On the day before Christmas in 1520, the Venetian organist Giovanni da Legge wrote to his friend and mentor, the theorist Giovanni del Lago:

I should like you to send me here in Rome 'quella bella cosa' by Tinctoris that you wanted to give me when I left [Venice]. At that time you told me you had a resolution that you had made before for the late Zampiero. I should really like to have it together with some explanation so that I could understand the reasons for the resolution, for which I should be much obliged to you. I want to see what some worthy men here have to say about it.

No answer is preserved, but del Lago must have gratified him, for three years later da Legge asked del Lago for 'the Mass Dixerunt discipuli, with the annotations of the modes where necessary', which

* A condensed version of this paper was read at the Forty-sixth Annual Meeting of the American Musicological Society in Denver, Colorado, November 1980. On that occasion a taped performance of the prima pars of Tinctoris's motet was included. I am indebted to Howard Mayer Brown (soprano recorder), Charles Coldwell (tenor recorder), and Thomas MacCracken (tenor viol), all of the University of Chicago, for a splendid performance of the work, and again to Thomas MacCracken for his expert recording.

1 'Ben voria che quella bella cosa di Tinttoris mi volevi dar al partir mio me la mandasti qui a Roma, et za me dicevati alora haver la resolucione qual facesti una volta per Zampiero, a chi Dio perdoni. Haveria molto a charo dicta cosa con qualche pocca dichiaratione, accio apresso la resolucione io sapessi le rason perche, da la qual cosa molto ve ne saria obligato. Et voria veder de qui quello me saperiano dir alcuni valent 'ometti vi sono.' The letter forms part of the Spataro correspondence, Vatican City, Biblioteca Apostolica Vaticana, MS Vat. lat. 5318 [Vatican City Vat. lat. 5318], fol. 136. See K. Jeppesen, 'Eine musiktheoretische Korrespondenz des friiheren Cinquecento', Acta Musicologica, 13 (1941), pp. 3-39. An edition of the whole correspondence is being undertaken by Edward E. Lowinsky and Clement A. Miller. I wish to thank them warmly for allowing me to publish portions of some of the letters in their transcriptions in advance of publication. Moreover Professor Miller kindly read this paper and suggested an explanation for the puzzling word 'dupl iciter' in some of the annotations. I am greatly indebted to Edward Lowinsky, who generously gave of his time and knowledge and whose criticism has considerably improved the final form of this paper.
A lost guide to Tinctoris’s teachings recovered

he wanted ‘in the form of a commentary [like the one] on that Difficiles by Tinctoris so I could understand it well’.2

Though he mentions no more than the first word of Tinctoris’s composition, da Legge’s second letter enables us to identify ‘quella bella cosa di Tintorri’ with a motet referred to by Franchinus Gafurius in his Practica musicae of 1496. In the chapter ‘De modo’ in Book IV, Gafurius describes the system of using ‘indicative’ rests, placed at the beginning of a composition before the mensuration sign, to show whether the modus (the mensuration of the maxima and long) is perfect or imperfect. Three rests covering three spaces each show that both the maxima and the long are perfect, ‘just as Tintoris did in the tenor of his pedagogical motet, Difficiles alios delectat pangere cantus’.3

No work by this title (which might be translated as ‘He takes delight in composing other difficult songs’) occurs in Tinctoris’s treatises, nor is it among his compositions surviving in contemporary prints and manuscripts. But a trail of references to it can be found in the letters of the Spataro correspondence, spanning nineteen years and involving five different correspondents. From these it appears that Tinctoris’s motet served as a model for the solution of knotty problems of mensural usage, imperfection, alteration, coloration and proportions.

That such a work by one of the foremost composer-theorists of the age, a work still known and cited by theorists one generation younger, should have disappeared is greatly to be regretted. It must have belonged to a category of compositions considered as brain-teasers – puzzles to be worked out, bit by bit, until the pieces fell into place. Gafurius is known to have written one such work, which he mentions in his Tractatus practicabilium proportionum of c. 1481–3, the early version of Book IV of the Practica musicae.4 Speaking about the effect of proportions as applied to successive sections of music, he

refers to ‘our motet to Johannes Tintorii, Nunc eat et etere etes’.5 It is likely that this motet was written in response to Difficiles alios, perhaps during the time when Gafurius and Tinctoris were together in Naples, between 1478 and 1480.6 Theirs must have been a relationship of friendly rivalry – unlike that of Gafurius and Spataro, which ended in mutual acrimony.

If Tinctoris’s motet were still to exist, it would probably be found not in a source of practical music but in a collection of didactic music examples, either forming a whole or scattered in a manuscript containing several treatises. There are two such collections in early-sixteenth-century manuscripts: Perugia, Biblioteca Comunale Augusta, MS 1013 (olim 36) [Perugia 1013] and Bologna, Civico Museo Bibliografico Musicale, MS A 71 (olim 159) [Bologna A 71].7

To our pleasure and profit, Difficiles alios occurs in the former, as the last of a series of examples appended to an anonymous treatise on proportions. It has escaped detection so far because the author’s name, ‘Tentoris’, is not written above the piece but under the first notes of the superius (see Figure 1). The three-voice motet, in two parts, covers four openings of the manuscript (fols. 118v–122) and is copiously annotated. The notes concern the proportions, the mensurations, and difficult examples of imperfection and alteration. The tenor in each pars is provided with a resolutio. Gafurius was certainly justified in calling it a ‘pedagogical’ motet.

Before I turn to a consideration of Difficiles alios and its marginal annotations, I shall examine the manuscript in which it is found and the similar collection of examples in Bologna A 71.

PERUGIA 1013 AND ITS TREATISE ON PROPORTIONS

Perugia, Biblioteca Comunale Augusta, MS 1013 (olim 36) is a paper manuscript measuring 210 × c. 160 mm and consisting of 139

---

2 ‘la messa de Discent disielli cum le annotacione di quelli modi dove sarà biogio ... Haveria ché facessi si possibili fosse in modo di uno commodo sopra quello Difficile di Tentorri accio lo potesse bene intenderi’ (letter of 29 December 1523, Vatican City, Vatican Library, lat. 5318, fol. 135v). On the Mass, see below, p. 90 and note 119.


5 ‘et vsae proportiones virtutes propriae operari noscantur ut diffusius paste in moteto nostro ad Ioannem Tinctori: Nunc eat et etere etes et in quantuphis allorius compositionibus’ (‘and the proportions themselves are known to effect their particular powers, as is more amply evident in our motet to Johannes Tinctoris, Nunc et etere etes, and in many compositions of others’), Bologna, Civico Museo Bibliografico Musicale, MS A 69, fols. 2r–3v.

6 On the relations between Gafurius and Tinctoris, see Miller, ‘Early Gaffuriana’, p. 377.

7 The Segovia manuscript (Cathedral, MS s.s. [Segovia s.s.]) contains a small section in which are twelve proportional duos by Agricola, Ohecht, Adam, Roelkin, and Tinctoris (fols. cc–ccv). Of the six attributed to Tinctoris, two are also found in the Perugia manuscript.
folios. The main scribe, Johannes Materanensis, has obligingly
suam utilitatem scriptis' (fol. 45v) and
century musical manuscript
compositions added later by different hands:

M.ccccc.viiii . Die xxj Junij. Domi\[n\]usjohannes Materanensis ad
musical academy in
belonged to the merchant and music-lover Raffaele
Materanensis, and some preliminary material and scattered musical

B
2 fols. lv -2. An eleven-line staff showing the note names , clefs, hexa­
d'ltalia ,
Renaissance
Lucidarium,
Seay, 'An

The different traditions concerning the inventor of music have been trac e d by

J. W. McKinnon, 'Jubal vel

Clinkscale and C. Brook (New

I have not seen the manuscript itse lf but

here. I have not seen the manuscript itse lf but

ofjohannes Hothby , whose 'terzo ordine' includ es

D#
013
013
013
013
013
013
013
013
013
013
A lost guide to Tinctoris's teachings recovered

demonstrating the relationship of the notes under various proportions. On folio 81 begin the musical examples, proceeding from brief illustrations of the simple proportions for two voices, through longer duos involving several different proportions, then three-voice compositions (folios 105v-113), to a single four-voice work by Busnois in which each voice is in a different mensuration. Next follow six compositions on folios 114v-118 illustrating major and minor modus. The last example belonging to this treatise is Tinctoris’s ‘Difficultes alios’, on folios 118v-122. Seemingly as an afterthought, on folios 122v-123 are added ‘alia proportionum exempla’ in tabular form. For a list of the musical examples with concordances, see Table 1.

12 Fols. 123v-136. Regula scribendi secondum suam regulam et geometrie artis et cetera. A treatise in Italian on calligraphy, which shows how to form each letter from the intersection of circles with a square, so that it has the initial appearance of being, as Seay thought, a treatise on geometry. Interestingly, the letters are Gothic minuscules, though Johannes Materanensis came from Matera, south-east of Naples, and wrote a delicate italic script. However, the Gothic hand was used for liturgical books at the time, and it is very similar to Gothic print. As a professional scribe, Johannes Materanensis would have had to be familiar with many different kinds of script.


19 ‘Arts instead of’artem’ may be due to the absence of a following word, indicated by the ‘et cetera’.

20 See, for example, the book prepared by Giovanniantonio Tagliante, the Venetian calligrapher, which provides samples of various types of chancery hands, but also Venetian and Florentine mercantile hands, the Greek alphabet, and two kinds of Gothic majuscule and minuscule alphabets, copied for the monastery of Santa Giustina in Padua, which is similar to the Perugia treatise; both series of letters are constructed geometrically. Perhaps Johannes Materanensis’s interest in musical proportions was stimulated by his experience as a scribe – or vice versa. The mathematical foundation of calligraphy is stressed in one of the earliest printed treatises, the ‘Theoria et pratica perspicacissimi Sigismundi de Fonti Ferraricensis in artem mathematicam professoris de modo scribendi fabricantium omnes litterarum speciebus’, which came out in Venice in 1516. De Fonti undertook the book because lettering ‘anchora non è stata per qualunque modo dilucidata per essere li Preceessori non berc in le Matematiche disciplinae adottati’ (fol. +iii). I wish to thank James Wells, Associate Director of the Newberry Library, for acquainting me with the Library’s rich collection of manuscripts and early printed books on lettering, and for referring me to M. Meiss, Andrea Mantegna as Illuminator (New York, 1957), which includes the informative chapter ‘The Alphatical Treatises’.

Bonnie J. Blackburn


Slightly less than one-third of Johannes Materanensis’s compendium is devoted to music examples showing a great variety of proportions, ranging from the briefest snippets to the pièce de résistance, Tinctoris’s motet. Of these sixty-four examples, most are without text, and all are anonymous except the last and no. 56 (Busnois). I have succeeded in identifying forty of the remainder (see Table 1).

The examples are entered in a systematic fashion. First come duos showing the simple proportions, dupla (i), tripla (i), quadrupla (i), quintupla (i), sexupla (i), and sesquialtera (i), the first three paired with their opposites, subdupla (i), subtripra (i), subquadrupla (i). For these examples, nos. 1–10, Johannes Materanensis drew on a very logical source, Tinctoris’s Proportionale, except for the genus submultiplex, for which Tinctoris gave only an example of subdupla. Johannes took the illustrations of subdupla and subquadrupla from later compositions in his anthology: no. 51 (which in turn comes from Tinctoris’s Liber de arte contrapuncti), and no. 38 (so far unidentified; the tenor of no. 6 comes from an internal passage of no. 38; the superius has been newly composed). In all of the examples the proportions are not only labelled in Latin but also explained in Italian. For example, the first proportion, with C> in the superius and O in the tenor, bears the annotation: ‘Dupla do [=due] semibreve per una, cioè per medium.’ Triplo, with C> in the superius and C in the tenor, has ‘Tripla cioe tre semibreve per battuta.’ Battuta, the Italian equivalent of tactus, always refers to the semibreve of the tenor, unless the part is

21 The academy was founded in 1561; none of the members listed by Atlas in ‘The Accademia degli Unisoni’, however, has the initials ‘S.P.’
Table 1 Musical examples in the treatise on proportions in Perugia 1013

<table>
<thead>
<tr>
<th>No.</th>
<th>Fol.</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81</td>
<td>Tinctoris</td>
<td>Prop., p. 16</td>
<td>dupla</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>81</td>
<td>Tinctoris</td>
<td>Cpt., p. 125</td>
<td>subdupla; = beginning of no. 51</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>81'</td>
<td>Tinctoris</td>
<td>Prop., p. 13</td>
<td>tripla</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>81'</td>
<td>Tinctoris</td>
<td>Prop., p. 18</td>
<td>subtripla</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>81'</td>
<td>Tinctoris</td>
<td>subquadrupla; T taken from no. 38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>81'</td>
<td>Tinctoris</td>
<td>(S newly composed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>81'</td>
<td>Tinctoris</td>
<td>Prop., p. 18</td>
<td>quintupla</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>82</td>
<td>Tinctoris</td>
<td>Prop., p. 19</td>
<td>sextupla</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>82</td>
<td>Tinctoris</td>
<td>Prop., p. 12</td>
<td>dupla, sesquialtera</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>82</td>
<td>Tinctoris</td>
<td>Prop., p. 19</td>
<td>sesquialtera</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>82'</td>
<td>Tinctoris</td>
<td>Cpt., p. 119; Segovia, fol. 204: Johannes Tinctoris; Bologna, p. 289 ('Si bona')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>83</td>
<td>Tinctoris</td>
<td>Cpt., p. 106; Bologna, p. 298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>83'</td>
<td>Tinctoris</td>
<td>Cpt., p. 117; Bologna, p. 296 ('Si vis')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>84</td>
<td>Tinctoris</td>
<td>Cpt., p. 114; Bologna, p. 297 ('Deus alleluia')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>84'–85</td>
<td>Sanctus (\text{Crucifixus of Missa Pour l'Amour d'une})</td>
<td>San Pietro à 80, fols. 159(^{v})–160 (\text{(anon.)})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>85'–86</td>
<td>Sanctus (\text{Sanctus})</td>
<td>Verona 755, fols. 108–19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>86'</td>
<td>Tinctoris</td>
<td>Cpt., p. 110; Bologna, p. 296 ('Nolo')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>87</td>
<td>Tinctoris</td>
<td>Cpt., p. 114; Bologna, p. 299 ('Do')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>87'</td>
<td>Tinctoris</td>
<td>Cpt., p. 117; Bologna, p. 296 ('Si vis')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>88</td>
<td>Tinctoris</td>
<td>Cpt., p. 116; Bologna, p. 289 ('Deus alleluia')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>88'</td>
<td>Tinctoris</td>
<td>Cpt., p. 118; Bologna, p. 289 ('michi')</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>89</td>
<td>Tinctoris</td>
<td>Cpt., p. 118; Bologna, p. 289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>89'</td>
<td>Tinctoris</td>
<td>Segovia, fol. 197: Johannes Tinctoris; Bologna, p. 297</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>90</td>
<td>Tinctoris</td>
<td>Prop., p. 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>90'</td>
<td>Tinctoris</td>
<td>Prop., p. 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>91</td>
<td>Tinctoris</td>
<td>Chanson melody in T; ed. in Melin, p. 143.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>91'</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>92</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>92'</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>93</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>93'</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>93'–94</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>94'–95</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>95'–96</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>96'–97</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>96'–97</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>97'–98</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>98</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>99</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>99'–100</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 (cont.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Fol.</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>89'</td>
<td>Tinctoris</td>
<td>[D'un g aultre amer]</td>
<td>Segovia, fol. 197: Johannes Tinctoris; Bologna, p. 297</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>90</td>
<td>Tinctoris</td>
<td>Prop., p. 20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>90'</td>
<td>Tinctoris</td>
<td>Prop., p. 54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>91</td>
<td>Tinctoris</td>
<td>Chanson melody in T; ed. in Melin, p. 143.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>91'</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>92</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>92'</td>
<td>Tinctoris</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>93</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>93'</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>93'–94</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>94'–95</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>95'–96</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>96'–97</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>96'–97</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>97'–98</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>98</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>99</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>99'–100</td>
<td>Dufay</td>
<td>Chanson melody in S; different from nos. 37 and 40.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 1 (cont.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Fol.</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>100⁺</td>
<td>[Spagna]</td>
<td>[La Spagna]</td>
<td>C.S. 14, fols. 145⁺-146; Verona 761, fols. 119⁺-120</td>
<td>Ed. in Gombosi, pp. xl-v; different from no. 44.</td>
</tr>
<tr>
<td>42</td>
<td>101</td>
<td>[Faugues]</td>
<td>[Pieni di Missa L'homme armi]</td>
<td>C.S. 14, fols. 129⁺-130; Wolfenbüttel 287, fols. 53⁺-54</td>
<td>Ed. in Schütze, p. 110.</td>
</tr>
<tr>
<td>43</td>
<td>101⁺-102</td>
<td>[La Spagna]</td>
<td></td>
<td></td>
<td>Ed. in Gombosi, pp. xxl-v; different from no. 41.</td>
</tr>
<tr>
<td>44</td>
<td>102⁺</td>
<td>[La Spagna]</td>
<td></td>
<td></td>
<td>Possibly a setting of a basse dance tenor.</td>
</tr>
<tr>
<td>45</td>
<td>103</td>
<td>[Le scriverre]</td>
<td></td>
<td></td>
<td>Melody in T.</td>
</tr>
<tr>
<td>46</td>
<td>103⁺-104</td>
<td>[La serviteur]</td>
<td></td>
<td></td>
<td>Melody in T.</td>
</tr>
<tr>
<td>47</td>
<td>104⁺-105</td>
<td>[Gentil madonna]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Larger examples a 3 illustrating mixed proportions |
| 48  | 105⁺-106⁺ | [Tinctoris] | [Catherine sponso dei] | Cpt., p. 135 | Ed. in Besseler, vi, pp. 33-4. |
| 49  | 107 | [Ravy d'amours] | | | |
| 50  | 107⁺-108 | [Tinctoris] | [Sancte Johannes] | Cpt., p. 125; Bologna, p. 288 (no text) | |
| 51  | 109⁺-110 | [Tinctoris] | [Dieu gard la bonne sans reprise] | Florence 176, fols. 24⁺-26; Seville, fols. 91⁺-92; Glogau, no. 180 ('Trag frischen muth') | |
| 52  | 109⁺-111 | [Dufay] | | | |

| Example a 4 illustrating different mensurations simultaneously |
| 53  | 111⁺-112 | [Tinctoris] | [Beiatissima Beatrix] | Prop., p. 24 | |
| 54  | 112⁺-113 | [Tinctoris] | | | |

| Duo without proportions |
| 55  | 113⁺-114 | [Tinctoris] | [Beatissima Beatrix] | Prop., p. 53 | |
| 56  | 113⁺-114 | [Tinctoris] | [Beatissima Beatrix] | Prop., p. 128; Bologna, p. 286 (no text) | |

| Examples illustrating major and minor modus |
| 57  | 114⁺-115 | [Tinctoris] | | | |
| 58  | 115⁺-116 | [Tinctoris] | | | |
| 59  | 116⁺ | [Tinctoris] | [Beatissima Beatrix] | Prop., p. 24 | |
| 60  | 116⁺ | [Tinctoris] | | | |
| 61  | 117 | [Tinctoris] | | | |
| 62  | 117⁺ | [Tinctoris] | | | |
| 63  | 118 | [Tinctoris] | | | |
| 64  | 118⁺-122 | [Tinctoris] | [Difficulte alias] | Prop., p. 53 | |

### Table 1 (cont.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Fol.</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>114⁺-115</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3, no proportions</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>115⁺-116</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>116⁺</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>117</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>117⁺</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>118</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>118⁺-122</td>
<td>[Tinctoris]</td>
<td></td>
<td>a 3, ed. in Appendix</td>
<td></td>
</tr>
</tbody>
</table>

**Bibliography**

- Besseler, Guglielmi Dufay opera omnia, ed. H. Besseler, Corpus Mensurabilis Musicae 1, n (n.p., 1960), vi (n.p., 1964)
- Bologna, Città di Bologna, Biblioteca Capitolare, MS A 71 (olim 139)
- C.S. 14, Vatican City, Biblioteca Apostolica Vaticana, Archivio della Cappella Sistina, MS 14
- Dijon, Bibliothèque Municipale, MS 517
- Florence 176, Florence, Biblioteca Nazionale Centrale, MS Magl. xix, 176
- Glogau, Berlin, Deutsche Staatsbibliothek (formerly Preussische Staatsbibliothek), MUS 40998 (Glogauer Liederbuch)
- Gombosi, Compositioni di Mesi Vincenzo Capriva, Late-Book (circa 1517), ed. O. Gombosi (Neuilly-sur-Seine, 1955)
- MRM 6, Eustachio Romanus, Musica duorum, Rome, 1521, ed. from the literary estate of Hans T. David by H. M. Brown and E. E. Lowinsky, Monuments of Renaissance Music 6 (Chicago, 1975)
- Prop., Johannes Tinctoris, Proportionale musice, Johannes Tinctoris opera theoretica, ed. A. Seay, Corpus Scriptorum de Musica 22, n (n.p., 1978)
- San Pietro a 80, Vatican City, Biblioteca Apostolica Vaticana, MS San Pietro a 80
- Segovia, Catedra de Segovia, MS 8 s.s.
- Seville, Biblioteca Colombiana, MS 3-1-43
- Trent 90, Trent, Castello del Buon Consiglio, Biblioteca della Soprintendenza, MS 90
- Verona 755, Verona, Biblioteca Capitolare, MS noxx
- Verona 761, Verona, Biblioteca Capitolare, MS noxx
- Wolfenbüttel 287, Wolfenbüttel, Herzog-August-Bibliothek, MS Extravag. 287

---

*Note:* The table presents concordances and remarks related to musical works, including titles and authors, with references to various editions and manuscripts.
A lost guide to Tinctoris's teachings recovered

augmented or diminished, in which case the battuta falls on the minim or breve. Sometimes the scribe writes 'per uno battere' instead.

The foundation laid, Johannes branched out into longer duos, adding sub sesquialtera (2) and sesquiteria (3) to his repertory (nos. 11–14). All four of these examples come from Tinctoris's Liber de arte contrapuncti. Most of the polyphonic examples in Book II of this treatise contain proportions, and Tinctoris must have thought of it as further training for those students who had mastered his Proportionale; certain it is that no beginner who had to learn from Book I the proper way to proceed from one concord to another could hope to make head or tail of the examples in Book II without considerable practical experience. The Liber de arte contrapuncti presupposes expertise in singing; it was not written for the amateur musician.

Examples 15 and 16 show coloration. The first is an extract from a Mass, the Crucifixus a 2 of the anonymous Missa Pour l'amour d'une, found in Vatican City, Biblioteca Apostolica Vaticana, MS San Pietro b 80, fols. 159r–160r. The second has not been identified, but it may be a chanson; a signum congruentiae over a cadence at the midpoint suggests that it is a rondeau. No. 17, for two low voices, has a passage in sesquialtera.

No. 18, in C with semiminims written as white flagged minimis, has a brief passage in sesquiteria (2) and an ending in sesquiteria (3). We may be fairly sure that this composition is not by Tinctoris, for he approved neither of showing a proportion by a single number nor of using the sign O to indicate sesquiteria. However, the piece does use another type of proportion discussed by Tinctoris. The use of the word 'semiminim' for the white flagged minimis would draw his displeasure, for Tinctoris rejected the term as a logical impossibility, since the minim (minima), by virtue of its name, is the 'least' of the note values. What looks to us like a semiminim is for Tinctoris a minim in proportio dupla, the diminution being shown by the flag (as in the present example: the flagged minim is to be used under major prolation) or by coloration. Similarly, a white minim with a double flag or a black minim with a single flag — what other theorists called a fusa — was for Tinctoris a minim in proportio quadrupla. When the sign C occurs in one voice of a composition against C in the other voices, it generally indicates augmentation. It is a question of whether C in all voices also indicates augmentation, in which case the tactus falls on the minim instead of the semibreve. The annotations to no. 18 confirm that the tactus falls on the minim: 'Sexquitercia quattro minime per tre battute' and 'sexquialtera cioe tre minime per battuta'; the 'battuta' is a minim. If the duo is transcribed in 1:2 reduction, the proportional sections begin in the middle of a measure (something that occurs very rarely in these examples) and a pattern of notes irregular in 2 emerges: j. j. j. j. j. If, however, the duo is transcribed without reduction (the result of reading the voices in augmentation), the proportional sections fall correctly at the beginning of a measure and the above rhythmic pattern fits well into 5:

manifestantes, una tantum cyphra, videlicet, eius numeri qui ad alium referunt omnes quas practicant proportiones signant (Proporionale musices, Johannes Tinctoris opera thesiatrica, ed. A. Seay, Corpus Scriptorum de Musica 22 (n.p. 1975–8), ii, p. 44. (Seay's edition of Tinctoris's theoretical works, which I have used throughout the paper, will be cited hereafter as Seay i, ii, and iii.) The criticism is echoed by Gafurius in his Practica musicae, trans. Miller, p. 156.

23 On this manuscript, see C. Hamm, 'The Manuscript San Pietro b 80', Revue Belge de Musicologie, 14 (1960), pp. 40–53. (Editor's note: see also C. Reynolds, 'The Origins of San Pietro b 80', p. 257–304 below.)

24 Estimates in Tinctoris opera omnia, ed. W. Melin, Corpus Mensurabilis Musicæ 18 (n.p., 1976), pp. 1–32. The opera are somewhat less than omnia, inasmuch as they do not include examples in the treatises excepting one duo that also appears in Segovia s.s. Unlike those of many other music treatises, a considerable number of examples in Tinctoris's Proportionale musices and Liber de arte contrapuncti are not only complete, but also musically significant compositions that should be presented among the composer's opera omnia, perhaps in a special appendix. (On this question, see also R. Ströhm, 'Die Missa super "Nos amis" von Johannes Tinctoris', Das Musikforschung, 32 (1979), p. 40 n. 19.) Melin inexplicably omits the distichs headed the Missa in the Verona manuscript, the only known source: 'Ferdinande sacer inter divos referentis cantica tinnitus suscipe parva tui' ("O Ferdinand, holy enough to be numbered among the gods, accept the small compositions of your Tinctoris"). These words, so characteristic of the Renaissance spirit of individualism and patronage, probably stem, directly or indirectly, from a presentation copy of Tinctoris's compositions ('cantica') made for King Ferdinand, now lost.


26 Ins minima est nota valoris individui ("a minim is a note of indivisible value"), states Tinctoris in his Difinitorium (see C. Parrish, trans., Dictionary of Musical Terms by Johannes Tinctoris (New York and London, 1963), pp. 40–1). A century and a half earlier, Johannes de Muris had recognised and named a semiminim.

27 The position that blackened minimis are not semiminim forces Tinctoris into a lengthy discussion in his Proportionale on how to tell whether coloration means proportio dupla, sesquialtera, imperfection, or reduction (Seay iia, pp. 16–17 and 20–21).

28 Chasius Hamm in A Chronology of the Works of Guillaume Dufay Based on a Study of Mensural Practice (Princeton, 1964), has put forward the thesis that 'the beat was on the minim in pieces in major prolation dating from the first part of the century' (p. 24). This view has been contested by J. A. Bank, Tactus, Tempo and Notation in Mensural Music from the 13th to the 17th Century (Amsterdam, 1972), esp. chapter vi, 'Mensura facit tactum', in which he shows that the theorists quoted by Hamm speak of the tactus on the minim only when the part is to be read in augmentation.
A lost guide to Tinctoris’s teachings recovered

Here C in both voices indicates augmentation. No. 20, which is by Tinctoris, has O in both voices; it must likewise be read in augmentation up to the first proportional sign. 29

O or C in the tenor does not always have the meaning of augmentation in Tinctoris’s works. At the beginning of the Difficultes alios (see Appendix), where the tenor is in O, the other voices in O, all voices are to be read in integer valor, with minim equivalence. I believe that this usage reflects an earlier stage of Tinctoris’s thought, for at the time he wrote the Proportionale he disapproved of the practice of using O or C as a sign of augmentation without some kind of rule, such as ‘crescit in duplo’ (Seay na, pp. 48–50). His example is taken from the Missa Spiritus almus of Domarto, whom he charges with having ‘sinned intolerably’, along with ‘Regis, Caron, Boubert, Faugues, Courbet, and many others’, including, he is chagrined to admit, Ockeghem and Busnois (Seay na, p. 49). There is another example in the Proportionale where O in the tenor does not indicate augmentation (Seay na, p. 51). In his Missa L’homme armé Tinctoris uses both C in integer valor and C meaning augmentation, but the latter always with the canon ‘crescit in duplo’. 30 By the time he wrote the Liber de arte contrapuncti (1477), Tinctoris seems to have acquiesced in the practice of his contemporaries, and uses O and C to indicate augmentation without any canon.

Nos. 19–22 come from the Liber de arte contrapuncti (curiously, no. 19 duplicates no. 13 – apparently the scribe took them from different sources, though the reading is the same in both). In nos. 20 and 21 dupla superbipartiens tertiias (9) is introduced, in no. 22 sesquioctava (9). No. 23, a duo using the tenor of Ockeghem’s D’un autre amer, is found under Tinctoris’s name in Segovia s.s., fol. 197. Nos. 24–5 come from the Proportionale. The latter is one of the most complex examples in that treatise and illustrates ‘Dupla, sesquialtera, sesquitertia et sesquioctaveraltera in utroque [modo] imperfecto, tempeora perfecto, prolatione maiori et minori’ (Seay na, p. 54). 31

29 This example is concordant with Tinctoris’s Virginis Mariæ laudes in the counterpoint book (Seay ii, pp. 110–12). Contrary to his usual practice, Seay transcribed the beginning of the superius in integer valor, without so indicating.


31 Seay’s transcription (na, p. 54) of the first measure of the discantus should be emended to begin with a breve imperfect ad tenuum (six minims) and end with a semibreve G, thus eliminating the parallel ninths which are not sanctioned in Tinctoris’s rules of counterpoint. Seay, who published his translation of the Proportionale in the same year that his first article on the Perugia manuscript appeared, failed to recognize any of the examples taken

from Tinctoris’s treatise. Of Difficultes alios he says no more than: ‘The Cantus appearing on f. 118’ has under its first notes the word “Tentoris”’ (An “Ave maris stella”, p. 95, n. 1).

On duos in fifteenth-century music, see D. Kämper, ”Das Lehr- und Instrumentalduo um 1500 in Italien“, Die Musikforschung, 18 (1965), pp. 292–33; D. Kämper, Studien zur instrumentalen Ensemblemusik des 16. Jahrhunderts in Italien, Analekta Musico-Licologica 10 (Cologne and Vienna, 1970), pp. 86–112; and H. M. Brown, ”Eustachio’s Historical Position“, Eustachio Romano, Musica duorum, Rome, 1521, ed. from the literary estate of Hans T. David by H. M. Brown and E. E. Lowinsky, Monuments of Renaissance Music 6 (Chicago, 1975), chapter vi. This edition includes a transcription of the duo on Le serviteur from the Perugia manuscript (pp. 38–40), particularly interesting because it runs through the series of proportions C C C C C C C C C C C C.

Recently Lawrence F. Bernstein has made a survey, the results of which he published as ‘French Duos in the First Half of the Sixteenth Century’, Studies in Musicology in Honor of Otto E. Albrecht, ed. J. W. Hill (Kassel and Clifton, N. J., 1980), pp. 43–87; in this article he discussed the duos of Perugia 1013. Independently he discovered a number of concordances with examples in Tinctoris’s treatises. I wish to thank Professor Bernstein for placing the proofs of his article at my disposal before publication.

Recently Lawrence F. Bernstein has made a survey, the results of which he published as ‘French Duos in the First Half of the Sixteenth Century’, Studies in Musicology in Honor of Otto E. Albrecht, ed. J. W. Hill (Kassel and Clifton, N. J., 1980), pp. 43–87; in this article he discussed the duos of Perugia 1013. Independently he discovered a number of concordances with examples in Tinctoris’s treatises. I wish to thank Professor Bernstein for placing the proofs of his article at my disposal before publication.

Seay na, pp. 47 and 57–8. Besseler dates this work c. 1435–40; see Guglielmì Dufay OPERA OMNIA, ed. H. Besseler, Corpus mensurabilis Musicæ I, n (n.p., 1960), p. v. This is the only Mass in which Dufay uses proportions other than sesquialter, except for a brief passage in 10 in the Missa L’homme armé. Charles Hamann has serious doubts about its authenticity, citing six examples of mensural usage that conflict with Dufay’s normal practice; see A chronology of the works of Guillaume Dufay, pp. 105–10.
of C and 3. The Perugia anthology includes three duos from the Missa L'homme armé by Faugues, a composer to whom Tinctoris refers in the Proportionale and the Liber de arte contrapuncti.34

All examples in the Proportionale from Tinctoris's pen are for two voices. The same is true, with two exceptions, of the examples in Book iv (on proportions) of Gafurius's Practica musicae. In fact most treatises on counterpoint give only two-voice examples. It is therefore gratifying to find in the Perugia manuscript a series of three-voice compositions illustrating proportions (nos. 48–55). Two pieces in this section come from Tinctoris's counterpoint treatise (nos. 49 and 51). No. 48, a lengthy composition with an unusual passage in 3, may be a movement from a Mass written before 1450; there is no imitation, and the tenor and contratenor move predominantly in breves and longs, with many ligatures. No. 50 is identical with the three-part chanson Rasy d'amours found in Dijon, Bibliothèque Municipale, MS 517 [Dijon 517], and Wolfenbüttel, Herzog-August-Bibliothek, MS Extravag. 287 [Wolfenbüttel 287]. The final phrase pits sesquialtera through coloration in the superius against sesquialtera through the sign 3 in the contratenor and proportio dupla in the bass.35 No. 53 is Dufay's Dieu gard la bone sans reprise, which illustrates proportio sesquialtera, as do nos. 52 and 54. Otto Gombosi believes that no. 55 is probably a setting of a basse dance melody, so far unidentified; the tenor moves throughout in semibreves under the signature G.36

No. 56, Busnois's Conditor alme siderum, is the only composition for four voices and the only one, aside from Tinctoris's Difficiles alias, to carry a composer's name. It is not known from any other source.37 Only in the bass are there proportional changes, but each voice is written under a different signature, and all four voices have passages

in coloration. No. 57 is a duo without proportions; it may have been added to fill the space beneath the hymn.

On folios 114v–118 are found six compositions illustrating major and minor modus. They have a place in a treatise on proportions because, as Tinctoris asserts, 'it should be considered in which mode, tempus and proportions are to be made'.38 Indeed, two of the examples come from the Proportionale, one from the Liber de arte contrapuncti. The anonymous compositions have no proportions. The scribe has indicated the proper mode, tempus and imitation in the tenor for all of these works.

By the time the student has reached Tinctoris's Difficiles alias on folios 118r–122, he has had a thorough grounding in proportions and fair practice in modal mensurations. Even if he was not familiar with Tinctoris's treatises on proportions and counterpoint, he had now studied twelve music examples from each of them.39 Tinctoris's motet, which is not mentioned in any of his treatises, is, as it were, the musical equivalent of a bar examination. Having played it through successfully, the performer or singer could then consider himself a 'musicus', one who, after careful investigation of theory through the benefit of observation, takes up the calling of singing'.40

34 Proportionale, Book iv, chapter 5 (Seay, p. 53).
35 The readings do not differ substantially from the manuscripts of Tinctoris's treatises known at present. There is some variance, as might be expected, in ligatures and cadential ornamentation. In no. 20, concordant with Virginis Mariei laudis from the counterpoint treatise (Seay, pp. 110–12), white semiminims with double flags are used in place of black semiminims with single flags. An annotation to no. 55, concordant with an example in the Proportionale (Seay, p. 24), is helpful in correcting two passages in Seay's transcription that should have been read in sesquialtera: in bars 7 and 8 after the sign ♩ the three black semibreves are labelled 'sesquialtera'. Therefore they are counted together with the following white semibreve to make a perfect tempus, and the preceding breve D must be perfect. The blackened breve and semibreve in bars 2–3 of the same section are also to be read in sesquialtera. J. A. Bank, in his transcription of this example (Tactus, Tempo and Notation, p. 164, Example 90), though purportedly based on Seay, falls into a different error: in bars 7–8 the black breve is transcribed as a semibreve. I do not understand the statement (p. 165) that 'In the Tenor, Modus minor perfectus alternates with Modus maior perfectus and Modus minor imperfectus, indicated by means of special signs over the system, which Tinctoris thinks is the best way of notation.' There is only one sign, of modus maior perfectus, minor imperfectus at the beginning of the tenor, and blackened notes achieve imperfectness of the modus. In none of his examples does Tinctoris change the modus within a composition.
36 Proportionale, Book iv, chapter 5 (Seay, p. 53).
37 The readings do not differ substantially from the manuscripts of Tinctoris's treatises known at present. There is some variance, as might be expected, in ligatures and cadential ornamentation. In no. 20, concordant with Virginis Mariei laudis from the counterpoint treatise (Seay, pp. 110–12), white semiminims with double flags are used in place of black semiminims with single flags. An annotation to no. 55, concordant with an example in the Proportionale (Seay, p. 24), is helpful in correcting two passages in Seay's transcription that should have been read in sesquialtera: in bars 7 and 8 after the sign ♩ the three black semibreves are labelled 'sesquialtera'. Therefore they are counted together with the following white semibreve to make a perfect tempus, and the preceding breve D must be perfect. The blackened breve and semibreve in bars 2–3 of the same section are also to be read in sesquialtera. J. A. Bank, in his transcription of this example (Tactus, Tempo and Notation, p. 164, Example 90), though purportedly based on Seay, falls into a different error: in bars 7–8 the black breve is transcribed as a semibreve. I do not understand the statement (p. 165) that 'In the Tenor, Modus minor perfectus alternates with Modus maior perfectus and Modus minor imperfectus, indicated by means of special signs over the system, which Tinctoris thinks is the best way of notation.' There is only one sign, of modus maior perfectus, minor imperfectus at the beginning of the tenor, and blackened notes achieve imperfectness of the modus. In none of his examples does Tinctoris change the modus within a composition.
40 "Musicus est qui perpensa ratione beneficia speculationis canendi officium assumit" (Tinctoris, Difficiliorum; Parish, Dictionary, p. 44) -- a definition that is largely taken over from Boethius: 'Is vero est musicus, qui ratione perpensa canendi scientiam non servitio operis sed imperio speculationis adnumpti' (De institutione musicae, ed. G. Friedlein (Leipzig, 1867), p. 224), but with the important difference that Boethius's musicus does not design to sing.
Mainly a collection of theoretical treatises, Bologna, Civico Museo Bibliografico Musicale, MS A 71 (olim 159), probably dates from the second decade of the sixteenth century. It has been described a number of times — by Gaetano Gaspari, Higinio Anglès, Robert Stevenson, Valerie Weinhouse O'Donoghue, Karl-Werner Gümpel, and Winfried Kirsch — yet no one description is satisfactory for both the musical and the theoretical sections. In the following catalogue, the description of the treatises is taken from the study of Karl-Werner Gümpel, to which the reader is referred for further details.

Bologna A 71 is a paper manuscript of 303 pages, numbered in a later hand, measuring 215 × 145 mm. Its contents are as follows:


2. pp. 134–90. Guilielmus de Podio, *Enchiridion de principiis musicæ discipline*, datable after 1495, since it refers to Podio’s *Commentarii musicæ* published in that year.


4. pp. 207–20. Six motets for four and three voices (see Table 2, nos. 1–6). Valerie O’Donoghue (crediting Joshua Rifkin) and Winfried Kirsch discovered independently that the first two motets are compositions of Andreas de Silva and Adrian Willaert, respectively. The third motet carries the name ‘Antonius Marlet’, maestro de capilla at the Cathedral of Tarragona in the early sixteenth century, and Anglès thought that all of the motets were of Spanish origin. Both Anglès and Kirsch erroneously list the *secunda pars* of no. 5 as a separate motet.

### Table 2: Musical examples in Bologna A 71

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
<th>Author</th>
<th>Title</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>208-10</td>
<td>Adrian Willaert</td>
<td>[Illicit tempore celi et oc]</td>
<td>Ed. in MRM 4, pp. 114-19.</td>
</tr>
<tr>
<td>8</td>
<td>251-2</td>
<td>Juponius</td>
<td>Si con gi pran [Se congiq pran], l. 69</td>
<td>Ed. in Kirsch, p. 21.2, and MRM 4, pp. 114-19.</td>
</tr>
</tbody>
</table>


Genus-Catalogue, I, p. 68. I have worked from a microfilm.


Table 2 (cont.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>12a</td>
<td>263-4</td>
<td>[Tinctoris?]</td>
<td>O precor, a 4</td>
<td></td>
<td>The note at the end of the S, 'Ad longum', indicates that this is a resolution of the Z.p. of the preceding piece. Ed. in O'Donoghue, pp. 105-10.</td>
</tr>
<tr>
<td>13</td>
<td>286</td>
<td>[Tinctoris]</td>
<td>[Beatissima Beatrix], a 3</td>
<td>Cpt., p. 128; Perugia, fols. 115–116 (no text, anon.)</td>
<td>T (except notes 4–8) same as no. 18 below. Ed. in O'Donoghue, pp. 113-14.</td>
</tr>
<tr>
<td>14</td>
<td>287</td>
<td>[Tinctoris?]</td>
<td>textless, a 3</td>
<td></td>
<td>Ed. in O'Donoghue, p. 111-12.</td>
</tr>
<tr>
<td>15</td>
<td>288</td>
<td>[Tinctoris]</td>
<td>[Sancte Johannes Baptista], a 3</td>
<td>Cpt., p. 125; Perugia, fols. 106–109 (no text, anon.)</td>
<td>Ed. in O'Donoghue, pp. 115-16.</td>
</tr>
<tr>
<td>16</td>
<td>289</td>
<td>[Tinctoris]</td>
<td>Do, a 2</td>
<td>Cpt., p. 116 ('Alleluia'); Perugia, fol. 88' (no text, anon.)</td>
<td>Ed. in O'Donoghue, p. 117.</td>
</tr>
<tr>
<td>17</td>
<td>289</td>
<td>[Tinctoris]</td>
<td>michi, a 2</td>
<td>Cpt., p. 114 ('Alleluia'); Perugia, fol. 89 (no text, anon.)</td>
<td>Ed. in O'Donoghue, p. 118.</td>
</tr>
<tr>
<td>18</td>
<td>290</td>
<td>[Tinctoris]</td>
<td>Si bona, a 2</td>
<td>Cpt., p. 119 ('Alleluia'); Perugia, fol. 87' (no text, anon.); Segovia, fol. 204 (no text)</td>
<td>Ed. in Melin, p. 128; O'Donoghue, pp. 119-20.</td>
</tr>
<tr>
<td>19</td>
<td>290</td>
<td>Philipe Nescitis quid petatis, a 3</td>
<td></td>
<td></td>
<td>Puzzle piece; the T consists of the numerals '1' and '2' on various degrees of the scale with the canonic instructions 'In Diapente et Diapason'; the CT is to be read backwards ('ut cancer').</td>
</tr>
<tr>
<td>20</td>
<td>291</td>
<td>[Tinctoris?]</td>
<td>textless, a 3</td>
<td></td>
<td>Ed. in O'Donoghue, p. 121.</td>
</tr>
<tr>
<td>21</td>
<td>296</td>
<td>[Tinctoris]</td>
<td>Si vis, a 2</td>
<td>Cpt., p. 117 ('Sanctus'); Perugia, fols. 83' and 87' (no text, anon.)</td>
<td>Ed. in O'Donoghue, p. 122.</td>
</tr>
<tr>
<td>22</td>
<td>296</td>
<td>[Tinctoris]</td>
<td>nolo, a 2</td>
<td>Cpt., p. 110 ('Virginis Mariae laudes', Perugia, fol. 86 (no text, anon.)</td>
<td>Although it is written like a separate piece, this is the last phrase of the S of the previous piece.</td>
</tr>
<tr>
<td>22a</td>
<td>296</td>
<td>[Tinctoris]</td>
<td>Ego volo</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 (cont.)

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
<th>Author</th>
<th>Title</th>
<th>Concordances</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>297</td>
<td>[Tinctoris]</td>
<td>Dung autre, a 2</td>
<td>Segovia, fol. 197; Perugia, fol. 89' (no text, anon.)</td>
<td>Ed. in Melin, p. 143; O'Donoghue, pp. 123-4.</td>
</tr>
<tr>
<td>24</td>
<td>297</td>
<td>[Tinctoris]</td>
<td>Deus alleluia, a 2</td>
<td>Cpt., p. 113 ('Alleluia'); Perugia, fol. 84 (no text, anon.)</td>
<td>Ed. in O'Donoghue, p. 125.</td>
</tr>
<tr>
<td>25</td>
<td>298</td>
<td>[Tinctoris]</td>
<td>textless, a 2</td>
<td>Cpt., p. 106; Perugia, fol. 83 (anom.)</td>
<td>Ed. in O'Donoghue, p. 126 (as a 3-part piece, including no. 26).</td>
</tr>
<tr>
<td>26</td>
<td>298</td>
<td>[Tinctoris?]</td>
<td>textless (S only)</td>
<td></td>
<td>An alternative version of the S of no. 23, without proportions.</td>
</tr>
<tr>
<td>27</td>
<td>298</td>
<td></td>
<td>Done ponam inimicos tuos, a 4</td>
<td></td>
<td>'Primus tonus'. Ps. 109, v. 2. Falsobordone.</td>
</tr>
<tr>
<td>28</td>
<td>298</td>
<td></td>
<td>Potens in terra erit, a 4</td>
<td></td>
<td>'Tercius tonus'. Ps. 111, v. 2. Falsobordone.</td>
</tr>
<tr>
<td>29</td>
<td>299</td>
<td></td>
<td>Sit nomen domini benedictum, a 4</td>
<td></td>
<td>'Quartus tonus'. Ps. 112, v. 2. Falsobordone.</td>
</tr>
<tr>
<td>30</td>
<td>300</td>
<td></td>
<td>Magna opera domini, a 4</td>
<td></td>
<td>'Secundus tonus'. Ps. 110, v. 2. Falsobordone.</td>
</tr>
<tr>
<td>31</td>
<td>300</td>
<td></td>
<td>Quoniam confirmata est, a 4</td>
<td></td>
<td>'Sextus tonus'. Ps. 116, v. 2. Falsobordone.</td>
</tr>
</tbody>
</table>

Bologna x 142 Bologna, Civico Museo Bibliografico Musicale, MS x 142
MRM 3, 4 The Medici Codex of 1518, ed. E. E. Lowinsky, Monuments of Renaissance Music 3, 4 (Chicago, 1968)
Pal. lat. 1980-1 Vatican City, Biblioteca Apostolica Vaticana, MS Pal. lat. 1980-1
Perugia Perugia, Biblioteca Comunale Augustana, MS 1013 (olim x 36)
Segovia Segovia, Catedral, MS s.s.
Smijers Werken van Josquin des Prés, ed. A. Smijers, Aflevering 3: Wereldelijke Werken, 1 (Amsterdam, 1923)
A lost guide to Tinctoris’s teachings recovered

5 pp. 222–7. Anonymous treatise beginning ‘Incipit compendium musicale de diversis questionibus et diffinitionibus’. This is a miscellaneous and unordered collection of definitions, many of which are taken, without acknowledgement, from Marchetto’s Luciderarium.

6 pp. 228–30. Six sections on the division of the monochord.

7 pp. 232–5. A series of examples showing (a) clausulae in various modes (one voice only); (b) clausulae that fit against a tenor pattern of three breves, A, B, C; (c) clausulae that fit against a tenor moving B, C, D; (d) ornamental figures written over single breves or patterns of three breves—all without clef and therefore applicable to various modes; (e) a sixty-four-measure example over an unchanging bass (except the penultimate measure), showing how it is possible to combine a selection of the above figures into a continuous melodic line.

No explanation accompanies the examples (contrary to Kirsch’s assumption, they do not belong to the previous treatise), which seem to form a practical compendium showing how to sing or play a counterpoint over a lower voice moving in breves. They would be of use to a singer improvising super librum, an instrumentalist playing over a bass dance melody, or a singer wishing to ornament. Recently, Howard Mayer Brown has reconstructed a table of ornaments for fifteenth-century chansons based on variant readings found in chanson manuscripts and on the ornamentations of the Buxheim Organ Book. He believes that ‘passaggi were probably expected as a matter of course from instrumentalists throughout the entire sixteenth century’, and that this practice extended back to the fifteenth century; he cites a passage from Adam von Fulda on the corruption of music by the ‘worst usages of instrumentalists’. The examples in Bologna A 71 seem to form the earliest ‘manual’ of passaggi known; they confirm Brown’s thesis and offer an Italian counterpart to his examples from French and German sources.

8 pp. 241–8. Excerpts from Gafurius, Practica musicae, Book iv, chapters 1–3 and 3–6: a compendium of the most common proportions, together with the relevant music examples.

9 pp. 251–2. Josquinus, Si con gi pran [Se congi prens] (see Table 2, no. 8). This chanson was probably included in the manuscript because of the scribe’s interest in proportions; it has several passages in sesquialtera.

10 pp. 254–64. A series of musical examples, ranging from one to four voices, most without text (see Table 2, nos. 9–12a).

11 pp. 266–76. Anonymous Spanish treatise beginning ‘Canto es movi-

miento de voces concordante’, which has some parallels with Podio’s Enchiridion and Commentarii musices.

12 p. 284. Excerpt from Gafurius, Practica musicae, identical with that on p. 248.

13 pp. 286–91. Eight anonymous music examples, five of which come from Tinctoris’s Liber de arte contrapuncti, though the scribe has omitted the text or changed the incipit (see Table 2, nos. 13–20), effectively hiding their authorship up to now.

14 pp. 296–9. Six anonymous music examples, four of which are taken from the Liber de arte contrapuncti, likewise with spurious incipits; another is found under Tinctoris’s name in Segovia s.s. (see Table 2, nos. 21–6).

15 pp. 298–300. Five four-part settings of psalm tones in falsobordone style (see Table 2, nos. 27–31). Since the second verse is given in each case, alternatim performance with chant is indicated. Thus the psalm tones, ornamented in the superius, begin with the reciting note, not the intonation.

The excerpts from Gafurius’s Practica musicae provide a terminus post quem of 1496. All the treatises and the short musical examples could have been entered before 1500, but the inclusion of motets by Andrea de Silva and Adrian Willaert makes a later dating mandatory, c. 1515–20. The manuscript seems to be in one hand; the slight variants may be due to the use of different pens.

The compiler of Bologna A 71, who may well have been a student at the Spanish College of Bologna, drew most of his proportional

49 Bologna A 71 was unknown to Murray C. Bradshaw, The Falsobordone: A Study in Renaissance and Baroque Music (n.p., 1978). Although he believes falsobordone originated in Italy, most of the earliest sources are Spanish. Interestingly, Bologna A 71 has both Italian and Spanish elements. The falsobordone are in a style similar to Bradshaw’s examples from the late fifteenth century.

50 Ibid., p. 24. Unlike other early sources, Bologna A 71 does not include a setting of Psalm 113, In exitu Israel.

51 De Silva’s earliest datable work is his Gaude filiorem, written for the election of Leo x in 1513; see E. E. Lowinsky, ‘A Newly Discovered Sixteenth-Century Motet Manuscript at the Biblioteca Vallicelliana in Rome’, Journal of the American Musicological Society, 3 (1956), pp. 175–8; Willaert was in Italy by July 1515, when he entered the service of Cardinal Ippolito d’Este in Rome; see L. Lockwood, ‘Josquin at Ferrara: New Documents and Letters’, Josquin des Prez: Proceedings of the International Josquin Festival-Conference, ed. E. E. Lowinsky in collaboration with B. J. Blackburn (London, 1976), pp. 119–20. (An earlier date has been proposed by Valerie Weinhouse O’Donoghue; see note 55 below.)

52 Robert Stevenson has suggested that the manuscript was ‘intended for use among students in the Spanish college at Bologna’; see Spanish Music in the Age of Columbus (The Hague, 1960), p. 74. V. W. O’Donoghue, ‘A Music Manuscript from the Spanish College of Bologna: A Study of the Manuscript Bologna, Civico Museo Bibliografico Musicale, MS A 71 (slim 150)’ (M.M. thesis, University of Illinois at Urbana-Champaign, 1972), accepts Stevenson’s suggestion and points to the frequent underlining and marginal notes as evidence that the manuscript ‘was originally used for study purposes’ (p. 4). I wish to
examples not from Spanish theory but from Tinctoris's Liber de arte contrapuncti. The nine examples he chose are also found in the Perugia manuscript. The readings differ mainly in the notation of ligatures, but in a few details Perugia and Bologna reveal derivation from a common source not identical with any of the manuscript versions of treatises by Tinctoris known at present. The scribe himself may be responsible for no. 26, an alternative superius to no. 25 that lacks proportions, and possibly also for no. 14, which uses a tenor, with slight variants, from an example by Tinctoris (no. 18). No. 10, a counterpoint over a tenor written in chant notation, follows Tinctoris's description of one method of making a counterpoint over a plainchant melody ('there are some who make each note of the plainchant worth two semibreves in minor prolacion'; Seay ii, p. 112).

In addition to the small didactic examples, Bologna A 71 includes two full-size motets for four voices that are examples of the proportioner’s art. One (no. 6) is found among the motets in the first section of the manuscript, including those by de Silva and Willaert, and stands close to them stylistically. The proportions are indicated by numbers, mensuration signs, and coloration, and change frequently in all voices. The second, O preco (no. 12), carries the following note at the end of the bass of the secunda pars: 'Bene correctum est', and underneath it the name 'Tintoris'. A note such as this would seem to imply that Tinctoris had read through the motet and found it correct. The note, however, matches other marginal annotations which seem to be in the hand of the scribe, and he may have copied it along with the music from the source he used. Can the motet be by

express my warmest thanks to Professor Donald Krummel of the University of Illinois, whose kind intervention made the thesis accessible to me.

53 O’Donoghue is to be credited with the discovery of the concordances in the Perugia manuscript, although their source in Tinctoris’s Liber de arte contrapuncti escaped her.

54 For example, in Seay ii, p. 117, first measure of the upper voice at the top of the page, Bologna and Perugia give A as the third note – certainly not the correct reading; in the example on p. 120, bars 2–3, the change to sequentiaria occurs one measure earlier in both sources (with no change in harmony). On p. 126, third staff, bar 1, Perugia and Bologna agree with Bologna, Biblioteca Universitaria, MS 2573, in giving D as the fourth note of the lowest voice – a better reading since it removes the leap into a dissonance.

55 O’Donoghue thinks it possible that the note is in the hand of Tinctoris; this is the basis for her suggestion that the manuscript may date before his death in 1511, though she concludes that 1510–15 is the most likely date (‘A Music Manuscript’, pp. 39–40). Since the handwriting of the note appears elsewhere in the manuscript, it seems more plausible to assume that the name Tinctoris was copied by the scribe together with the piece, a hypothesis considered conceivable by O'Donoghue (ibid., p. 37).

A lost guide to Tinctoris’s teachings recovered

Bonnie J. Blackburn

Tinctoris? One is immediately struck by the formal similarity of O preco to Difficiles alios. Both are in two partes, with successive proportions only in the secunda pars. Both have a tenor that has the slow beginning of a cantus firmus, but then falls in with the rhythmic pace of the other voices. In both pieces the mensuration of the tenor differs from that of the surrounding voices, though those in O preco are in proportio dupla from the start, whereas Difficiles reserves proportio dupla for the secunda pars. Neither motet seems to have been conceived with a text in mind. Difficiles is for three voices, O preco for four, imposing an additional burden on the composer; however, the tenor is silent in about half the motet. The proportions are less complicated, though one section of the alto runs through 12 16 6. But if the motet is similar to Difficiles alios in its formal elements, its style has no place in Tinctoris’s oeuvre. The melodic writing is undistinguished and repetitive; the phrases lack the sweep and direction of Difficiles alios. The counterpoint is too busy; three and four voices frequently move simultaneously in quavers and crotchets, especially after the opening phrase. In Difficiles alios, Tinctoris keeps the third voice in a slower rhythm when the remaining two voices have passages in quavers. But above all it is the rhythm that speaks against Tinctoris’s authorship: it is nervous and jerky, and the constantly repeated motifs, especially the figures ♮ ♮ and ♮ ♮, become obtrusive. Bars 1–13 of the prima pars will give an idea of how well the anonymous composer imitated the structure of Difficiles alios and how little he was able to capture the grace and fluency of Tinctoris’s melodic and rhythmic style (Example 1) – if indeed he was at all interested in doing so. One is dealing here with the denser style of the Ockeghem generation.

TINCTORIS’S ‘DIFFICILES ALIOS’ AND ITS ANNOTATIONS

Tinctoris’s motet stands far above the other examples in Perugia 1013 in length and complexity, for besides being a lesson in proportions, it is an exercise in notation. A number of glosses have been provided, not only in the hand of the scribe, Johannes Materanensis, but also by another person. Johannes wrote brief explanatory remarks under certain notes of the tenor and labelled the proportions in the secunda pars. In his hand is the name ‘Tentoris’, not over the piece but under the first notes of the superius. It was left to the
A lost guide to Tinctoris's teachings recovered


Bonnie J. Blackburn
second person, whom I shall call the annotator, to recognise that the first words of the piece are ‘Difficiles alios’, which he added after ‘Tentoris’ (see Figure 1). His handwriting, though similar to that of Johannes Materanensis, is distinguished by a greater cursiveness and a pronounced tilt to the right. Note also the different capital ‘T’. However, the formation of certain letters and especially the abbreviations for ‘par’ or ‘per’ and ‘pro’ and the tendency to run the words ‘ad totum’ together are common to both hands. Thus there may have been one scribe who made the entries at two different times. The annotator is responsible for all the marginal remarks and the detailed explanations of the proportions and the notational problems. In each voice he used an alphabetical numbering, keyed to the comments in the margins. These letters have been retained in the score (see Appendix) and in the commentary below. Johannes Materanensis’s notes on the proportions have been included in the score, but his comments on the notation of the tenor have not been kept since they largely duplicate the annotator’s remarks. Wherever they differ, the commentary notes the variants.

The didactic nature of Tinctoris’s motet is underlined not only in the annotations, which may stem directly from Tinctoris himself, but also in the format the scribe has chosen for the motet. Superius and tenor are on the first opening (fols. 118v–119), contratenor on the second (fol. 119v), making a performance from the manuscript impossible; the proportions, for example, do not appear before the ‘seconda parte’. The tenor of the secunda pars, too, appears in a resolved version.

Decipherment of Tinctoris’s motet requires familiarity with the precepts in many of his treatises. The rudiments of notation explained in the Tractatus de notis et pausis and the treatise Super punctis musicalibus provide the fundamental basis; they do not differ from the general theoretical teachings of the time. The Tractatus de regulari valor notarum contains not only the listing of note values under each mensuration but also a systematic numbering and description of the sixteen possible mensurations. The annotations of the manuscript agree with Tinctoris’s numbering, which differs from that of his predecessors and successors. A variety of different usages of imperfection and alteration are found in the motet; all of these may be traced back to rules specified in the Liber imperfectionum notarum musicalium and the Tractatus alterationum. The proportions found in the secunda pars are treated in the Proportionale. And, of course, the counterpoint follows the rules of Tinctoris’s Liber de arte contrapuncti. In fact, the examples in the latter are very similar in style to Difficiles alios, including the use of proportions.

When was Difficiles alios written? It probably dates from the years when Tinctoris was writing his treatises on notation, in the early 1470s, and it certainly antedates the Liber de arte contrapuncti of 1477 because the sign ⌂ is used without the meaning of augmentation, a practice Tinctoris no longer follows in the counterpoint book (see above, p. 42). The fact that it is not mentioned in any of his writings is no reason to date it later, for Tinctoris, at the end of his Liber de arte contrapuncti, says: ‘I have referred to these compositions [by Dufay, Busnois, Ockeghem, etc.], however, as examples to confirm this our rule, leaving out my own, not without advantage . . . lest I, contrary to a good man’s duty, would seem to approve only myself, and to look down on others where they had done well.’

In the commentary that follows, each of the voices has been taken up in turn. The marginal annotations of the Perugia manuscript have been transcribed and translated and are followed by an explanation. In general, Tinctoris moves from the simple to the complex; the proportions, for example, do not appear before the secunda pars. They begin with dupla, pass through tripla, quadrupla, and sextupla (all of the genus multiplex), reverse to subdupla (genus submultiplex)..

---

56 Difficiles alios delestat panger cantus seems to be a motto rather than the beginning of a text. I do not know its source.

57 On this, see, the letters of Giovanni del Lago to Pietro Aaron and to Lorenzo Gazio (below, pp. 90 and 93–4).

58 See the letter of Giovanni del Lago to Pietro Aaron of 27 August 1539, discussed below (p. 90), which shows the state of confusion in ordering the mensurations.

59 And sometimes even the use of motifs. Compare the opening of the cantus of Difficiles alios with bars 1–3 of the tenor of Sancte Johannes Baptistae (Seay II, p. 125).

60 I shall discuss the chronology of Tinctoris’s treatises in another study.

61 Seay II, p. 136. I use Lowinsky’s translation in ‘Renaissance Writings on Music Theory (1964)’, Renaissance News, 18 (1965), p. 356. In all his treatises, Tinctoris mentions no more than one of his own compositions, and that only because it serves as the catalyst for his treatise on alterations; see p. 82 below.
A lost guide to Tinctoris's teachings recovered

and return to *dupla*; from there they move into the *genus superparticular* with *sesquialtera* and *sesquitertia*, returning to *dupla* for the remainder of the *pars*. In the beginning of the tenor of the *prima pars* the notes are glossed in an ascending series: *minim*, *semibreve*, *breve*, *long*, *maxima*.

**Prima pars, cantus (fol. 118°), heading (see Figure 1):**

*Ista pars cantus que suprema dicitur ex nona specie scilicet utroque modo perfecto [tempore perfecto] et prolacione minori est hic composita Tenori ut fundamentum relationis equaliter proportionata.*

(This part of the composition, called superius, is composed in the ninth species, that is perfect in each mode, perfect *tempus*, and minor prolongation, proportioned equally to the tenor as the foundation of reference.)

The characterisation of this voice as being in the 'ninth species' agrees with Tinctoris's numbering of the modal species in his *Tractatus de regulari valore notarum*, chapter 24, 'On the ninth species of composition and the value of the notes in it': 'The ninth species of composition consists of each perfect mode, perfect *tempus*, and minor prolongation. Therefore in it the maxima is regularly worth 3 longs, 9 breves, 27 semibreves, and 54 minims; the long 3 breves, 9 semibreves and 18 minims; the breve 3 semibreves and 6 minims; and the semibreve 2 minims.'

The notes of the superius are in equal relation to the tenor; that is, there is no reduction in one voice. Tinctoris gives an example of *proportio aequalitatis* towards the beginning of his *Proportionale* (Seay ii, p. 14). The famous definition of the tenor as 'fundamentum relationis' comes, of course, from Tinctoris's *Diffinitorium*: 'The tenor is the foundation of the relationship [of the various voice-parts] of any part-song.'

62 *De nona specie compositionis et valore notarum in ea existentis*': 'Nona species compositionis fit ex utroque modo perfecto, tempore perfecto et prolacione minori. Itaque regulariter in ea valet maxima 3 longas, 9 breves, 27 semibreves et 54 minimas; longa 3 breves, 9 semibreves et 18 minimas; brevis 3 semibreves et 6 minimas; ac semibrevis 2 minimas.' (Seay i, p. 134.) The music example given by Seay lacks the three pauses covering three spaces each that are indicative of the major and minor perfect modes. There are also errors in pauses elsewhere in this treatise: in Example 30 there should be three pauses covering two spaces each; in Example 31 two pauses covering three spaces each, and in Example 35 two pauses covering three spaces each. In Example 29 a semibreve E is missing before the minim C. Del Lago, in a letter to Pietro Aaron of 27 August 1639, refers to 'the glosses of the soprano, the *prima pars* of the tenor, and the *secunda pars* of the tenor' of this composition as an example of how Tinctoris numbers the species of modes; see below, p. 90.

63 *Tenor est cuiusque cantus compositi fundamentum relationis.*' (Parrish, *Dictionary*, pp. 64–5.)
A lost guide to Tinctoris's teachings recovered

seems to originate with Tinctoris, the idea of the tenor as the foundation, in the architectural sense, goes back at least to the late thirteenth century. Johannes de Grocheo draws a comparison between the tenor of a composition and the foundation of a building in his treatise on music; he is followed by Jacobus of Liége and the author of the *Quatuor principalia musicae.* Other theorists, such as Johannes de Muris, call counterpoint the 'fundamentum' of discant; a musician cannot hope to compose well unless he has a good foundation in (two-part) counterpoint.

*Prima pars,* cantus (fol. 118°), marginal note:

Genera cantus quorum nonnulla posuit Aristoteles in 8.ο politicorum plura autem Cicero in 2.ο de natura deorum.

---

**Diagram:**

- **Cantus**
  - **Difficilis** (difficult)
  - **Facilis** (easy)
  - **Lentus** (slow)
  - **Velox** (fast)
  - **Novus** (new)
  - **Vetus** (old)
  - **Gravis** (low)
  - **Acutus** (high)
  - **Asper** (harsh)
  - **Lenis** (mild)
  - **Mollis** (soft)
  - **Durus** (hard)
  - **Rigidus** (tense)
  - **Remissus** (relaxed)
  - **Letus** (happy)
  - **Tristis** (sad)

---


65 Johannes de Muris, *Ars contrapuncti* (CS m, p. 60): 'Contrapunctus non est nisi punctum contra punctum vel notam contra notam ponere vel facere, et est fundamentum discantus. Et quia sicut quis non potest edificare, nisi prius faciat fundamentum, sic aliquid non potest discantare, nisi prius faciat contrapunctum.' (Counterpoint is nothing but placing or making a point against a point or a note against a note and it is the foundation of discant. And just as no one can build unless he first makes a foundation, so no one can sing discant unless he first makes counterpoint.) In the chapter 'De numerorum proportione' in his *Notitia artis musicae* of 1321 (ed. U. Michels, Corpus Scriptorum de Musica 17 [n.p., 1972]), Johannes de Muris gives a table of the five species of proportions in which all the numbers are to be compared to the 'fundamentum relationis' which serves as the denominator (p. 54).

66 Politics, vm, ch. 5, 7; see *The Basic Works of Aristotle,* ed. R. McKeon (New York, 1941), pp. 1312, 1316.


Bonnie J. Blackburn

Aristotle, in the eighth book of the *Politics,* discusses the characters of the four modes:

...even in mere melodies there is an imitation of character, for the musical modes differ essentially from one another, and those who hear them are differently affected by each. Some of them make men sad and grave, like the so-called Mixolydian, others enfeeble the mind, like the relaxed modes, another, again, produces a moderate and settled temper, which appears to be the peculiar effect of the Dorian; the Phrygian inspires enthusiasm . . . The Socrates of the *Republic* is wrong in retaining only the Phrygian mode along with the Dorian, and the more so because he rejects the flute; for the Phrygian is to the modes what the flute is to musical instruments – both of them are exciting and emotional . . . All men agree that the Dorian music is the gravest and manliest . . . the Dorian is a mean between the other modes.

As Aristotle says, this classification comes from Plato's *Republic* (the speakers in this section are Socrates and Glaucon), where the 'dirge-like harmonies' are said to be Mixolydian and intense Lydian, the 'soft and convivial harmonies' certain Ionian and Lydian modes 'that are called relaxed', the 'enforced' the Dorian ('that harmony that would fittingly imitate the utterances and the accents of a brave man who is engaged in warfare'), the 'voluntary' the Phrygian ('for such a man engaged in works of peace, not enforced but voluntary').

Plato's comments on the Dorian and Phrygian modes are not at all clear. He introduces the discussion with the statement by Socrates, 'I don’t know the harmonies', who then goes on to speak of 'that harmony', then 'another [harmony]' . One assumes that he discusses them in the order mentioned, Dorian and Phrygian, but the characterisations, according to Aristotle's comments, should be just the reverse. Glareanus discusses this passage from Plato's *Republic* in his chapter on the Lydian mode. He remarks that, with regard to Dorian and Phrygian, Plato 'does not pronounce anything definite about them. But he teaches that those modes should be adhered to in
general which kindle and excite the virile spirit to noble deeds.' Moreover 'Plato speaks as if he did not know them sufficiently well himself, although I believe he understood them clearly, as all mathematical knowledge was known to that very learned age. But I could not say easily how it was understood by the translator.'68 (Glareanus does not refer to Aristotle in this connection.) Indeed, Plato presents Socrates as being familiar with the effects, but not the names of the modes, for each time, after describing the character of a mode, he asks Glauccon to give the name of it. The ambiguity of Plato's remarks had considerable consequences in later music history, especially in the sixteenth century.

Earlier, Glareanus had taken up the saying 'From Dorian to Phrygian', explaining it as 'from natural to less natural, or from well ordered to irrational, or from mild to harsh'.69 He criticises Gafurius, for whom he generally has the highest regard, for contradicting himself in explaining the adage as a change from 'invariable and serious moods' to 'pleasant and less severe' ones in one place, then characterising Phrygian in another place as 'suitable for incitement to war'.70 Glareanus's own opinion of Phrygian (in contemporaneous music) is that it is 'more suitable to severe, religious music, as elegies, laments, and funeral music', though he admits that composers of 'happy genius' such as Josquin and Pierre de la Rue are quite capable of using this mode to advantage also for other subjects.71 He quotes various Greek and Roman authors who hold contrasting opinions about the effects of the Phrygian mode.72

To the medieval theorists, for whom Aristotle was the supreme authority - 'the Philosopher', as he is often called - the Phrygian mode was considered exciting, the Dorian moderate.73 Tinctoris, in the Liber de natura et proprietate tonorum, referring to Aristotle, says: 'For

68 Henricus Glareanus, Dodecachordon, trans. C. Miller, Musicological Studies and Documents 6, 2 vols. (n.p., 1965), i, p. 164. Glareanus, who prided himself on his knowledge of Greek, was apparently using a Latin translation of Plato or perhaps a Latin commentary on the De republica.
69 Ibid., i, p. 129.
70 Ibid., i, p. 130. The reference is to Gafurius, De harmonia musicorum instrumentorum opus (Milan, 1518), Book iv, chapters 2 and 5 (fols. 84, 85v). Gafurius, however, is merely transmitting ancient reports about the effects of the modes ('apudaptuduncapuveducetubescens', as his chapter headings specify), and he does not connect these characterisations with music of his time.
71 Glareanus, Dodecachordon, trans. Miller, i, p. 130.
72 Ibid., i, p. 160.
73 Required reading for scholars in Paris in 1394 were Aristotle's Politics and Pseudo-Aristotle's Problems; see N. C. Carpenter, Music in the Medieval and Renaissance Universities (Norman, 1938), p. 50. These two books are mentioned frequently in Carpenter's study.
vocal quality, taken from Cicero (gravis-acutus, asper-lenis, mollis-durus), some the manner of performance—in this case the duration of the note values (lentus-velox). Two further pairs are less frequently encountered in music theory, Greek or medieval, difficile-facilis and novus-ventus, but they have particular reference to Tinctoris; it was he who underlined the distinction between the ‘new music’ of Dunstable, Binchois, and Dufay and the ‘old music’, no longer worth hearing, going back more than one generation. Most obvious of all, his motet begins with the word ‘difficiles’, and indeed it is a most difficult piece, though certain parts could be said to be relatively ‘facilis’.

Tinctoris was well read in the classical authors, whom he quotes frequently in his treatises, especially the Complexus effectuum musices and the De inventione et usu musicae. He refers to Aristotle’s Politics, his Ethics, and On the Heavens, and of Cicero he shows acquaintance with Tusculanae disputationes, De officiis, De amicitia, De oratore, Rhetorica ad Herennium and Quaestiones Tusculaniarum. ‘Ut ait Tullius’ or ‘Cicerone teste’ or ‘si Tullio credimus’ are frequent introductions to his statements.

Prima pars, tenor (fol. 119), heading (see Figure 2):

(Tenor. This, from the beginning to the semicircle of the composition,

80 Mollis and durus of course also have another meaning in music theory, referring to the presence of Bb or Bb. Some of the adjectives for vocal quality are also listed by Isidore of Seville, who names the following: suave, perspicua, subtillis, pinguis, acuta, dura, aspera, caeca, cinnola (defined as ‘vox lenis, vox mollis atque flexibilis’) in his Etymologiarum sive originum libri xx, iii, ch. 20; see M. Gerbert, Scriptores ecclesiastici de musica sacra potissimum, 3 vols. (St Blasien, 1784), i, p. 22 (Scriptores ecclesiastici is hereafter abbreviated as SE). An English translation of Isidore may be found in Strunk, Source Readings, pp. 93–100. It seems to have gone unnoticed that practically the whole of chapter 5 of Book I of Pietro Aaron’s Thoscanello de la musica (Venice, 1523), ‘Cognitione di voci, et suoni, et varii istromenti’, is translated from Isidore of Seville, not named, with some additions from other writers, who are named. It is a curious mixture of ancient and modern, for most of the instruments discussed are those of antiquity. Yet the characterisation of vocal quality must have seemed just as relevant to Aaron in 1523 as it did to Isidore in the seventh century.

81 Liber de arte contrapuncti (Seay ii, p. 12), and especially Proportionale (Seay iii, p. 10), where he speaks of ‘ars nova’. On Tinctoris’s attitude toward the ‘new’, see Lewinsky, ‘Music of the Renaissance as Viewed by Renaissance Musicians’, The Renaissance Image of Man and the World, ed. B. O’Kelly (Columbus, 1966), pp. 129–77, esp. pp. 132–3; on his predecessors who praised or denounced the ‘moderni’, see ibid., p. 165, n. 5.

Fig. 2. Johannes Tinctoris, Difficiles alias delectat panger cantus, prima pars, tenor, Perugia, Biblioteca Comunale Augusta, MS 1013, fol. 119
A lost guide to Tinctoris's teachings recovered

consists of all perfect quantities \([Mx = 3L, L = 3B, B = 3S, S = 3M]\), and from that sign to the third \([i.e.\, beginning\, of\, the\, 2.p.]\) is set forth in the fifth species, that is perfect in each mode \([Mx = 3L, L = 3B]\), imperfect tempus \([B = 2S]\), and major prolation \([S = 3M]\).

Again, the numbering of the modal species agrees with Tinctoris's classification in the Tractatus de regulari valore notarum. The first half of the tenor is in the first species: 'The first species of composition consists of each perfect mode, perfect tempus, and major prolation.'

The second half is in the fifth species: 'The fifth species of composition consists of each perfect mode, imperfect tempus, and major prolation.'

Knowledge of the modus is necessary because this voice has longs and maxima, and one must know whether they are perfect or imperfect in order to read the notation correctly. A careful composer will let the modus guide his placement of cadences. In the prima pars of Difficiles alios the length is determined by the modus of the maxima of the tenor; there are four periods \(= 54\) bars \(=46, 55\).

The remaining six periods in the prima pars, with the midpoint coinciding with the tenor at bar 28. All but one of the major cadences on \(F\), the mode of the motet, involving the superius and contratrenor are also perfect in both modes, but since the prolation is minor, the maxima covers nine instead of thirteen and a half bars. This yields six periods in the prima pars, with the midpoint coinciding with the tenor at bar 28. All but one of the major cadences on \(F\), the mode of the motet, involving the superius and contratrenor fall at the end of a nine-measure period (bars 10, 28, 37, 46, 55). Other cadences are placed at the division points of the minor perfect mode, at three-bar intervals covering a long each (on \(F\) at bar 7, \(C\) at bar 13, \(G\) at bar 16, \(C\) at bar 19, \(C\) at bar 22, \(F\) at bar 34, \(C\) at bar 40, \(F\) at bar 43, and \(C\) at bar 52). One might ask, if Tinctoris followed the modus so regularly in his placement of cadences, why did he not write a major cadence at the end of the first and third periods of the major modus in the tenor? The probable reason is that they would fall in the middle of a bar (bars 14 and 41), and to place a cadence in the middle of a bar would conflict with the minor prolation of the superius and contratrenor since minor prolation divides the bar into thirds, not halves.

Prima pars, tenor (fol. 119), marginal notes:

a) Iste pause ante signum temporis prolationisque posite non sunt essenciales sed utriusque modi tamen indiciales.

(These pauses placed before the sign of tempus and prolation are not essential but only indicative of each of the two modes.)

In the Tractatus de regulari valore notarum, chapter 7, 'De signo modi maioris perfecti', Tinctoris shows the placement of three longs \(\text{(longa)}\) pauses before the sign of tempus as indication of the major perfect mode. A note at the end of chapter 10 warns: 'si huiusmodi pause longales . . . signo temporali anteponantur, non sunt de cantus essentia' ('if these longa pauses are placed before the mensuration sign, they are not essential to the composition') (Seay 1, pp. 129–30).

Gafurius cited Tinctoris's motet as an example of indicative pauses.

b) Ista minima alteratur eo quod in prolatione maiori sit ultra duarum solarum ante semibreve postiarum.

(This minim is altered because it is the farther of two single \(\text{(minima)}\) placed before a semibreve in major prolation.)

In the Tractatus alterationum, chapter 2, under 'De alteratione minima', Tinctoris states: 'If two single minims are found before a semibreve or its pause in major prolation, the last of them is altered.' Alteration means doubling the length of the note in order to fill out the measure.

c) Ista semibrevis est alterata eo quod ante brevem tempore perfecto duarum solarum ultima invenitur.

(This semibreve is altered because it is found as the last of two single \(\text{(semibreves)}\) in perfect tempus.)

---

82 'Prima species compositionis fit ex utroque modo perfecto, tempore perfecto et maiori prolatione.' (Seay 1, p. 131.)

83 'Quinta compositionis species fit ex utroque modo perfecto, tempore imperfecto et prolatione maiori.' (Seay 1, p. 133.)

84 'But frequently unmeasured rests are written indicatively, when for example, they are placed at the beginning of a song before a circle or semicircle, the sign of tempus; then two rests of three tempora show modus maioris perfectus, and another third rest shows modus minor perfectus, just as Tinctoris did in the tenor of his pedagogical motet, Difficiles alios delectat pangeret cantus.' (Gafurius, Pratica musicar, trans. Miller, p. 86.) The seeming contradiction between Gafurius's statement that the major perfect mode is shown by two longs \(\text{(longa)}\) rests and Tinctoris's that it is shown by three such rests is resolved when we realise that in Tinctoris's system the major mode is never indicated by itself but always includes the minor mode, since the length of the maxima depends on the length of the long. If the minor mode is imperfect, then the three pauses occupy only two spaces each, showing that the long is comprised of two breves.

85 'Si duae minimae solae in maiori prolotione ante semibrevenve aut eius pausam inveniantur, ultima illarum alteratur.' (Seay 1, p. 179.)
The long itself loses one breve ('ad totum'), the two remaining semibreves ('eius partes remotas') lose four minims. Thus this is the seventh manner of imperfecting a long (Seay I, p. 163). This is the seventh manner of imperfecting a long (Seay I, p. 163). The long itself loses one breve ('ad totum'), the two remaining semibreves ('eius partes propinquas') lose two semibreves, and the four remaining semibreves ('eius partes remotas') lose four minims. Thus the long is reduced from twenty-seven minims (i.e., three breve of three perfect semibreves each) to only eight, the maximum reduction possible, since each perfect note within the long has become imperfect (the scribe has written here: 'Imperfecta est usque ad ultimam divisionem que dividi potest').

g) Ista maxima est imperfecta quo ad totum et omnes partes eius propinquas et remotas ac magis remiotores.

(This maxima is imperfect as to the whole and all its near, its remote, and remoter parts.)

This is the fifteenth and last manner of imperfecting a maxima (Seay I, p. 160). Imperfected are the maxima itself ('ad totum'), the two longs ('omnes partes eius propinquas'), the four breves ('et remotas'), and the eight semibreves ('ac magis remiotores'). Like the previous note, this one achieves the maximum reduction possible (again the scribe specifies: 'Imperfecta usque ad ultimam divisionem').

h) Ista brevis imperficitur quo ad unicam eius partem propinquam ut evitetur alteratio.

(This breve is imperfect as to one near part to avoid alteration.)

Under the heading 'De imperfectione brevis in prolatione maior' in chapter 6 of Book II of the Liber imperfectionum notarum musicalium (Seay I, p. 164), Tinctoris explains that a breve in major prolation can be imperfected as to two or only one of its near parts, since the breve comprises two perfect semibreves. If it had been imperfected by two minim, the fourth minim following would have had to be altered. The scribe's comment to this note, 'Imperfecta quo ad totum et unam partem remotam', is wrong, not only because the minim is a

---

86 In the seventh general rule of his Liber imperfectionum notarum musicalium, Tinctoris shows how a long can be reduced to the value of eight minims (Seay I, pp. 149-50). Gauriurus, in his Pratica musicce, discusses another such example, ending with the remark that 'a study of these varied kinds of imperfecton produces little of value or practical application. In our opinion it should rather be avoided than encouraged' (trans. Miller, p. 97). The Spanish theorist Guillermo de Podio vehemently denied that a ternary note could lose more than a third of its value; in his view, a note could be imperfected either as to the whole or as to its parts, but never as to both; see Stevenson, Spanish Music in the Age of Columbus, pp. 78-9.

87 This maxima contradicts Willi Apel's statement that 'the Ms itself was not admitted to be ternary; in other words, its maximum value was six, not nine, B (The Notation of Polyphonic Music 900-1600 (5th edn, Cambridge, Mass., 1953), p. 124). In the Commentary, p. 140, he adds: the equivalent of a maximodus perfectus is always represented by a group such as L L L (3 + 3 + 3), or Ms L (6 + 3), never by a single Ms (9). It is understandable that such a long note value is rarely encountered in compositions. Tinctoris has placed three maximae in his motet, the first two under major perfect mode, the third under major imperfect mode, but he has reduced them to less than half their full value through imperfecton. The examples in major perfect mode in Tintorius's Tractatus de regulis valore notarum, however, all begin with a perfect maxima (Seay I, pp. 127, 129, 132-6).
A lost guide to Tinctoris’s teachings recovered
‘pars propinqua’ but also because the breve under C is already imperfect and therefore cannot be imperfected ‘ad totum’, though both of its constituent semibreves can be imperfected. Perhaps the scribe overlooked the new mensuration sign, for the value of the breve is the same as that to which note d) is appended, with the same gloss. Throughout his explanatory notes, the scribe differs from the annotator in calling the near parts ‘partes remotas’. This is not necessarily an error; he is describing the imperfecting note instead of the imperfected note, though the word ‘per’ should be added. If he had written ‘imperficitur per unam partem remotam’ he would have described the process correctly.

i) Ista brevis est imperfecta quo ad omnes eius partes propinquas.
   (This breve is imperfect as to all its near parts.)

Another example of the previous rule, this time showing imperfection of both near parts. The scribe writes: ‘Imperfcta quo ad totum.’ He is correct as to the value removed, but not as accurate theoretically as the annotator, who indicates imperfection of the parts of the breve, not of the breve itself.

k) Ista longa quo ad totum dumptaxat est imperfecta.
   (This long is imperfect only as to the whole.)

This example shows the first manner of imperfecting a long (Seay I, p. 162).

l) Ista brevis alteratur et quo ad omnes eius partes propinquas imperficitur.
   (This breve is altered and imperfected as to all its near parts.)

This is an unusual example of simultaneous alteration and imperfection. Under the second general rule of alteration (Seay I, p. 174), Tinctoris states that it does not matter if the two single notes in a pattern that requires alteration are contiguous or syncopated; here the previous two notes, D and C, separate two breves before a long. At the same time, the D and C imperfect all the near parts of the altered breve, that is, the breve loses the value of two semibreves (semibreves, not minimis, since it now has the value of a long). This complicated notation is the only way to produce the value of a breve tied to an imperfect semibreve in C (it could not have been written as a long and then imperfected because it precedes another long, and

m) Ista maxima imperficitur quo ad totum et omnes eius partes propinquas.
   (This maxima is imperfected as to the whole and all its near parts.)

Under Tinctoris’s fifth manner of imperfection of the maxima (Seay I, p. 158), it loses one long and two breves. The scribe’s annotation, ‘imperfcta quo ad totum dupliciter’, does not mean that the imperfection is doubled, which would not be possible, but that the maxima is made imperfect as to the whole in two ways, that is, it is imperfect ‘quo ad totum’ and its remaining longs are in turn imperfect ‘quo ad totum’.

Prima pars, contra (fol. 119v), heading:

Ista pars vero quam contratenorem dicimus nullam hie differentiam a suprema quo , ad quantitates ac proportiones patitur.
   (This part, however, which we call contratenor, does not differ from the superius with respect to quantities and proportions.)

Like the superius, the contratenor is in the ninth species. However, since in both voices there is no value larger than a breve, the indication of modus is superfluous, and indeed both voices lack the ‘indicative’ pauses found in the tenor, where knowledge of the modus is indispensable to a correct interpretation of the notation.

Prima pars, contra (fol. 119v), marginal note:

Queritur hic qua ratione tres soni, quorum medius distat ab extremo inferiori per diapente, a superiori vero per diatesseron [sic] concorde[n]tur. Et si medius ipse distet e converso ab extremo inferiori per diatesseron, a superiori autem per diapente discorde[n]tur, nam utroque extremorum

88 This is not a case of simultaneous augmentation and imperfection, a practice Tinctoris deplores in his Liber imperfectionum notarum under the twelfth general rule (Seay I, pp. 153-4), giving as examples compositions by Domarto and Barbingant. Augmentation of an imperfect note by a dot is not the same as alteration.

89 Perhaps the scribe was familiar with Johannes de Muris’s Libellus cantus mensurabilis, in which one chapter begins ‘Maxima perfecta in toto et in paribus potest imperfici dupliciter’ (CS II, p. 97). Dupliciter here means ‘in two ways’, as is evident from the continuation: ‘validiter, quoad totum et quoad partes’. Johannes de Muris also uses dupliciter to describe another two ways of imperfecting the maxima: a parte ante and a parte post.
A lost guide to Tinctoris's teachings recovered

cadem est distantia et quod deficit in uno recuperatur in alio: quodque fuerat ibi discordantia fit hie concordantia: quam quidem questionem hactenus absolutam accepi a nemine, hinc quoniam mihi difficilimum est super ea opinione alienam malo verecunde audire quam meam temere ingerere.90

(All is distant and what is missing in one is made up in another. As regards whether there was discord there, here there is concord. As to this question, I have hitherto accepted an absolute conclusion, but because it is most difficult for me, I prefer on this opinion to assent modestly to another's rather than to press my own rashly.)

If the annotator has a specific passage of 'another' theorist in mind, he has left the reader in the dark about his identity. Tinctoris does not discuss this particular problem in his treatises, but he says that the fourth is not used in two-voice counterpoint except in improvising over a plainchant (super librum); if one voice sings a fourth above the tenor, then another voice should take a fifth below the tenor. He then goes on to show two ways in which the fourth can be used in composition (i.e., when three or more parts are involved): (1) in fauxbourdon, where the fourth between the middle and upper voice stands a fifth or a third above the tenor, and (2) in res facta, where a fourth between the middle and upper voice can stand a third, fifth, or tenth above the lowest voice (Seay ii, pp. 26-7, with examples).

Gafurius, in Book iii of his Practica musicae, has a chapter entitled 'A fourth between middle and upper parts is concordant, between middle and lower parts is dissonant'.91 He speaks not of an octave between the outer notes but a sixth, and claims that the fourth, being formed between two consonances, the sixth and the third, 'is hidden, so to speak, between a smaller and larger interval'. This, he explains, following Boethius, is because lower sounds are slower in motion than higher ones; the fourth between the upper parts, 'weaker in a

90 The passage offered some difficulties toward the end. A Alemianum has been emended to alienum. The unusual abbreviation difficilium was resolved as difficilissima, following the suggestion of Professor Bernard Barbiche of the Ecole des Chartes. The words 'a nemine' resisted all attempts at decipherment until the solution was found by Ségoëlène de Danville-Barbiche. To Professor and Madame Barbiche I extend my warmest thanks for their expert assistance.

91 Practica musicae, trans. Miller, p. 132.
A lost guide to Tinctoris’s teachings recovered

more audible, then the low consonance will make the high consonance more audible... Therefore the fifth and octave make such audible consonances with the low voice that we don’t hear the dissonance of the fourth.96

The classification of the fourth was a problem that plagued musicians for centuries. Considered a consonance in Greek theory and so treated by medieval writers, to whom mathematics was the supreme arbiter, it lost its eminent position as a major consonance when theorists started codifying rules for counterpoint.97 The conflict between the rational mind, which determined consonances according to superparticular ratios, and the sense of hearing (already referred to by Boethius in his definition of dissonance) was not resolved easily. Medieval writers found various ways of dealing with the problem of the fourth. Jacobus of Liège, in the last book of his Speculum musicae of c. 1330, includes a thoughtful discussion on the position of the fourth, beginning with an example from Guido of parallel organum at the fourth and octave, which he says is ‘contra quendam modernum doctorem’ (identified by Roger Bragard as Johannes de Muris; see his Musica speculativa, GS iii, pp. 271–3) who states that the fourth below the fifth is not a consonance. Jacobus holds that the fourth is a consonance whether it is placed beneath or above a fifth, but it sounds better above the fifth, reasoning along the same lines as the Pseudo-Aristotelian Problems with regard to high and low voices.98 The author of the Quatuor principa musicae of 1351, who bases his tract largely on Boethius, devised a classification in which intervals are divided into three groups: concordant consonances (consonantiae concordantes), discordant consonances (consonantiae discordantes, also called imperfect discords), and perfect discords (perfectae discordantiae). The fourth is labelled an ‘imperfect discord’, along with the tone and the minor sixth. Imperfect discords occur ‘when two voices are joined so that in a certain measure

96 'Si la boz grave dissonante por ser grave, haze más sensible a la aguda: luego la consonancia grave hará más sensible a la consonancia aguda... Pues tan sensibles se hacen la quinta y octava con la consonancia grave: quie no sentimos la dissonancia de la quinta.' (Ibid.)


they are compatible according to the sense of hearing, but they discord’.99

One of the notable innovations in Tinctoris’s theory of music, developed in his treatise on counterpoint, is his insistence on the ‘judgement of the ear’.100 While he begins the treatise with the story of Pythagoras’s discovery of the relationship between weights and tones and mentions the ratios for producing the fourth, fifth, and octave and their compounds, Tinctoris leaves all the other mathematical ratios aside. He precedes his list of the twenty-two consonances with the statement that these intervals are the ones used by modern musicians and singers and are ‘approved by the judgement of the ears in the Aristoxenian fashion’ (Seay II, p. 17). It took a great deal of courage on the part of Tinctoris to mention Aristoxenus in an approving manner, for the latter had come under scathing attack in Boethius’s De musica for the very reason that he left everything to the judgement of the ear, and medieval theory followed Boethius religiously.101 The time-honoured idea of the superiority of reason over the senses was beginning to be questioned.

In his own music, Tinctoris uses the fourth freely between the upper voices. Yet some of his contemporaries, especially in their secular music, wrote in a style that completely avoids essential fourths, allowing any pair of voices to be sung as a duo,102 and in his two chansons for three parts Tinctoris approaches this style. As a result of avoiding fourths, the outer voices frequently move in parallel tenths, a procedure discussed by Gafurius, who names Tinctoris at the head of his list of composers who write in this style.103 The remark about fourths is appended to the contratenor of Difficiles alios because it is between that part and the superius that the fourths occur, always when the contratenor moves above the tenor. Most of the fourths come at cadence points, but there

99 ‘Imperfectae discordantiae discantur, quando duo voces conjungan tur sic quod quodammodo se compari possunt secundum audium, sed discordant’ (GS iv, p. 279). The treatise was erroneously attributed to Simon of Tunstede by Coussemaker; see G. Reaney, ‘Tunstede’, Die Musik in Geschichte und Gegenwart, ed. F. Blume, 16 vols. (Kassel, 1949–79), xii, cols. 979–81.

100 For a lucid precastation of the changing view of consonance and dissonance in the Middle Ages and Renaissance, see Lowinsky, ‘Music of the Renaissance’, esp. pp. 136–47.

101 On the new appreciation for Aristoxenus and its significance for Renaissance theory, see ibid., pp. 137–8.

102 This phenomenon was first noticed and described by Charles Warren Fox; see his ‘Non-quartal Harmony in the Renaissance’, Musical Quarterly, 31 (1945), pp. 33–53.

103 See Practica musices, trans. Miller, p. 144.
A lost guide to Tinctoris’s teachings recovered

is a conspicuous fauxbourdon-like passage in the secunda pars at bars 10–11.

Prima pars, tenor (fol. 120)

Though not so labelled, this is a resolution of the prima pars of the tenor under the time signature C. Some note values that are irregular under C have been divided to fit better in imperfect mensuration (for example, the perfect breve, bars 3–4, is written as a long and a minim in the resolutio, and the imperfect breve at d) is written as a breve and a minim). The resolution is in the hand of the main scribe.

Secunda pars, can tus (fol. 120v), marginal notes:

a) Ab hoc autem loco pars ista suprema ut signis patet proprijs temporibus ac proportionibus est diversificata, modis attamen tenori adequadta.

(From this point on the superius part, as shown by the signs, is characterised by its own time signatures and proportions, but in its modes it agrees with the tenor.)

This note states that the superius is in the same mode as the tenor, the eleventh species (major imperfect mode, minor perfect mode, perfect tempus, minor prolation), though the ‘indicative’ pauses are not present.

b) Prima species generis multiplicis per relationem ad tenorem.

(First species of the genus multiplex by relation to the tenor.)

The word ‘species’ here refers to the mathematical species discussed in the Proportionale. ‘Proportion’, says Tinctoris, ‘is the relation of two terms to each other’ (Seay na, p. 12). The terms are applied to the note values of one voice as compared to a previous section of the same part or to another voice. The first species of the genus multiplex is the simplest of the unequal proportions and the one taken up first by Tinctoris, proportio dupla. Two notes of the superius go against one note of the same value in the tenor. In other words, all the note values of the superius under the sign 2 are to be halved. Some of the proportions in this motet are related to the tenor (‘per relationem ad tenorem’), others to the previous passage in the superius (‘per relationem ad numerum precedentem’).

c) 2a species eiusdem generis multiplicis per similem relationem.

(Second species of the same genus multiplex by a similar relation.)

---

Bonnie J. Blackburn

The second species is proportio tripla, where three semibreves are sung to one of the tenor – ‘tre semibreve per battere’, as the copyist has helpfully indicated in Italian (the ‘battere’ is always the semibreve of the tenor). The words ‘per similem relationem’ (i.e., to the tenor) are necessary here, because the relation of this section of the superius to the previous section is not one of proportio tripla but of sesquialtera (3:2), since the first section is in proportio dupla. Another way to calculate this is to multiply 2 by 2, since proportions are cumulative, yielding 4. (On the passage in coloration, see the letter of Spatapo to Aaron of 1 November 1523, below, p. 96.)

d) 3a species eiusdem generis per similem relationem.

(Third species of the same genus by a similar relation.)

The third species is proportio quadrupla, exactly double the first section, for which reason the note values are halved again. The relation to the previous section would be sesquitercia: 3 × 2 × 2 = 12.

e) 4a species eiusdem generis per similem relationem.

(Fifth species of the same genus by a similar relation.)

The fifth species is proportio sextupla, six notes to one of the tenor. Again, the passage stands in a sesquialtera relation to the previous section in proportio quadrupla: 2 × 4 = 5. Tinctoris chose to relate these first four proportions to the tenor instead of to the previous section because they show a progressive ordering of the genus multiplex, the first genus.

f) 5a species generis submultiplicis per relationem ad numerum precedentem.

(Fifth species of the genus submultiplex by relation to the previous number.)

Tinctoris abruptly shifts out of this ascending scale of proportions (in which longer and longer notes are sung at faster and faster speeds) by changing to proportio subsextupla. The prefix 'sub-' added to any proportion reverses its meaning. In effect, it cancels the previous proportion and returns to integer valor. These proportions are discussed in Book 11 of the Proportionale (Seay na, pp. 37–41). Because this proportional change, exceptionally, occurs in the middle of a measure, the sign of tempus perfectum is added at the beginning of the next measure.
g) Prima species generis multiplicis per [simillem] relationem.
   (First species of the genus multiplex by a similar relation.)

Here there is a return to the proportio dupla in which the secunda pars began.

h) Prima species generis superparticularis per similem relationem.
   (First species of the genus superparticular by a similar relation.)

In the genus superparticular the larger number contains the smaller number plus part of it: half if the number is 2, one-third if the number is 3, etc. The first species is sesquialtera, 3:2. It will be observed that the note values in this section and the annotation ‘tre semibreve per battere’ are the same as in the second section (bar 7), yet one is called ‘tripla’, the other ‘sesquialtera’. This is because the second section was related to the tenor, the present section to the previous passage. It is sesquialtera to what precedes, but tripla in relation to the tenor. The copyist’s remarks beneath the notes as to the number of semibreves per beat are particularly helpful from this section on, since they refer to the invariable three beats (semibreves) of the tenor, thus providing a ‘back-up system’ for the performer who may have lost his way in the maze of signs and numbers.

i) 2\(^{a}\) species eiusdem generis per similem relationem.
   (Second species of the same genus by a similar relation.)

The second species is sesquitertia, 4:3. For the meaning of the isolated black semibreves, see the annotations by Lorenzo Gazio discussed below (p. 99).

k) Prima pars\(^{10}\) species eiusdem generis per similem relationem.
   (First species again of the same genus by a similar relation.)

The music returns to the \(\frac{3}{4}\) of the previous section, but now is written in the next higher note values, hence ‘tre breve per battere’. The passage could also have been written in the same note values under \(\frac{3}{4}\), proportio subsesquitertia. The preceding mensuration determines which note values to use under sesquialtera. If it is \(\square\) or \(\bigcirc\), sesquialtera should be counted in minims. If it is \(\bigcirc\) or proportio dupla, sesquialtera is counted in semibreves. If it is proportio quadrupla or sesquitertia, as it is here, sesquialtera is counted in breves. The procedure is explained in the treatise on proportions in the Perugia manuscript, fol. 78.

---

\(10\) 'Undecima species compositionis fit ex modo maiori imperfecto, modo minori perfecto, tempore perfecto et prolacione minori.' (Seay, p. 135.)

\(10\) 'Quintadecima species compositionis fit ex modo maiori imperfecto, modo minori perfecto, tempore imperfecto et prolacione minori.' (Seay, p. 136–7.)
triple mensuration must go against one breve in triple mensuration in the tenor, but the proportions are calculated against the battere or semibreve of the tenor. Therefore the two perfect breves must be performed as if they were three imperfect breves, matching each imperfect breve against a semibreve of the tenor. The result is a mensuration that is sometimes triple, sometimes duple, and frequently—because of syncopations—neither (see, for example, 2.p., cantus, bar 9). Willi Apel has remarked upon this phenomenon. 

He explains that proportio dupla changes the notated modus to tempus and tempus to prolatio. In other words, under $\text{O}_6$, the modus perfectus ($L = 3B$) becomes tempus imperfectum ($B = 2S$). In terms of modal structure, cadences could fall at the end of any bar, but in this pars they are largely coordinated with the long of the tenor and therefore occur more often at the end of every third bar.

b) Ista longa imperfectur quo ad duas partes eius propinquas.

(This long is imperfected as to its two near parts.)

This is Tinctoris's second manner of imperfecting the long (Liber imperfectionum notarum musicalium; Seay i, p. 162), which loses the value of two semibreves. The scribe writes: 'Imperfecta a parte post [per] duas partes remotas', which is another way of stating the same thing.

c) Ista longa imperfectur quo ad totum et unam eius partem propinquam.

(This long is imperfected as to the whole and one near part.)

The fourth manner of imperfecting the long (Seay i, p. 162), which loses the value of a breve and a semibreve. The scribe makes the same error as he did in note h) to the prima pars, calling 'remota' the note that is actually 'propinqua'. The passage in black notation, directly following, illustrates a case where coloration under $\text{O}$ does not call for imperfection and syncopation but for sesquialtera, producing crotchet triplets against each semibreve of the tenor. (For a discussion of this passage, see below, p. 97.)

d) Ista semibrevis non alteratur eo quod non sit hic defectus numeri temporalis quoniam precedentes note implere per sexquialteras reddunt 4 semibreves quaram una cum duabus alis sequentibus necessario computatur.
A lost guide to Tinctoris's teachings recovered

(This semibreve is not altered because there is no deficiency of the number of the tempus since filling in the preceding notes through sesquialtera renders four semibreves, of which one is necessarily counted with the two others following.)

In case the performer did not discern the correct resolution of the passage in coloration, this note tells him that it covers four beats. Thus, the two succeeding semibreves fill out the rest of the bar, and alteration (which normally occurs when two semibreves precede a breve) is not necessary. The concept of 'defectus numeri' is discussed in Tinctoris's Tractatus alterationum, which, in fact, is a response to an unnamed singer at the ducal court in Milan who claimed that the theorist himself, in his Missa Nos amis, had committed an error in placing two semibreves, the second of which is not altered, between two breves. Tinctoris quotes the example, then shows that because of the two preceding semibreve rests, there is no 'defectus numeri' and therefore the second semibreve is not altered (Seay I, p. 173).107

e) Ista semibrevis alteratur eo quod precedentibus nigris per sexqualteras 4 semibreves reddentibus quinta ante brevem in tempore perfecto inveniatur.

(This semibreve is altered because it occurs as the fifth before a breve in perfect tempus since the preceding black notes through sesquialtera render four semibreves.)

This single white semibreve bridges two passages in coloration. The first is in sesquialtera; in the second, black notation merely indicates imperfection. Again, the annotator specifies that the black notes fill four beats. Thus the white semibreve is the fifth in a series before a breve; the first three semibreves fill a bar, therefore the second of the following two must be altered to fill another bar.

f) Ista longa imperficitur quo ad duas partes eius propinquas.

(This long is imperfected as to two near parts.)

This is the same as b) above.

107 It was this example that enabled Reinhard Strohm to identify Tinctoris's Mass, which was otherwise unknown. The three-voice Mass is found anonymously and without title in Strahov, Monastery Library, MS d.0.iv.47 (now in Prague, Památník Národního Písemnictví), fol. 114v–116, 117v–119. The Kyrie and Gloria also occur in Trent, Castello del Buon Consiglio, Biblioteca della Soprintendenza, MS 89, fol. 163v–164 and the Credo in the Speciálník Codex (Hradec Králové, Krajiske Muzeum, MS n 67), pp. 168–70 – all anonymous and without title; see Strohm, 'Die Missa Super "Nos amis" von Johannes Tinctoris', pp. 34–51, esp. p. 41.

82

Bonnie J. Blackburn

g) Ista longa imperficitur quo ad totum ac eius duas partes propinquas quo fit ut ultima duarum semibrevium ante brevem immediate sequentium non alteretur quia tempus perfectum reliquit.

(This long is imperfected as to the whole and two near parts, by which it follows that the last of the two semibreves before the breve immediately following should not be altered because it would abandon perfect tempus.)

The long loses the value of a breve and two semibreves, which leaves space for two more semibreves in the bar. Therefore, since there is no 'defectus numeri', the second of the two following semibreves does not undergo alteration. Again, the scribe's annotation, 'Imperfecta quo ad totum dupliciter', means that the note is imperfected 'quo ad totum' in two ways (see note (m) to the prima pars of the tenor).

h) Ista semibrevis alteratur eo quod in tempore perfecto ante brevem ultima duarum solarum inveniatur.

(This semibreve is altered because it is found as the last of two single [semibreves] before a breve in perfect tempus.)

At first sight it seems that the semibreve ought to imperfect the following breve, but the breve must be perfect because it is followed by a breve rest ('similis ante similem semper est perfecta'). The semibreve actually is paired with the preceding semibreve C. The presence of an intervening note makes no difference, as Tinctoris remarks in his second general rule of alteration: 'The second general rule is that it does not matter if the two single notes found, of which the latter should be altered, are continuous or syncopated.'108 This passage was discussed by del Lago in his letter to Lorenzo Gazio of 6 May 1535 (see below, pp. 94–5).

i) Ista brevis alteratur et quo ad eius alteram priorem partem imperfectur.

(This breve is altered and is imperfected as to its other first part.)

This is another example of simultaneous alteration and imperfection (see note (1) to the prima pars of the tenor). These are the only two examples of alteration for which no explanation is given. They both illustrate the rule 'if two single breves in the minor perfect mode are found before a long or its pause, the last of them is altered' (Seay 1, pp. 174–5.)
A lost guide to Tinctoris's teachings recovered
p. 178). It makes no difference whether they are contiguous or separated by other notes. In the prima pars, the first breve was perfect, the second imperfected by the intervening notes. In the present passage, both breves are imperfected. Nevertheless, they make a pattern of two breves before a long in the minor perfect mode. Alteration is necessary to avoid a 'defectus numeri', for a long in the minor perfect mode must be preceded by a unit of the value of three breves.

[k] The scribe has added a comment beneath the maxima in bar 57: 'Imperfecta quo ad totum a parte ante, duas partes remotas.' (Imperfect as to the whole by a preceding part, two remote parts.) This is correct, though, as usual, he calls 'remota' what Tinctoris calls 'propinqua'.

Secunda pars, contra (fol. 121v), marginal notes:

a) Similiter respondetur signa partem hanc contratenoris et ab isto loco proportionibus, temporibus et prolacionibus ostendunt diversificari licet modus sit tenori similis.

(The signs are similarly placed in this contratenor part and from this point they show differentiation in proportions, tempus, and prolations, though the mode is the same as in the tenor.)

The contratenor and the superius both begin in proportio dupla, but go their own way in the proportional sections. Tinctoris shows how the same result can be accomplished by using numerical proportions in one voice and coloration in the other (e.g., at bar 13) or different numerical proportions in each voice (e.g., bars 26, 28, 31, 34).

b) Prima species generis multiplicis per relationem ad tenorem.

(First species of the genus multiplex by relation to the tenor.)

Proportio dupla.

c) Prima species generis submultiplicis per relationem ad numerum precedentem.

(First species of the genus submultiplex by relation to the preceding number.)

Proportio subdupla, cancelling the previous proportion.

d) Secunda species generis multiplicis per similem relationem.

(Second species of the genus multiplex by a similar relation.)

84

Bonnie J. Blackburn

Proportio tripla (in this case both to the preceding section and to the tenor).

e) Prima rursus species generis submultiplicis per similem relationem.

(First species again of the genus submultiplex by a similar relation.)

Proportio subdupla. Most of the proportions signal a change in metre between 3 and 4, with proportional equivalence of the semibreve, a sesquialtera relationship. In this case no change occurs in the 3 metre. The sign O indicates that there should be nine minims in the breve. Subdupla cancels the previous proportio tripla, causing the notes to be sung in integer valor instead of halved as before. The copyist's 'una minima' is the only mistake he made in describing the proportions; it should be 'tre minime'.

f) Prima species specialissima speciei subalter[n]atione generis multiplicis superpartientis per similem relationem.

(First irreducible species of the species in subalternation of the genus multiplex superpartiens by a similar relation.)

This is the only proportion in the genus multiplex superpartiens (where the larger number includes the smaller one at least two times plus at least two parts of it). In 8:3 the larger number contains the smaller one twice plus two parts of it and is called dupla superbipartiens tertias (Seay 11a, p. 34). Tinctoris has written the passage in very large note values so that eight minims of the new passage can be directly compared with three of the former passage. 109 And, indeed, the scribe has specified 'octo minime per battere' instead of 'due breve per battere', which would come to the same thing. In spite of its forbidding name, dupla superbipartiens tertias is nothing more than the common 4:3, sesquitertia, but with the higher number referring to a smaller unit, minim instead of semibreve. In this very passage it is paired with sesquitertia in the superius, 'quattro semibreve per battere'.

g) 3⁴ species generis submultiplicis per similem relationem.

(Third species of the genus submultiplex by a similar relation.)

Subquadrupla brings us out of the very large note values back to integer valor.

109 In this it differs from the example of 8:3 in Tinctoris's Proportionale (Seay 11a, p. 35), where the note values are not changed; they must, however, be reduced by half to fit the tenor.
A lost guide to Tinctoris’s teachings recovered

h) Prima species generis multiplicis per similarem relationem.
(First species of the genus multiplex by a similar relation.)

Dupla causes a return to the proportion of the beginning of the pars, but now the mensuration is duple rather than triple in contratenor and superius (the tenor does not change to duple metre until bar 49). Nevertheless, there is good reason to transcribe the outer voices in ¾ until bar 49, both because it makes them easier to read against the tenor and because the fifteen bars cannot be evenly divided by 2. Moreover, the cadences fall at the proper points with respect to the minor perfect mode of the tenor.

At this point the reader will undoubtedly breathe a sigh of relief, sympathizing with the would-be musica of Tinctoris’s time, who must sometimes have thought he was undertaking the labours of Hercules. But what of the result? Once the musician has deciphered the tenor and written out a resolution such as the Perugia manuscript provides, once he has worked out all the proportional relationships and distinguished the various meanings of the blackened notes, once he has firmly fixed in his mind the changing values of maxima and long under the various mensuration signs, what is the musical result? Here the musica will feel richly rewarded, for Difficiles alios is as light and graceful in sound as it is obscure and problematic on paper. Unlike, for example, the fugue of the Hammerklavier sonata, which looks difficult and sounds difficult, Tinctoris’s motet merely looks difficult. Even the complicated proportions of the secunda pars produce no more than a slight ruffling of triplets against the basic ¾ mensuration. Thus the first pair of ‘types of composition’ listed in the margin of the superius takes on a new meaning: Difficiles alios looks ‘difficilis’ but sounds ‘facilis’.

Difficiles alios is written in what Tinctoris would call the ‘sextus tonus mixtus’ (Seay i, p. 84), that is, the Lydian mode, authentic mixed with plagal, but with emphasis on the plagal range. This characterisation derives from the tenor part, as Tinctoris counsels (Seay i, p. 86), but it also applies to the superius and contratenor. The tenor is a cantus firmus, but frequently becomes an equal partner with the other voices. Difficiles alios differs from Tinctoris’s Masses and motets primarily because it was not written to a text: the phrases are very long and there are no repeated notes. (Text setting was not one of Tinctoris’s primary concerns; even in his later music repeated notes and short phrases, as observable in text-orientated music, are rare.)

In his last rule of counterpoint (Seay ii, p. 155), Tinctoris advises the composer to seek variety: in note values, cadences, proportions, intervals, syncopations, imitation, pauses, ornamentation. In Difficiles alios he has anticipated all his precepts. Note values range from maxima to fusa (pace Tinctoris! a minim in proportio quadrupla), but this is probably not what Tinctoris has in mind by suggesting diversitas ‘nunc per unam quantitatem, nunc per aliam’. Rather, he seems to call for variety in rhythm, with passages that move now in semibreves and minims, now in minims and semiminims, now with even quicker values predominating. The contrast of the broad passage beginning in bar 30 of the prima pars with the preceding section is striking. The cadences, as noted before, are coordinated with the mensuration of the tenor. The major ones are on F, the mode of the piece, others mainly on F and C, with an occasional cadence on A Phrygian. The Lydian mode (with its strong leaning towards Ionian because of the Bb signature in the lower parts) is presented so consistently that the deflection to G minor in bar 15 becomes an event. Here Tinctoris has mixed the Lydian mode with transposed Dorian, or, as he would say, ‘sextus tonus commixtus secundo irregulari’.

Tinctoris warns that not all varieties that would be suitable for a motet are appropriate to a chanson, nor would those for a motet necessarily be fitting in a Mass (Seay ii, p. 155). Among those varieties he names, proportions would be less suited to a chanson or motet than to a Mass, and indeed they are not found in Tinctoris’s other chansons and motets, which are small pieces. They are present in Difficiles alios because its length allows the proportions their just share. Tinctoris understood that one must consider proportions not only between the different parts of a composition but also between the whole and its parts.

In only one aspect of Difficiles alios might one be inclined to believe that Tinctoris did not follow his own precepts, and that is with regard to the admonition to compose ‘nunc cum fugis, nunc sine fugis’ (Seay ii, p. 155). His definition of ‘fuga’ has generally been understood to describe canon, not imitation, but it does not specify.

\[ \text{Fugue is the likeness of the voice-parts in a composition as to the value, name, and shape of} \]

86

Bonnie J. Blackburn

87
that the *fuga* has to run for a whole piece or section, and the use of the plural, 'nunc cum fugis', instead of the singular would seem to indicate that 'fuga' embraces imitation as well as *canon*. *Difficiles alios* has few examples of imitation, but they are all set in relief in two voices against a held note in the tenor (see *l.p.*, bars 34–5, 46–7; *2.p.*, bars 21–2, 50–1, all at the unison, fifth, or octave). In Tinctoris's later works imitation is given a more extensive place. It is not yet the word-generated motivic imitation of Josquin but a technique in which melodic similarity — whether at the beginning of a theme or internally — is sought, sometimes even at the expense of rhythmic similarity. *Difficiles alios* shows an early stage in the development of this style, which is already adumbrated in the examples of the counterpoint treatise.

**TINCTORIS’S *DIFFICILES ALIOS* IN THE SPATARO CORRESPONDENCE**

A piece such as *Difficiles alios* was meant to test the mettle not only of students but also of other theorists; Gafurius was probably the first to try his hand at solving it. When Tinctoris, in 1477, characterised the music of forty years earlier as no longer worth hearing (Seay II, p. 12), perhaps he thought that his own music would be outmoded forty years after it was written. Of all Tinctoris's musical offspring, *Difficiles alios* had the longest life. Its career can be traced and its fame judged through the letters of the Spataro correspondence, where it is discussed in no fewer than six epistles. The earliest letter (quoted at the beginning of this paper) is from 1520, in which Giovanni da Legge asked Giovanni del Lago for 'quella bella cosa di Tinctoris'. Of the other letters, three concern the mensuration, one a problem in imperfection, and one an unusual type of coloration.

The central figure in the discussion of Tinctoris’s motet is Giovanni del Lago, 'priest in the Church of Santa Sophia in Venice', and author of *A Breve introduzione di musica misurata* (Venice, 1540). In their notes and rests, and sometimes even to their degree on the staff.' (Parish, *Dictionary*, p. 33.)

A good example of internal imitation, that is, imitation that does not begin in both voices after a pause but is prefaced in one or both voices by unrelated notes, is his chanson *Hicis* ( *Johanni I Tinctoris opera omnia*, ed. Melin, pp. 130–1). See cantus and tenor, bars 4–8, 10–12, 15–18, 20, 21–2, and all three voices, bars 25–6.


Bonnie J. Blackburn

his letters del Lago frequently cites specific musical compositions to make his points. He must have owned or had access to a copy of Tinctoris’s *Difficiles alios* that included the marginal glosses, several of which he refers to and one of which he quotes verbatim. Being a Venetian, he may even have used the Perugia manuscript, which was in fact copied in Venice in 1509.

In a lengthy letter concerning mensuration signs and their meanings, written to Giovanni Spataro on 23 August 1532, del Lago argues that the *modus* is valid for the whole composition and does not change when there are different mensuration signs. This was observed by 'Tinctoris in a composition of his for three voices written to some verses that begin *Difficiles alios delectat pangere cantus* in the tenor in the *prima pars*, and likewise in the tenor in the *secunda pars*, in the superius, and in the contratetnor'. Actually, only in the tenor of Tinctoris's motet are there changes in the mensuration. In the *prima pars* the tenor begins perfect in all quantities: major perfect mode, minor perfect mode, perfect tempus and perfect prolation; half way through it changes to imperfect tempus and major prolation, retaining the perfection of the two modes. In the *secunda pars* the tenor is written in the major imperfect mode and minor perfect mode, the first half being in perfect tempus and minor prolation, the second in imperfect tempus and minor prolation. Only in the tenor is the mode indicated, by use of rests covering three spaces. In the superius of the *prima pars*, the mensuration is specified as 'ninth species', that is major perfect mode, minor perfect mode, perfect tempus and minor prolation, and the contratetnor agrees, though the question of mode is irrelevant — as far as the notation is concerned — in these two voices since there is no value larger than a breve. However, *modus* influences the placement of cadences (see above, pp. 66 and 79–81). In the *secunda pars* the superius and contratetnor agree with the tenor in their modes, but have their own tempus and proportions.

Spataro replied, in a letter directed to Pietro Aaron, that when a piece such as 'Difficiles alios delectat pangere cantus' begins in the tenor with a perfect tempus and mode, the *secunda pars* will generally begin with a perfect tempus and mode, and the superius with the same tempus and a perfect mode. However, the mensuration of the superius will be imperfect when the arrangement is based on the imperfect tempus and mode of the tenor.
A lost guide to Tinctoris’s teachings recovered

composer uses pauses to indicate modus, he cannot change modus in the middle of a composition because the pauses would logically be understood as ‘essential’. Spataro, however, recommends using mensuration signs to indicate modus, a system followed by Hothby; they allow one to change modus within a composition.116

Del Lago was not convinced by Spataro’s remarks, and further research into the question of mensuration left him confused. We can see this from his letter of 27 August 1539 to Pietro Aaron.117 As we know from a note at the end of the letter, which is a copy del Lago made for himself, his purpose was to test Aaron (‘io ho mandato a richiede lo soprascritto dubbio a Frate Pietro Aaron per tentarlo’) – a practice del Lago found irresistible and which got him into trouble with the sharp-tongued Spataro. Del Lago asks Aaron to clarify the order of the mensurations because he finds that Hothby, Éloy and Tinctoris disagree. For Hothby, he refers to a canon or round in which he demonstrates the value of the notes.118 And Éloy, in his Mass composed on the antiphon Dixerunt discipuli ad beatum Martinum,119 has an order different from that used by Hothby. And Tinctoris, in a composition for three voices written to some verses that begin from the two named above, Hothby and Éloy, as appears in his glosses to order of the mensurations because he finds that Hothby, Éloy and Tinctoris disagree. For Hothby, he refers to a canon or round in which he demonstrates the value of the notes.118 And Éloy, in his Mass composed on the antiphon Dixerunt discipuli ad beatum Martinum,119 has an order different from that used by Hothby. And Tinctoris, in a composition for three voices written to some verses that begin Difficiles alios deletat pangere cantus, etc., likewise has a different manner, very different in order from the two named above, Hothby and Éloy, as appears in his glosses to the soprano, the prima pars of the tenor, and the secunda pars of the tenor. But Éloy and Tinctoris say there are sixteen species of modes, and this is the only thing they agree on, but as for the order, that is first, second, third, etc., they differ greatly from each other.120

Del Lago then refers to Tinctoris’s Difficiles alios, for it makes use of only five species: the first, the fifth, the ninth, the eleventh, and the fifteenth. The numbers refer to the order Tinctoris gave them in his Tractatus de regulari valore notarum (Seay t, pp. 121–138), which del Lago does not mention, though he probably knew it since he is aware that Tinctoris lists sixteen different species. From Difficiles, however, del Lago could see that Tinctoris placed the mensurations in a certain order. In Éloy’s Mass, the seven-note cantus firmus is to be sung sixteen times, under the sixteen different mensurations. The proper pauses and mensuration signs indicate which mensuration is to be followed. Though Éloy agrees with Tinctoris in the designation of the mensurations, he does not place them in the order Tinctoris gave them but begins with the eleventh and twelfth species in the Kyrie, probably because the shorter note values under these species fit the shorter text better. The Gloria begins with the first species; the remaining species unfold in order, skipping the eleventh and twelfth. Tinctoris, in his Proportionale musices, praises Éloy as ‘in modis doctissimis’ and gives an example from this Mass showing his use of two pauses occupying three spaces each as the sign of the minor perfect mode (Seay na, pp. 55–6).122

If del Lago had to admit confusion in the matter of designating the

appear nelle sue glose fatte in dichiarazione di tal suo canto, cioè nella glossa del soprano, et in quella del tenore della prima parte, et similmente in quella del tenore della seconda parte. Ma Eloi et Tinctoris dicono esser sedici spetie di modi, et in questo solamente si concordano. Ma quanto all’ordine, cioè primo, secondo, terzo, etc., molto sono disprezzati l’un da l’altro. (Vatican City Vat. lat. 5318, fols. 181–181 v.)


Seay gives ‘modus minor imperfectus’, noting the variant reading ‘perfectus’ in only one source. The latter is correct, however, as the Tractatus de regulari valore notarum confirms: ‘Signum modi minoris perfecti est longalis pausa tria occupans spatia.’ (Seay t, p. 129.)

The minor imperfect mode has two pauses occupying two spaces each. Gaffurius, in his Praxis musices, refers to the same Mass in much the same words, but without example (trans. Miller, p. 85).
mensural modes, he prided himself on his knowledge of the intricacies of the notational system. One of his correspondents on this matter is the Benedictine monk, Lorenzo Gazio, clearly del Lago's inferior in theoretical knowledge, as del Lago does not hesitate to make clear in his letters. Gazio had received from his nephew, Don Valeriano, a tenor composed in the minor perfect mode, imperfect tempus, with a request for its resolution. Gazio replied to Valeriano on Easter Sunday, 1535:

not only in those places that Messer Pre Zanetto [del Lago] says, but in many others this tenor is very false, and therefore I would advise Messer Adriano Willaert that whatever he has composed over this tenor should not be seen in public because it would certainly bring him more shame than honour among experts. I would certainly like to know who the composer is and he sent a resolution, arrived at 'more by guessing and interpreting the composer's mind than by the art that is in the work'. The letter had somehow fallen into the possession of del Lago who, after revealing that the tenor belongs to a three-voice composition from his own pen, thunderously and mercilessly blasts Gazio's ignorance and presumption, for the tenor is correctly written, full of art and subtlety, and Gazio's resolution is replete with errors.

In this letter, stretching over fifteen folios, del Lago explains, breve by breve, how the tenor should be resolved, bolstering his explanations with quotations from Gafurius's Practica musice and Johannes de Muris's Libellus cantus mensurabilis on the rules for perfection and alteration. At the end he gives the tenor, Multit sunt vocati pauci vero electi, in its original notation and in a resolution into

---

126  'non solamente in quelli loch che dice Messer Pre Zanetto, ma in molti altri epo tenore se trovò insanimo, per il che laudato a Messer Adriano che quello che lui ha composto sopra esso tenor che per niente lo desse fora, perché certamente apud peritos più pe se sia de vergogna che de honore. Voluntiera sapetia chi è stato lo compositore. Se pur ve piaccese la resolution sua, giungendo più presto a indivinar et interprete la mente del compositore che per l'arte che sia in epso, [io] ve la mando' (Vatican City Vat. lat. 5318, fol. 175.)

127  Letter to Lorenzo Gazio of 6 May 1535 (Vatican City Vat. lat. 5318, fols. 85-101')

128  Particularly ironic, because Gazio was a friend of Gafurius, whom he calls 'nostro amicissimo' in a letter to del Lago of 9 September 1534 (Vatican City Vat. lat. 5318, fol. 185)'

129  The composition has not survived, but it is mentioned by Pietro Aaron in his Trattato della natura et cognizione di tutti gli toni (Venice, 1525), fol. c2', as an example of the seventh mode ('Multit sunt vocati pauci vero electi del venerabile Messer Pre Zaneto Veneto'). Gazio was so upset by the thought that Willaert had composed something on del Lago's tenor that he himself went to Venice (undoubtedly before he had received del Lago's letter) and censured and heaped insult on the tenor; this we know from a letter Aaron wrote from Padua to del Lago on 12 May 1535 (Vatican City Vat. lat. 5318, fol. 171): 'el nostro Don Lorenzo è stato dui giorni a Venezia et andato da Messer Adriano et ha molto biasimato et smaçato el nostro tenore.' Willaert's composition has not survived either.

127  'Drawing together' is used here to translate reducere, which means 'to draw backwards, to lead back, to bring back'. In other contexts it may also be translated 'to imperfect' or 'to be imperfect by'. In music theory it means to connect two or more notes so as to form a perfection and can refer to imperfection, alteration, or syncopation. In his Diffinitorium, Tinctoris defines reducere as 'unius aut plurium notarum cum maioribus quas imperficient aut cum sociis annamnserat' ('reducere is the counting together of one or more notes with greater ones which they imperficient, or with their companions'). Carl Parrish's translation of aut cum sociis as 'or their equivalents in value', and the addition of a comma after maioribus.

---

breves. In the course of the letter he cites passages in several other compositions to underline his points.

To illustrate Gazio's erroneous resolution of the passage

As

instead of

because he ignored the elementary rule 'similis ante similem semper est perfecta' - in this case the breve d imperfects not the first but the second long - del Lago refers to Bartolomeo Ramis's Tu lumen, Tinctoris's Missa Elas, Philippo de Primis's Missa Pouriant se mon, and Tinctoris's Difficiles alios. Only the last of these seems to have survived. Del Lago speaks of 'a passage in the tenor in the second part'. What he must have in mind is the following passage (sec 2 p., bars 45-9):

The second semibreve c cannot imperfect the breve a, which stands before another breve. Nor can it imperfect the next breve, which also stands before a breve. It must therefore imperfect the last breve. The annotator of the Perugia manuscript did not think that this particular passage needed any explanation.

As an example of a particular sort of alteration, del Lago again refers to Tinctoris's Difficiles alios:

in the second part of the above-mentioned song, Difficiles alios, etc., in perfect tempus he alters the second semibreve before the breve by drawing the first semibreve together with the second, as appears in his gloss in
A lost guide to Tinctoris’s teachings recovered

explanation of that semibreve, which says: ‘Ista semibrevis alteratur eo quod in tempore perfecto ante brevem ultima [duarum] solarum inveniatur.’

The passage to which del Lago refers is marked ‘h’ in the Perugia manuscript (see 2:p., bars 35–9) and the gloss there agrees word for word with del Lago’s quotation, except for the word ‘duarum’ left out by del Lago. The passage he cites is the following:

The natural inclination is to imperfect each breve by its preceding semibreve. However, the breve rest after the last breve causes the latter to remain perfect, according to the rule ‘similis ante similem semper est perfecta’. Therefore the tempus must be filled out by altering the second semibreve. The dot after it at the top of the stem is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.

lead him to the erroneous belief that ‘Reduction is simply the result of imperfection, in which a larger note in a perfect mensuration is reduced from its normal value of three to two values of the next smaller unit’ and that aut cum sociis ‘means that the smaller note which causes the imperfection might be either a single note or a group of notes of still smaller notes equivalent in value to it’; see Dictionary of Musical Terms, pp. 54–5, p. 91, n. 83.

In this context, ‘reduction’ is a false cognate.

Del Lago again returns to Tinctoris’s motet towards the end of his letter to illustrate a ‘mediated imperfection’, that is, imperfection of a note by two other notes that are separated by a third note, which should not be used without some indicative sign, such as a dot or coloration. He says:

Such mediated imperfection was used by Tinctoris in his above-mentioned motet, Difficiles alias, etc. In the first part of the tenor under the sign of imperfect tempus and perfect prolation, the sixth minim (which has a dot after it at the top of the stem) is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.

lead him to the erroneous belief that ‘Reduction is simply the result of imperfection, in which a larger note in a perfect mensuration is reduced from its normal value of three to two values of the next smaller unit’ and that aut cum sociis ‘means that the smaller note which causes the imperfection might be either a single note or a group of notes of still smaller notes equivalent in value to it’; see Dictionary of Musical Terms, pp. 54–5, p. 91, n. 83.

In this context, ‘reduction’ is a false cognate.

Del Lago again returns to Tinctoris’s motet towards the end of his letter to illustrate a ‘mediated imperfection’, that is, imperfection of a note by two other notes that are separated by a third note, which should not be used without some indicative sign, such as a dot or coloration. He says:

Such mediated imperfection was used by Tinctoris in his above-mentioned motet, Difficiles alias, etc. In the first part of the tenor under the sign of imperfect tempus and perfect prolation, the sixth minim (which has a dot after it at the top of the stem) is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.

lead him to the erroneous belief that ‘Reduction is simply the result of imperfection, in which a larger note in a perfect mensuration is reduced from its normal value of three to two values of the next smaller unit’ and that aut cum sociis ‘means that the smaller note which causes the imperfection might be either a single note or a group of notes of still smaller notes equivalent in value to it’; see Dictionary of Musical Terms, pp. 54–5, p. 91, n. 83.

In this context, ‘reduction’ is a false cognate.

Del Lago again returns to Tinctoris’s motet towards the end of his letter to illustrate a ‘mediated imperfection’, that is, imperfection of a note by two other notes that are separated by a third note, which should not be used without some indicative sign, such as a dot or coloration. He says:

Such mediated imperfection was used by Tinctoris in his above-mentioned motet, Difficiles alias, etc. In the first part of the tenor under the sign of imperfect tempus and perfect prolation, the sixth minim (which has a dot after it at the top of the stem) is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.

lead him to the erroneous belief that ‘Reduction is simply the result of imperfection, in which a larger note in a perfect mensuration is reduced from its normal value of three to two values of the next smaller unit’ and that aut cum sociis ‘means that the smaller note which causes the imperfection might be either a single note or a group of notes of still smaller notes equivalent in value to it’; see Dictionary of Musical Terms, pp. 54–5, p. 91, n. 83.

In this context, ‘reduction’ is a false cognate.

Del Lago again returns to Tinctoris’s motet towards the end of his letter to illustrate a ‘mediated imperfection’, that is, imperfection of a note by two other notes that are separated by a third note, which should not be used without some indicative sign, such as a dot or coloration. He says:

Such mediated imperfection was used by Tinctoris in his above-mentioned motet, Difficiles alias, etc. In the first part of the tenor under the sign of imperfect tempus and perfect prolation, the sixth minim (which has a dot after it at the top of the stem) is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.

lead him to the erroneous belief that ‘Reduction is simply the result of imperfection, in which a larger note in a perfect mensuration is reduced from its normal value of three to two values of the next smaller unit’ and that aut cum sociis ‘means that the smaller note which causes the imperfection might be either a single note or a group of notes of still smaller notes equivalent in value to it’; see Dictionary of Musical Terms, pp. 54–5, p. 91, n. 83.

In this context, ‘reduction’ is a false cognate.

Del Lago again returns to Tinctoris’s motet towards the end of his letter to illustrate a ‘mediated imperfection’, that is, imperfection of a note by two other notes that are separated by a third note, which should not be used without some indicative sign, such as a dot or coloration. He says:

Such mediated imperfection was used by Tinctoris in his above-mentioned motet, Difficiles alias, etc. In the first part of the tenor under the sign of imperfect tempus and perfect prolation, the sixth minim (which has a dot after it at the top of the stem) is drawn together with the second breve of the sign, which minim imperfects the other near part included in this breve as to its whole. Tinctoris demonstrates this mediated perfection by the dot, which signifies a transfer of place.
Bonnie J. Blackburn

Difficiles alios does not have the passage cited by Spataro, who was quoting from memory, but it does have several examples where black notation under perfect tempus does not indicate imperfection but sesquialtera. The superius in the secunda pars, with a mensuration sign $O_1$ (tempus perfectum, proportio dupla), has five passages in coloration. Only the fourth (bars 31–2) indicates simple imperfection. The rest (bars 8–9, 14–15, 28 and 33) show imperfection, but they are all also in sesquialtera because of the proportional signs. It is only in the contratenor and tenor of the secunda pars that the two types of blackening appear under the sign $O$. In the contratenor, two extended passages in coloration mix semibreves, breves, and longs. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation.

The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage:

it is clear that, except for the penultimate note, all the breves would have been imperfect if the whole passage were written in white notes. The same is true of bars 14–15 and 24–5 in the tenor. This seemingly ‘unnecessary’ coloration hints at a different interpretation. The marginal annotations and those written by the scribe beneath the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence. The second (bars 23–5) indicates imperfection; all the semibreves could just as well have been white, though blackening the first ligature prevents alteration of the second breve. The other passage must be transcribed in sesquialtera (bars 13–15); it coincides with similar notation in the tenor. The superius achieves the same sesquialtera through proportio sextupla. How is one to tell when simple imperfection is expected and when sesquialtera? If one examines the original notation of this last passage: the notes of Tinstonis’s Difficiles alios in the Perugia manuscript are of considerable help, but they offer no elucidation of the foregoing passage. That this may be due to a mere oversight on the part of the scribe is suggested by the discovery of a sheet of annotations to an unnamed composition found in the Spataro correspondence.
A lost guide to Tinctoris’s teachings recovered

handwriting is that of Lorenzo Gazio. The description matches Tinctoris’s Difficiles alios almost precisely:

La prima parte del sopranò et anche la prima del contratenore se canta una semibreve a la batuta. Le pause de breve valen tre batute.

In la seconda parte del sopranò sono tutti li infrascripti segni over propozizione huiusmodi

\[ \begin{align*}
\text{O}_1' & \quad \text{qui andarà dui semibreve per batuta} \\
\text{C}_1 & \quad \text{una longa per batuta} \\
\text{C}_1 & \quad \text{tre breve per batuta} \\
\text{C}_1 & \quad \text{una semibreve per batuta. Le pause son perfecte.} \\
\text{C}_1 & \quad \text{dii semibreve per batuta} \\
\text{C}_1 & \quad \text{tre minime per batuta} \\
\text{C}_1 & \quad \text{una longa a la batuta} \\
\text{C}_1 & \quad \text{una semibreve a la batuta} \\
\text{C}_1 & \quad \text{una breve a la batuta. Le breve valen dui semibreve. La longa valen \[ \text{sic}\] 4. Le pause de breve valen 6 per fin in fino.}
\end{align*} \]

The seventh proportion listed for the superius, \[ \frac{3}{2} \], does not agree with the Perugia version of the motet, which has \[ \frac{2}{3} \]. But both are correct; the Perugia version refers to the previous section and is sesquialtera to it. Gazio’s version refers instead to the tenor, for the notation ‘tre semibreve per batuta’ indicates proportio tripla to the tenor. In the notes to the contratenor, the annotations to the sign \[ \text{O}_1' \] specify ‘tre minime per batuta’, confirming as erroneous the notation in Perugia, ‘una minima’ (see 2.p., bar 30).

Highly interesting is the special care Gazio took to clarify the passages in coloration. The second proportion of the superius has one of the passages in which blackened notation produces both imperfection and sesquialtera (see 2.p., bars 8–9). Gazio wrote out the blackened notes and added barlines and the words ‘4 batute’ to make sure that these six black breves would fit with four semibreves in the tenor.

Gazio’s notes to the contratenor contain two proportional signs more than those in the Perugia manuscript. These signs (second and third on the list) must come before and after the passage in coloration discussed above: \[ \frac{3}{2} \] at bar 13 and \[ \frac{3}{2} \] at bar 15. Thus this passage, which seemed exceptional at first, falls into the category of coloration that combines imperfection with sesquialtera, indicated by a proportional sign.\[135\] Gazio was aware of the two different types of coloration, for his notes to the sign \[ \frac{3}{2} \] specify that ‘the black [notes] are made so as to imperfect them’—that is, the passage beginning at bar 23, which is not to be read in sesquialtera.

The annotations also confirm the transcription of the passage in sesquiteria (see 2.p., cantus, bars 31–2) with its puzzling isolated black semibreves:

He states: ‘the three breves are perfect’. Indeed, only by making the breves perfect does the passage fill two bars. By resorting to blackened semibreves, the scribe avoided placing dots of perfection after all three breves. Tinctoris gives an example of this in his treatise on imperfection (Seay I, pp. 143–67) as an exception to the ninth general rule: ‘The ninth general rule is if, a number [perfection] having been completed or [there are] no other preceding notes, a smaller note is found before a longer note capable of imperfection, it imperfects it.’\[136\] The exception states: ‘And if smaller notes that otherwise, according to the foregoing rule, would imperfect another larger note are blackened, they do not imperfect it; on the contrary, they are counted together (reducentur) with other similarly blackened notes, as appears here’:

\[135\] Apel, Notation of Polyphonic Music, does not have a special category for this; he does, however, point out a brief example of it in Leonel Power’s Anima mea (p. 134). On p. 158 he discusses the use of \( \frac{3}{2} \) in combination with tempus perfectum. Tinctoris, in his treatise on proportions, gives an example of coloration indicating sesquialtera in perfect tempus in chapter 6 of Book I (Seay I, p. 20).

\[136\] ‘Nona regula generalis est quod si completo numero aut nullis praecedentibus notis aliis, nota minor sola ante maiorem ab ea imperfectiibum inveniatur, ipsum imperfecti.’ (Seay I, p. 156.)
A lost guide to Tinctoris's teachings recovered

All of the white notes are perfect, and the black notes together equal two perfections (applying proportio dupla). 137

Gazio's annotations show that he too knew Tinctoris's motet, though he does not mention it in his letters. Perhaps his curiosity was piqued by del Lago's letter to him in which Difficiles alios is cited three times, and he decided to familiarise himself with the motet. If so, he probably did not ask del Lago for it; the Spataro correspondence, not surprisingly, contains no answer to del Lago's blistering attack on Gazio's ignorance in notational matters.

Although Tinctoris's Difficiles alios must have been about fifty years old when it was discussed by Giovanni del Lago and his correspondents, Giovanni da Legge, Giovanni Spataro, Pietro Aaron, and Lorenzo Gazio, it still held lively interest for musicians almost two generations after it was written, mainly because it was considered a practical example of Tinctoris's teachings on mensural notation. By 1400, for instance, Tinctoris's treatises in this matter. Curiously, not a single correspondent, Giovanni da Legge, Giovanni Spataro, Pietro Aaron, and Lorenzo Gazio, it still held lively interest for musicians almost two generations after it was written, mainly because it was considered a practical example of Tinctoris's teachings on mensural notation. All the rules applied in Tinctoris's motet could also have been sought in his writings, but none of the correspondents refers to Tinctoris's treatises in this matter. Curiously, not a single letter in the Spataro correspondence (except for the annotations by

137 'Et si notae minores quae alterius praemissae regulam imperficient aliquam maiorisimpletinus sunt, non ipsam imperficient, immo ad aliaris similiter impletas reducuntur.' (Ibid., p. 151.) Here is an example that clearly illustrates 'aut cum sociis' in Tinctoris's definition of reductio (see note 127 above). The first black note in each group is counted together with its companions to form a perfect tempus. This meaning of coloration is not treated in Apel. Gafurius discusses it briefly on fol. bb7 of his Practica musicæ (trans. Miller, p. 103; unfortunately, the failure to show coloration in the transcription of the example makes Gafurius's point hard to understand), but he applies it to groups of three blackened notes of the same value.

In his Proportiona, Tinctoris gives an example showing four uses of the blackened minim (Seay, pp. 20–1). One of them, reductio, occurs twice in the tenor, bars 2–3 and 4. In the first instance, the three blackened minim (the first three notes in Seay's transcription should have crosses over them, indicating coloration) are counted together with the two blackened semibreves. Blackening the minim prevents imperfection of the breves between which they are placed. In the second instance, two blackened minimas are counted together with two blackened semibreves and therefore do not imperfect the white semibreves between which they fall. This same example is found in the Perugia manuscript (no. 24), but the superius has been rewritten to remove both the passages in sesquialtera; apparently Johannes Materanensis, or whoever is responsible for the editing of the example, read Tinctoris's blackened minimas as semiminimis instead of minimas in sesquialtera (the superius illustrates both usages of the blackened minim); he then had to adjust the superius to fit the tenor. Consequently, the piece—contrary to the anthology's purpose—has no proportions at all.

Lorenzo Gazio) mentions the proportions in Tinctoris's Difficiles alios. This was the one aspect of it that was largely outdated by the 1530s. After Tinctoris's and Gafurius's treatises on proportions appeared, the more complex proportions went out of style (though they can hardly ever be found outside theoretical examples and didactic compositions, even at the time of Tinctoris and Gafurius). 138 Ornithoparchus's Musice active micrologus of 1517 shows the change in outlook. He gives musical illustrations of proportio dupla, trip/a, quadrupla, sesquialtera, sesquiquinta, sesquioctava, and hemiola (= sesquialtera via black notation). For the rest, in the translation of John Dowland:

Although Tinctoris's treatises in this matter. Curiously, not a single correspondent, Giovanni da Legge, Giovanni Spataro, Pietro Aaron, and Lorenzo Gazio, it still held lively interest for musicians almost two generations after it was written, mainly because it was considered a practical example of Tinctoris's teachings on mensural notation. All the rules applied in Tinctoris's motet could also have been sought in his writings, but none of the correspondents refers to Tinctoris's treatises in this matter. Curiously, not a single letter in the Spataro correspondence (except for the annotations by

138 As complicated a piece as Isaac's De radice Jesse goes no farther than proportio quadrupla in the genus multiplex and sesquialtera in the genus superparticulare. On Isaac's virtuosity in using the mensural system of his time (whose proportions are mainly indicated by signs), see P. Gonetti, 'The Mensural System and the 'Choralius Constantinus''' Studies in Renaissance and Baroque Music in Honor of Arthur Mendel, ed. R. L. Marshall (Kassel and Hackensack, 1974), pp. 71–107. Another composer noted for his use of proportions is Jacob Obrecht, but they are mainly confined to augmentation and diminution of the tenor. An exception is his duo, Regina caeli, admirably explained by Helen Hewitt in 'A Study in Proportions', Essays on Music in Honor of Archibald Thompson Davison (Cambridge, Mass., 1957), pp. 69–81. Obrecht employs an unusual system of indicating three proportional numbers in the first section in triple metre, which enables the singer to relate each proportion not only to the preceding proportion but also to the tenor.


140 Ibid.
A lost guide to Tinctoris's teachings recovered

and nothing at all on the measurement of tactus."^{14} Heyden deplored the many types of tactus in use at his time, and his treatise was written to show how the proper use of signs coupled with an invariant tactus could bring order into the mensural system. He gives examples (taken from the works of well-known composers) of the same proportions as does Ornithoparchus. He then remarks:

These are the proportions of diminution that are generally used in ordinary songs of the most excellent musicians. We believe that there is greater value in studying them more thoroughly than the remaining proportions. On this account it seemed proper to omit other proportions here, since they relate not so much to the practice of singing as to mathematical acumen. It is much easier to show the ratio of numbers in proportions of multiplex superparti
tum and multiplex superpartiens than it is to perform their note values in singing, and I would readily believe that those who compose such examples can hardly sing themselves what they want to teach others.\n
While it is true that Difficiles alios includes no more than one example of the genus multiplex superpartiens, Tinctoris certainly did expect his students and colleagues to sing the more obscure proportions in his Proportionale musices, just as he expected them to decipher the notational problems of Difficiles alios.

CONCLUSION

With Tinctoris there emerges a new phenomenon: the theorist-composer. He is the first theorist of music who illustrates his treatises with full-size musical compositions from his own pen.\(^{145}\) Behind every word of his theoretical treatises stands Tinctoris the singer and composer. He remarks in the conclusion of his great book on counterpoint: 'But in truth anyone will strive in vain to become famous in this art unless he makes a diligent habit of composing or sings counterpoint against a plainchant (super librum canat). For, as Cicero says in Ad Herennium, "in every discipline the precept of art is weak without the greatest endeavour in practice"."\(^{146}\) He studied assiduously the works of his contemporaries, imitating those whom he admired. Difficiles alios shows the hand of a gifted composer; it is a unique combination of music and theory. It would be equally just to call Tinctoris a composer-theorist.

Although only one of his pupils is known, Princess Beatrix, daughter of his patron, King Ferdinand I of Naples, Tinctoris's influence must have been considerable. His learning, mathematical acumen, and outstanding musicianship, and his 'many remarkable works, through which he makes himself both useful to his contemporaries and worthy of memory to posterity' earned him a place, during his lifetime (the notice was written in 1495), in the Cathalogus illustrium virorum Germaniae by the German humanist Johannes Trithemius.\(^{147}\)

Yet as time went on, younger theorists came to the fore, discussing new ideas and raising questions and problems not envisioned by Tinctoris. The only one of his treatises that is mentioned more than a few times in the Špataro correspondence is the Diffinitorium — and that probably because it was printed. But if Tinctoris was not widely read and quoted in the 1520s and 1530s, if he had become an 'antico' among the 'moderni', his pedagogical motet — 'quella bella cosa' — was not forgotten. In it Tinctoris had distilled his teachings on mensuration, notation, counterpoint, and proportions. Fifty years and more after the motet was composed it continued to tease the wits of musicians — and not just theorists and composers, but also performers, such as the organist Giovanni da Legge. They used it, as Tinctoris must have intended, as a practical example of his teachings, an authority for the interpretation of the notational practice of a bygone age.

APPENDIX

Tinctoris's motet, Difficiles alios delectat pangere canus, has been transcribed from the only known source, Perugia, Biblioteca Comunale Augusta, MS 1013, fols. 118v-122. I have reduced the note values by one half except in the superius and contratenor of the secunda pars where they occur under a proportional sign and further reduction is required. For didactic purposes, it is useful to preserve the original appearance of the note values, as Albert
disciplina informa est artis praeceptio sine summa assiduitate exercitationis." (Seay, p. 156.)

For a translation of Trithemius's biographical notice on Tinctoris, see Reese, Music in the Renaissance, p. 138.
A lost guide to Tinctoris's teachings recovered

Seay does (in 1:2 reduction) in his edition of Tinctoris's theoretical works, but it does not facilitate reading the parts in score. With maximum legibility of this very complicated notation in mind, I have barred all voices in the same metre, though bars 1–27 of the tenor in the prima pars, under $\text{O}$, would normally call for $\frac{3}{4}$. Similarly, in the secunda pars, bars 34–48 of the outer voices are transcribed in $\frac{3}{4}$ to agree with the tenor, which does not join their $\frac{3}{4}$ mensuration until bar 49. Because of the small note values and frequent syncopation, it was impractical to follow a consistent beaming in $\frac{3}{4}$ or $\frac{3}{4}$.

Coloration brackets are set beneath the notes to avoid conflict with ligatures. The letters written in the original parts, keyed to the marginal annotations, have been retained here. Each voice has its own series of letters. The marginal remarks have been transcribed, translated, and commented on above (pp. 58–86). Since the tenor is an exercise in imperfection and alteration, in those passages where some question might arise about the transcription, the original notation is shown above the notes.

The passages in the secunda pars under the signs $\text{f}, \text{f}, \text{f}$ and some passages in coloration could be transcribed in two ways, either as triplets in sesquialtera compared to the previous section in $\text{O}$ (i.e. 9:6) or in a $\frac{3}{4}$ metre with the proportional equivalence $\text{d} \times \text{d}$. The latter was the only feasible solution, inasmuch as casting a passage such as bar 9 of the cantus (2 p.) into triplets would have led to unnecessary complication.
A lost guide to Tinctoris's teachings recovered

Bonnie J. Blackburn

1 original: C
A lost guide to Tinctoris’s teachings recovered

[Secunda pars]

Cantus (fol. 130v)

Tenor (fol. 121)

Contra (fol. 121v)

Dupla

Sextupla tre breve per battere

Subsextupla una semibreve per battere

Quatrupla quatro semibreve per battere
A lost guide to Tinctoris's teachings recovered

Bonnie J. Blackburn

113
A lost guide to Tinctoris's teachings recovered

Bonnie J. Blackburn
A lost guide to Tinctoris's teachings recovered

LANCE W. BRUNNER

A PERSPECTIVE ON THE SOUTHERN ITALIAN SEQUENCE: THE SECOND TONARY OF THE MANUSCRIPT MONTE CASSINO 318*

The medieval sequence was one of the most distinguished artistic achievements of the Carolingian age. In creating the genre, Frankish poet-musicians moulded text and music into a new and extraordinary synthesis, and created a composition that stood proudly apart from the Gregorian Propers that surrounded it in the Mass. The new style must have spread quickly throughout the Frankish Empire, eventually reaching well beyond its borders. Pieces from the earliest centres travelled far and wide and inspired new works at every turn—faithful imitations or adaptations, as well as works in which the style was consciously modified to reflect the different aesthetics of distant realms. The legacy of surviving sources, however, does not permit the details of these early developments to be traced; even the precise dates and places where the sequence was first cultivated remain obscure. The earliest surviving sources from most regions give access to only relatively mature stages of development, which already reveal a complex web of interrelationships that has been difficult to untangle.¹

Scholars since the mid-nineteenth century have studied the early sequence eagerly and have produced an impressive range of litera-

* This article is an expanded version of a paper presented at the Forty-sixth Annual Meeting of the American Musicological Society, Denver, Colorado, on 7 November 1980. I should like to acknowledge my gratitude to the National Endowment for the Humanities for a research grant that enabled me to visit Monte Cassino and other Italian libraries during the summer of 1978. I am also grateful to the archivists at Monte Cassino for their kind assistance.

¹ The most successful attempt to isolate the earliest layer of sequences is R. Crocker, The Early Medieval Sequence (Berkeley, California, 1977). Crocker carefully studied West Frankish counterparts to Notker's sequences in an attempt to uncover the first generation of sequences.