Ninth Symphony; the first nine measures of Schubert's *Der Doppelgänger*; Bruckner's *Te Deum*, mm. 1–10.

See New Harvard Dictionary of Music, 1986, s.v. "Dyad"; Webster's New Dictionary of the English Language, 2nd ed., s.v. "Dyad"; and Webster's New Dictionary of the English Language, 3rd ed., s.v. "Dyad.

14. See New Grove Dictionary of Music, 2nd ed., s.v. "Chord" and New Harvard Dictionary of Music, 1986, s.v. "Chord."

15. In the absence of praenominal and bibliographic information her first reference is presumably Sanders (1967:24–53); an English version was published in Moll (1997:327–62); see note 18.

16. The second edition of *Grove*, evidently in consequence of Bent (1998a), reformulates the beginning of this passage: "The earliest apparent precedents for triadic harmony occur in certain types of cadential formulation prevalent in the 15th century." See *New Grove Dictionary of Music*, 2nd ed., s.v. "Cadence" (by William Drabkin and Harold Powers).

For discussions of contrapuntal and cadential procedures of the period, see also Blackburn (1987:233–34); the spirited remarks and realistic perceptions by Daniel Leech-Wilkinson (1984:10–11, n.6); and Graeme M. Boone, who advocates "a step away from the theorists' bare rules . . . and toward a more integrated evaluation of the musical sound" (1997:91). He regards it as "more accurate to consider musical sound" (92), and concludes "that it is not the historicists or structuralists, but rather Besseler who had the most insight . . ." (59). Nevertheless, Boone then seems to reverse himself: " . . . it is the tenor . . . which I shall take to be the functionally determining note, and not a contratenor note that might sound below it" (60). In a footnote, in an evidently conflicted state of mind, he adds that "I shall not attempt to justify this approach here, except to note that numerous theoretical statements argue for the priority of the tenor . . ." (In his quotation of Gaffurius, the abbreviation of the third word must be resolved to *qui*, not *quem*.) I thank Peter Lefferts for calling this article to my attention, as well as for other items of information.

17. Dahlhaus's thesis is contained in note 11 (1968:75–76; translated in 1990:340–41). A preliminary discussion of the controversy regarding the rise of the V–I cadence appeared in Sanders (1998:viii–ix).

18. Moll's book received favorable reviews; see Bent (1999) and Leach (1999). Five of the twelve essays are by Ernst Apfel, who has been the most inveterately persistent researcher of the complex and troublesome issues. (For a discussion of his interpretation of the theoretical evidence, see Sanders [1967:34–35; translated in Moll 1997:338–41]. To my knowledge, the facts and views presented there have not been refuted or challenged.) The translations of the two above-mentioned articles by Rudolph von Ficker and Heinrich Besseler are in Moll (1997:91–128 and 129–48, respectively); see specifically pp. 119 and 141.

19. See note 15. Sarah Fuller provides details regarding fourteenth-century cadences: the "phenomenon of cadence," she points out, "powerfully shapes perceptions of formal divisions, tonal structure and sectional association ..." (1986:54). See also her magisterial essay on the *Ars nova* (1992a). Regarding the earliest application (by Jacques de Liège) to polyphony of *cadentia*, see Fuller (1992a:230); the term originated in medieval writings on grammar and poetry. For a detailed discussion of Fuller's valuable insights into fourteenth-century polyphony, see Leech-Wilkinson (2002:201–5).

20. As to Dahlhaus's general and persistent presumption of was gehört wurde, see Wegman (1998); note, however, Dahlhaus's later conclusion cited in note 31. Bent reformulates Dahlhaus (1998a:15–59). Referring to Besseler's commentary on Dufay's rondeau, Helas ma dame (1950:40-43), she paraphrases Dahlhaus's characterization of the contratenor as an added, not essential, voice, without which the counterpoint of discant and tenor can exist by itself (Dahlhaus 1968:74–75). His observations regarding dissonances caused by the contratenor with one or another of the other two voices are weakened by the fact that the dissonances actually involve all three voices in both cited cases. Bent adds that "the song has a perfectly self-contained discant-tenor duet, a fact that Besseler chose to suppress" (1998a:40) and concludes that the "upper two voices . . . make perfect self-contained sense without the lower contratenor. ... " (42). One begins to wonder why the composer bothered to write it if the voice was, in fact, subordinate to the point of negligibility. (For an insightful discussion of Bent's views of this subject, see Leech-Wilkinson [2002:208–9].) While David Fallows guardedly referred to the contratenor as "technically dispensable in ... all fifteenth-century three-part chansons" (1983:135), Bonnie J. Blackburn stated forthrightly that the contratenor's jump of an octave "produces a V-I cadence" (1987:244, n.57).

21. One who does, briefly, is Gerhard Albersheim (1939:144). See also Norton (1984:126–28).

22. See Sanders (1973:560). More recently, Fuller has adduced it as the "most solid fourteenth-century evidence for the principle that the lowest pitch governs the sonority" (1986:40). Leach has observed that "the possibility for the migration

of tenor function exists" (2000:73, n.18) and subsequently concluded—at least for the compositions at issue—that "the contratenor adopts tenor function when it is at the bottom of the texture" (2001:75). This principle of course also applies to thirteenth-century polyphony (increasingly for more than two parts), in which voice crossings involving the tenor are necessarily more common; most striking are those cases in which an upper voice temporarily located under the tenor and forming a fourth with it was subsequently redesigned to eliminate a contrapuntal interval that had become unacceptable for the two lowest voices. See Sanders (1993:47; 1995:626b) and p. 47 above.

23. See Sanders (1967:44-46). For more details, see Sanders (1963:287-310, 406-9).

24. They do, however, clearly merit Fuller's conclusion, based on her examination of one specimen of fourteenth-century polyphony, that "the individual voices . . . produce vertical sonorities and relationships among sonorities that may be called harmonic if that term is resolutely stripped of any functional connotations" (1992b:49).

25. The 2–1 cadence has largely disappeared with the advent of *chansons* by composers born by or near the end of the first two decades of the fifteenth century, among whom it seems reasonable to count Ockeghem as the first.

26. It is well known that there are at least two authors writing in the 1450s who recognized the growing fundamental role of the contratenor, one of them specifically declaring that "to the extent that the contratenor is lower than the tenor it is called tenor" (Coussemaker 1864, 3:466a). In view of changes occurring in the second half of the century (*contratenor bassus*), this has the ring of an older observer's coming to terms with new tendencies. See also (3:93b).

27. The following compositions locate the tenor below both final intervals formed by the two other voices: Nos. 78 (Philipoctus de Caserta); 84 (Pierre des Molins); 92, 96 (Senleches); 98 (Solage); 110 (Trebor); 118 (Valliant); 133, 216, 256 (Anonymous). In the following compositions, the tenor briefly places the penultimate V above the contratenor (mostly a third) before crossing down to the tonic: nos. 17, 18, 76, 82, 86, 89, 135, 143, 170, 176, 181, 278. The octave-jump cadence is quite rare.

28. In approximately the first four decades of the fifteenth century, it occurs in two compositions of J. LeGrand (Reaney 1955–83, 2:7,8) and in one each by G. LeGrand (1955–83, 2:2) and by Loqueville (1955–83, 3:11); and by one anonymous Italian composer (1955–83, 4: no. 2 of the Ballades).

29. See Dufay (1995: nos. 7, 37, 39, 40, 58). For a readily available example, see Perkins (1999:299). The question of the precedence of the Italian no. 7 or its French version, which has a different final cadence might be affected by this circumstance. See Fallows (1995:45). The 2–1 cadence retains its prominence (nearly two-thirds) among Dufay's *chansons*, though not surprisingly mostly in those that seem to stem from the time before the mid-thirties.

30. David Fallows points out that the "chronology of Dufay's music offers considerable scope for future research" (1995:2).

31. Three decades later, Dahlhaus unequivocally dated the rise of "dominantic tonality" as ca. 1430, when the "dominant-tonic cadence arose." See *Die Musik in Geschichte und Gegenwart*, 2nd ed., s.v. "Tonalität" (by Carl Dahlhaus). It seems im-

possible to exclude the octave-jump cadence from this context.

32. Michael Beiche refers to Riemann's concept of tonality as "increasingly felt to be inadequate and too limited in its applicability." See *Handworterbuch der musikalischen Terminologie*, 1992, s.v. "Tonalität" (by Michael Beiche). See also Blackburn (1987:223–24,244). For a discussion of the flawed view of tonality as effectively identical with functional harmony, see Norton (1984:27).

33. See also the definition of tonality given by Walter Wiora, which is a model of precision and concision (1961:24).

34. See Dahlhaus (1968:17) and Sanders (1967:37). Thomson pushes his enthusiastic view of tonal cohesion in thirteenth- and fourteenth-century polyphony to an unsupportable extreme, since it is patently inapplicable to some *organa* and many *clausulae* and motets, whose structure reflects different—rhythmic and numerical—principles of cohesion (1999:217–25); see Sanders (1973). Apodictic analytical approaches that sweep past inherent "ambiguity" are apt to produce conclusions dimmed by insufficient sympathy for the historic conditions of style and technique; see Thomas Christensen's insightful review of Dahlhaus and Joel Lester (Christensen 1993b:111). Regarding structural cohesion in a particular medieval motet repertoire, see Pesce (1990). She concludes that "a high degree of [contrapuntal] pitch coherence . . . could be created . . . in the absence of a system of tonality or modality" (313–14), though her hesitation to attribute this phenomenon to compositional intent shows startling caution in her approach to transhistoric cognition. For pertinent treatment of Dufay's *chansons*, see Treitler (1965).

35. Regarding the fourteenth century, see note 19. For the most recent formulation of the view denying the applicability of all tonal aspects, see Perkins (2000:393–95). The difference in views might well be seen as a matter of definition.

36. It seems significant that there are more tonally-uncentered compositions among Dufay's *chansons* ending with a 2–1 cadence than among the others. They exhibit features of tonal direction (rather than unity), prevailing in many four-teenth-century *chansons*. (Indeed, for French medieval polyphony, it may well be proper to regard tonal unity as a subspecies of tonal direction.) See Fuller (1987). Regarding motets, see her admirable 1990 essay (207); in Fuller (1992a), she extends and summarizes the observations offered in her earlier articles. Anachronistic impropriety notwithstanding, the introductions to Beethoven's opp. 21 and 111, as well as Mahler's "goal keys," may be cited in this connection.

37. For some further examples, see Sanders (1967:39–40; translated in Moll 1997:345). The relative prominence of such specimens in English—as compared to Continental—sources is not to be denied.

38. See Boone (1997). Thomas Brothers states: "The contratenor does move, at times, like a tonal bass line, but it has been sufficiently stressed by Dahlhaus and others that the voice must have been added to a self-sufficient cantus-tenor pair..." (1997:189). Hans-Otto Korth, in discussing Dufay's "magnificent chanson" Se la face ay pale (ca.1430), which ends with the contratenor descending a fifth to the tonic, sighs regretfully that "it is hard to deny its functional harmony" (1986:53). Friedemann Otterbach, though conceding that the new cadence procedures may be seen as carrying the seeds of the "Klangfolge der Neuzeit" (1975:83), reverts

(87) to the Dahlhaus tradition he had previously articulated (5, 56 n. 3).

39. See Handwörterbuch der musikalischen Terminologie, 1996, s.v. "Res facta/ chose faite" (by Markus Bandur) and Terminologie der musikalischen Terminologie, s.v. "Compositio/Komposition" (by Markus Bandur). Bandur's two essays set a high standard of factuality and reliability. See also Blackburn (1998). Her translation of *cantus* as "melody" seems inapposite (1987:251); though clumsy, the translation that seems best to convey the meaning of the Latin term in the context is "composition for vocal ensemble."

40. See Terminologie der musikalischen Terminologie, 1996, s.v. "Compositio/ Komposition" (by Markus Bandur). For Tinctoris's identical conceptual distinctions, see *ibid*.

41. To Sachs's postscript concerning Bent's contention that a *res facta* is "not necessarily written" should be added that Tinctoris's unequivocal choice of words in the *Liber de arte contrapuncti* ("Contrapunctus qui scripto fit communiter res facta nominatur") and in the *Diffinitorium* ("Res facta idem est quod cantus compositus . . . Cantus compositus est ille qui . . . est aeditus" . . . "Compositor est alicuius novi cantus editor") makes writing an essential part of the process. Moreover, there is clear evidence in Chapter 4 of Book 3 of his *Liber de arte contrapuncti* ([1477] 1975:149). After giving a rule pertaining to *contrapunctus mente* [*factus*] he continues:

And in order that they [i.e. those mentioned in the preceding sentence as more intent on acquiring skill in more attractive and elegant counterpoint than (is possible) with the narrower melodic intervals (i.e. no larger than a third)] may make counterpoint for more [than two] singing on the book more sophisticated, they (will) with circumspection produce it at length *in the manner of composers* . . . [emphasis added].

The short example (Blackburn 1987:257), itself a *res facta*, stretches, as he says, the limits of unwritten counterpoint worked out laboriously by three singers—a quasi-composing committee. Its relative complexity would probably require and presumably merit notation, guaranteeing both the accuracy and the desirable repeatability of its performance—Peter Cahn calls attention to Tinctoris's significant expression *componendi stilus* (1989:18).

42. Facere and edere had "to write" as one of their meanings since antiquity. For early uses of terms denoting composition, see Reckow (1967:82), Jacobus Leodiensis (1973:36), and Franco (1974:65,69). For Vitry, see the quotation from Gace de la Buigne's *Le Roman des Deduis* (Sanders 1975:37). The ascription to Vitry of the motet discussed in that article (*Floret/Florens*) has been placed in doubt by Leech-Wilkinson (1995:302–3). Its incautious assignment to 1314 is not inevitable, however; as was stated in the above-mentioned article, the "motetus poem can certainly, though not inevitably, be understood as reflecting the situation that prevailed between September and November of 1314" (1975:33). "Not inevitably" was meant to indicate that it could have been composed earlier (ca. 1312). In that case, the stylistic inadequacies of this imaginative fledgling composition could well be attributed to Vitry's pioneering youthful inexperience with a genre he essentially created, thus allowing the motets at issue to retain a fair degree of the probability of their unitary authorship in view of their topical relationship, identity of tenor in two of them, and novel structural design. It may well deserve, therefore, to be described as an imperfect early attempt rather than as "an imitation—a pale one in certain respects" (Roesner 1990:42). In a closely and meticulously reasoned study, Margaret Bent has again taken up the questions of dating and authorship of the motet at issue without, however, being able to come to a more definite conclusion than the statement that "these considerations blur questions of individual authorship" (1998b:50). While the extant evidence is insufficient to demonstrate Vitry's authorship conclusively, it seems under the suggestive circumstances unnecessarily cautious to state that "we cannot assume it" (39).

43. Apart from the numerous depictions showing singers performing chant from books, see Bowles (1983) for evidence of polyphony sung from a *rotulus*. In plate 146, performers are depicted singing an (early?) fifteenth-century polyphonic composition from a *rotulus*. They are well into the piece, as the leaf has folded back enough to expose the top staff to the viewer, with its complicated white notation and some coloration. See also Komma (1961: plates 120, 138) and *Die Musik in Geschichte und Gegenwart*, 2nd ed., s.v. "Rotulus" (by Karl Kügle). Kügle concludes that "rotuli can often be seen . . . as intermediary between the composer's autograph and the compilation of larger manuscript collections; they therefore display the status of the so-called fascicle manuscripts (Hamm 1962) . . . because of their ephemeral character their rate of loss may be assumed to exceed by far that of codices" (577). The *rotuli* are related to the earlier *volumina* mentioned by Anonymous 4; see Sanders (1998:ix–x).

44. "Only to the degree that a historian descries the historical essence of works from their inner structure has his historical account aesthetic substance . . ." (Dahlhaus 1977:49). See also Kristeller's principle quoted at the beginning of this essay.

45. See Schubert (1994:12-16).

46. The first listener is, of course, the performer.

47. In an exhaustive discussion of what he calls HIP (historically-informed performance), published more than two years after the first draft of this article, John Butt states that "all forms of historical representation rely on fabrication and an inescapably presentist perspective" and demands of HIP that it be an "imaginative—rather than [an impossibly] objective—recreation of the past" (2002:15). Elsewhere, he refers to "the concept of HIP as a simulacrum of a lost historical past" (157). It is striking that more than half of the book's bibliography, containing more than 300 titles, comprises books and articles published after the 1980s.

48. As Wanda Landowska so memorably put it, "But little do I care if, to attain the proper effect, I use means that were not exactly those available to Bach" (1981:356). She is quoted by both Brown (1988:39) and Taruskin (1988:148). For additional in-depth exploration of the issues, see Morgan (1988) and Tomlinson (1988). More recently, Peter Schubert quoted Helmuth Rilling's pithy answer to a question regarding "authentic performance practice on original instruments. 'It is very interesting . . . but we have no original listeners'" (1994:3). Butt presents the following formulation: "While one has a perfect right to 'prefer' what one takes to be the original sound, and one has a right to argue that this can [*sic*] present the music in a better light, this does not mean that the music is thus

eternally defined by its original sound, given that the definition of musical works themselves is also a matter of contingent, human practice" (2002:68).

49. In her most recent, rather wistful and aptly titled article on performance practice, Margaret Bent reflects that many aspects and branches of musicological research "seem to have brought us nearer to the original sound, if not near enough ... [and] without substantiating any claim that the resulting sounds reproduce those originally heard" (2001:39). Reminiscent of the recent controversy regarding the restoration of the Sistine Chapel ceiling, the absolute goal posited here ("near enough") necessarily must remain chimerical. To at times unwelcome performers' idiosyncracies are added the more or less troublesome historical gaps. Both factors doubtless caused Brahms's famous remark that he enjoyed Mozart's Don Giovanni best from the score, because no one could perform it right for him. In the end, at least in part because of its contrast with earlier performances, he was bowled over by Mahler's 1890 interpretation; see the vivid report in the Neues Wiener Journal (May 19, 1911). The first four pages of this edition were largely devoted to Mahler, who had died the previous night (see abridged version in Blaukopf 1976:189). For today's informed listeners, Mahler's performance would be likely to give rise to negative comments similar to Brahms's anticipatory distress.

50. See Treitler (1967:200-2).

51. "... in this age the capability of our music has undergone such miraculous growth . . . that I am boundlessly astonished by the fact that nothing not composed within the last forty years is considered by cognoscenti as worth hearing." This is a conflation of two prefatory statements in Tinctoris's *Proportionale Musices* and the *Liber de arte contrapuncti*. Compare also the remarks by Anonymous 4 regarding Perotinus Magnus (Reckow 1967:46): "Perotinus . . . melior quam Leoninus erat."

52. For a recent appraisal of late sketches for one or two symphonies or an overture, see Beller-McKenna (1995). (I thank Walter Frisch for this reference.) In any case, by late 1890 or shortly thereafter, Brahms had abandoned any plans for further orchestral works.

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