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THE MUSIC OF JOHANNES TINCTORIS (ca. 1435-1511)

A COMPARATIVE STUDY OF

THEORY AND PRACTICE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

William Eugene Melin, Mus. B., Mus. M.

* * * * *

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1973

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PREFACE AND ACKNOWLEDGEMENTS

In commenting on the present state of musicological research, musicologists have begun to express the view that the recent production of a large corpus of the opera omnia of many composers, both well known and little known, has perhaps obscured another fundamental need—that of the analysis and historical placement of the output of these composers. This is not to say that the many complete editions were not needed; indeed, it is because of these tangible results of much vigorous and fruitful scholarship that the above goal is now more possible than ever before. It is toward the partial achievement of this goal that the present study is offered.

This dissertation will deal with the music of Johannes Tinctoris (circa 1435-1511) and consists of two major parts. A critical edition of the complete works of Tinctoris, based on an examination of the known sources, comprises Volume II. The edition does not include those works that appear only in the treatises, but does include a composition found in another source as well as in a treatise. The first Volume consists of a stylistic analysis of Tinctoris' music.

Since a study of this type presupposes the existence of many diverse problems, these will be stated during the course of
the dissertation rather than in an introduction. If a single "problem" must be set forth here, let it be that of determining what the music of Johannes Tinctoris consists of and what comprises his compositional style. Although Tinctoris was learned in many disciplines, he is perhaps best known today as a theorist, for he left to succeeding generations twelve treatises that form what is probably the most comprehensive discussion of music in the early Renaissance. His works, therefore, afford an excellent and rare opportunity to compare theory with practice, and, whenever possible and appropriate, Tinctoris' music will be related to the theoretical discussions in his treatises.

Among the many persons to whom I am indebted, I would like to acknowledge first the members of my family—my wife and two sons—whose sacrifices and patience during the time this project was in progress have been considerable. I would like to express my appreciation to Professor Dragan Plamenac, formerly of the University of Illinois, and Professor Leeman Perkins, of the University of Texas, for providing me with personal copies of manuscripts which otherwise could have been obtained only with great difficulty and loss of time, and to Professor Albert Seay, of The Colorado College, for his clarification of certain theoretical points. I would like to thank Professor Kenneth Abbott of The Ohio State University, Professor Sesto Prete of Kansas University, Professor Robert Wittman of Miami University (Ohio), and
Professor H. C. Montgomery, formerly of Miami University, for their assistance with paleographic matters and translations. To Miss Olga Buth, Head of the Music Libraries at The Ohio State University, I owe a large "thank you" for her valuable assistance and experience in obtaining materials essential to this project. I wish to express my gratitude also to Professor Herbert Livingston, Head of the Department of Music History at The Ohio State University, and to Professors Alexander Main and Norman Phelps, also of the Department of Music History at The Ohio State University, for their careful reading of the text and their many helpful suggestions. It is, however, to my adviser, Professor Richard H. Hoppin, that I am most indebted for his patient understanding, his penetrating insight and discerning criticism, and his many excellent suggestions, without which this project might never have been possible.
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CHAPTER I

BIOGRAPHY

OF

JOHANNES TINCTORIS

The life of the famous theorist and composer, Johannes Tinctoris, is represented by very few documented facts and is further clouded by much speculation on the part of certain of his biographers. We know neither the places nor the dates of his birth and death, and were it not for a few scattered dated documents and his own treatises, some of which are dated, we would know little about the chronological events of his lifetime. Several dates and at least two places have been proposed for the birth of Tinctoris.

Johannes Trithemius (1462-1516), a leading fifteenth-century humanist, historian, and theologian, included the following sketch of Tinctoris in his Catalogus illustrium virorum Germaniae:

Johannes Tinctoris, patria Brabantinus, ex civitate Nivellenci oriundus et in Ecclesia ejusdem urbis canonicus, doctor utriusque juris, Regis Ferdinandi Neapolitani quondam Archicapellanus et Cantor, vir undecumque doctissimus, maximus mathematicus, summus musicus, ingenio subtilis, eloquio disertus, multa scripsit et scribe praecclara opuscula, quibus se et praesentibus utilem et posteris memorabilem reddit. Ex his solum reperi: in musica de arte contrapuncti libri tres, item de tonis liber unus, de origine quoque musicae liber unus. Epistolas ornatissimas complures dedit ad
diversos, figuram unam depinxit, in qua omnes
vetustissimos musicos comprehendit et Jesum
Christum summum cantorem dixit. Vivit adhuc in
Italia varia scribens, annos habens aetatis ferme
LX. Sub Maximiliano Rege anno Domini, quo ista
scribimus, MCDXCV.1

If, as Trithemius says, Tinctoris was "about sixty years old" in 1495, he must have been born circa 1435, in Nivelles, a town about
twenty-five miles south of Brussels in the province of Brabant.
In naming Tinctoris as a native of Brabant, Trithemius is cor­
roroborated by the theorist himself, who, in the preface to the
treatise De inventione et usu musicae, twice refers to himself
as such.2 Indeed, this treatise, known to Trithemius, may have
been the source of the biographer's information; the choice of
Nivelles as the place of Tinctoris' birth may have been only a
deduction based on the fact that he held a canonry there. Trithe­
mius' sketch was duplicated almost exactly by two later biographers3

1 Heinrich Hülsen, "Tinctoris," in Die Musik in Geschichte
und Gegenwart, Vol. XIII (Kassel: Bärenreiter, 1966), col. 418,
quoting Johannes Trithemius, Catalogus illustrium virorum Ger­
maniae (Mainz: 1497), fol. 73V. The passage is translated in
Gustave Reese, Music in the Renaissance (New York: W. W. Norton,

2 See Karl Weinmann, Johannes Tinctoris und sein unbekannter
Traktat "De inventione et usu musicae:" Eine historische-kritische
Untersuchung (Regensburg und Röm: Pustet, 1917), p. 27 ("Johannes
Tinctoris Brabantinus . . .") and p. 28 (" . . . quos Johannes
Tinctoris brabantinus:").

3 Konrad Gesner, Bibliotheca universalis sive catalogus om­
nium scriptorum locupletissimus (Zurich, 1545) and F. Sweertius,
Athenae Belgicae (Antwerp, 1628).
and was the basis for all biographies until the appearance of Volume IV of Vander Straeten's *La musique aux Pays-Bas* in 1875, in which a new theory was proposed. Vander Straeten cites the records of the University of Louvain for the year 1471, which contain the following entry: "M. Johannes Tinctoris, Morinensis dyocesis, XV° maij." Supposing Tinctoris to have been about twenty-five years of age at his supposed matriculation in 1471, Vander Straeten projected 1445 or 1446 as the year of Tinctoris' birth, not in Nivelles, but in the diocese of Morinie, in what is now Flanders. A later registration at the University, in 1475 of a Jacobus Tinctoris from Poperinghe, in Morinie, whom Vander Straeten assumes "sans nul doute" to be the younger brother of Tinctoris, was then used to place the town of the elder brother's birth as Poperinghe. In order to clear the path for his own theories, Vander Straeten earlier cited several instances of what he felt were gross errors in Trithemius' biographies of other well-known individuals as evidence of his unreliability. Unfortunately, Vander Straeten's work was written before the rediscovery, in 1909, of Tinctoris' treatise *De

---


5 Vander Straeten, *op. cit.*, p. 13. See also Reusens, *op. cit.*
inventione et usu musicae, by Karl Weinmann. Vander Straeten's views are now rejected almost universally as too conjectural, indeed even fanciful. Most biographies, of which that by Charles Van den Borren is the most comprehensive and accurate, now accept the writings of Trithemius as fact.⁶

The earliest recorded fact of Tinctoris' life concerns his registration at the cathedral of Cambrai in 1460, where he is supposed to have been a singer,⁷ and, as Reese suggests, he may have encountered Dufay, then in charge of the choirboys there.⁸ We know too from Tinctoris' writings that he himself was in charge of the choirboys at the cathedral at Chartres sometime before his tenure at the Neapolitan court of King Ferdinand I.⁹ Whether this post preceded or followed his stay at Cambrai is not known.

The exact date of Tinctoris' entrance into the service of King Ferdinand (Ferrante) I at Naples is uncertain. He is listed twelfth, following Ycart, among the twenty-one singers in the


⁸ Reese, op. cit., p. 138.

⁹ De inventione et usu musicae, Book II. See Weinmann, op. cit., p. 34: "... insignis ecclesiae Carnotensis: cujus pueros musicam tune docebam:".
employ of Ferdinand, in a document dated October 27, 1480:

"A Joan Tintoris.
Fiorence paonaczo de grana sbagnato—canna 3. pal. 6."

This entry, which describes the purple Florentine cloth used, presumably, for his cloak, gives no indication of the length of time Tinctoris had been at Naples. However, since this type of document generally lists the singers in the order in which they entered the court, it seems probably that he was not a newcomer. It can, however, be stated with certainty that Tinctoris was at Naples in 1476, and possibly even earlier, for his Liber de natura et proprietate tonorum closes with the following acknowledgement:

Explicit liber de natura et proprietate tonorum a Magistro Joanne Tinctoris, ut praedictum est, compositus quem quoque Capellanus regius esset neapolis incepit et complevit anno 1476 die 6' novembris. Quo quidem anno 15 novembris, diva Beatrix Aragonia Ungarorum Regina coronata fuit. Deo gratias.

His assertion that the treatise was both begun and finished at Naples indicates that he had been there for some period before the sixth of November. Tinctoris' dictionary of musical terms, the Terminorum diffinitorium musicae, which is dedicated to the virgin Beatrice, must have been written before her marriage to

---

10 The document, given here as it appears in Vander Straeten, op. cit., pp. 28-30, bears the following title: "Ad XXI Canturi de la Capella del Signor Re infrascripti per loro vestire a ciascuno l'infrascripti panni a di...dicto (27 octobre 1480).

Matthias Corvinus of Hungary on November 15 in 1476, and may date from as early as 1474. It was not printed, however, until ca. 1494; curiously, the word "virgin" appears also in the print, some eighteen years after her marriage. Also evidence of the possibility that Tinctoris was in Naples before 1476 is a motet, $O\ virgo~miserere~mei$, which bears the following dedication: "Beatissime virgini domine Beatrici de Aragonia." This motet, according to Professor Leeman Perkins, was originally the dedicatory piece of the Mellon Chansonnier, occupying the first folio of that collection.12 Perkins believes that Tinctoris compiled the chansonnier, or at least had some hand in its compilation, because two of his motets appeared originally on the first and last folios of the manuscript. He makes the observation that the chansonnier was probably compiled at about the time that Beatrice was married, for the dedicatory motet mentioned above was moved to folios $24^v-25^v$, probably because of the inappropriate-ness of the term "virgin." If Perkins' conjectures are correct, Tinctoris was in Naples for at least the length of time required to assemble the fifty-seven pieces in the Mellon Chansonnier prior to Beatrice's marriage.

12Perkins' facsimile edition of the chansonnier, with transcriptions and commentary, is expected to be published within the year. His discussion of the chansonnier and its relation to Tinctoris was presented as a paper at the Annual Meeting of the American Musicological Society at Toronto, Canada on November 7, 1970.
On October 15, 1487, a letter from Ferdinand's secretary Johannes Pontanus authorized Tinctoris, in the name of the king, to journey to France and "elsewhere" to secure singers for the royal chapel:

Joanni Tinctoris. Havendo nui bisogno per lo servitio del culto divino in la nostra cappella de alcuni cantori della conditione à bucca vi havimo ditto, et non trovandoli in queste nostre parti de quo, volimo che andate ultra monti in Franza, et in qualunque altra regione paese, et loc ve parerà posserne trovare, et portate con vui le littere scrivemo in raccomand® vostra al Ser® et Ill® Re de Franza, et Re do Romani, et ve afficate, et travagliate trovare alguno cantore buono, et che habbia la conditione, et parte vi havimo dicto, et trovandoli li conducerete con vui per servitio nostro, et de dicta nostra cappella, et tutto quello si prometterà per vui à dicti cantori conducerete tanto per vio de provisione, quanto per qualunque altra vio, haverimo rato, et firmo, et farrimo observare.

Averterite bene pero ad fare la spesa utile et que ne habbiamo à restare contenti et satisfacti, il che à vui per essere tanto intendente in tale arte de canti, et per sapere quale sia lo desiderio nostro, et de che ne aggravamo òerà facile, si che operarite secundo speramo in vui.

Dat in Castello novo Civitatis nostrae Neapolis, die decima quinta octobris MCCCCLXXXVI. Rex Ferdinandus.

Joanni Tentori.

(signed) Jo. Pontanus

Several biographers have asserted that, in the course of this journey, Tinctoris paid a visit to his native land. Although there is no documentation for this assumption, the possibility cannot be discounted, for, in his treatise De inventione et usu musicae, he mentions having met Johannes Stokhem while both were in Liége.\(^1\) The six surviving chapters of this treatise, consisting of two chapters from each of Books II, III, and IV, were sent by Tinctoris to Stokhem, probably while the latter was in the service of Beatrice at the Hungarian court.

He also mentions, in the same treatise, having encountered, at Bruges, the two viol players, Jean and Charles (Fernand), whose playing he described as so skillful and beautiful that no melody ever pleased him more.\(^2\) It should be mentioned, too, that, in view of the many fine singers who went to Italy from les Pays-Bas, it seems unlikely that Tinctoris would not have sought more singers there.

According to the entry by Trithemius, Tinctoris was still in Italy in 1495, although he is listed as formerly in the service of Ferdinand I, who had died in 1494. Schering discusses the possibility that Tinctoris was at the Pontifical Chapel in Rome

\(^1\) See Weinmann, op. cit., p. 27.

\(^2\) Ibid., p. 45.
in 1492. He cites as proof the diary of Johannes Burchardus, a papal official in the latter part of the fifteenth century, which gives the text of a composition supposedly written by Tinctoris for the coronation of Pope Alexander VI in December of 1492. Apparently the composition was not performed at the ceremony, although the Pope consented to hear it in his chambers at another time. The only copy of Tinctoris' Missa L'homme armé is included in a manuscript (Codex 35) that rests in the library of the Sistine Chapel in Rome and may well have been written there.

The exact date of Tinctoris' death is unknown, as is the place where he died. There is some speculation as to whether he died in Italy or in his homeland, to which he may have returned after leaving Ferdinand's service. In any case, his prebend at Nivelles was awarded, on October 12, 1511, to one Peter de Coninck:

Van eenen placet voer Petern De Coninck, om te comen totter possessien van eender provende van Nvvele, vacerende by doode van wylen heeren Janne Tinctoris, ende dat vuyt crachte van zekeren bullen apostolike, etc., de data xij octobris anno


17 Ibid., p. 174.
It may logically be concluded, therefore, that Tinctoris died shortly before that date. Since it was not generally required that the holder of a prebend be a resident of that area, it remains possible that Tinctoris stayed in Italy until his death.

One of the more persistent questions which pervades the writings of his recent biographers concerns the derivation, form, and spelling of his name. He himself, in his treatises, uses only the spellings "Tinctoris" or "Tintoris"; in the sources preserving his compositions, only one or another Latin spelling is used. The name, originally occupational in derivation (from "the dyer" or "tinter"), was patronymical with Tinctoris and his father. According to Tinctoris, his father's name was Martini Tinctoris. 19 The name has appeared at one time or another in the writings of his contemporaries and of more recent scholars in all of the following forms: (Latin) Tinctoris, Tinctor, Tintoris; (Italian?) Tintori, Tentori; (French) Tein-

18 See Vander Straeten, op. cit., p. 45. The brackets are Vander Straeten's, and the document appears above exactly as given in his text. That the year in question was in fact 1511 and not the eleventh year of the reign of that particular pope issuing the bull is confirmed by Vander Straeten with the following footnote: "Archives générales du Royaume, registre aux droits de sceau de Brabant, du 1er octobre 1511 au 31 septembre 1512, f° 1."

19 See Weimann, op. cit., p. 28.
turier, Taintenier, Tintillier, any of which may be preceded by Le or Du; (Flemish) Ververs, Ververe, De Ververe, Verwers, Vaewere, De Vaerwere; and even (German) Farbers.

The question of whether Tinctoris established a public music school at Naples, a popular but unfounded view still expressed in many biographies,\(^\text{20}\) has also been discussed by most of his biographers. Of greater import is the question of Tinctoris' official title at Naples and the implications of the many professional titles by which he refers to himself in his treatises. He is listed, as was mentioned earlier, only as the twelfth of twenty-one singers (li canturi) at the Neapolitan court. Contrary to Vander Straeten's assumption, this in no way constitutes a reflection on Tinctoris' abilities but indicates rather that certain singers had been in Ferdinand's employ for a longer period of time.\(^\text{21}\) Nor can this indicate, as Vander Straeten insists, that Tinctoris was never the Capellmeister at Ferdinand's court.\(^\text{22}\)

It must be remembered that, since he was entrusted by his King, in 1487, with the duty of recruiting new singers, with the express


\(^{21}\) Vander Straeten, *op. cit.*, p. 27.

\(^{22}\) Ibid.
statement that whatever he promises them by way of provision will be honored by the court, his abilities as a musician and his knowledge of singing must have been highly regarded by Ferdinand.

Tinctoris, in his treatises, refers to himself by many titles, among them "magister" (teacher or master), "capellanus" (the exact meaning of which is not clear), "inter musicae professores" (professor of music), "inter cantores minimus" (singer), "Regis Siciliae cappellanus" (singer? in the chapel of the King of Sicily), "in legibus licentiatum" (licensed in law), "iurisconsultus ac musicus" (jurisprudent and musician), "legum artium-que mathematicarum professores" (professor of law, the arts, and mathematics), and "inter eos qui iura scientiasque mathematicas profitentus" (among those who profess the law and mathematical sciences). All of these titles appear in the three treatises known to Trithemius, who included these many attributes in his biographical sketch.\textsuperscript{23} He is, as Trithemius says, "a man very learned in all respects, . . . and worthy of memory to posterity."\textsuperscript{24} Tinctoris may also have been known as an astrologer, for Giovanno Spataro, the well-known theorist of the early sixteenth century, in a letter to Giovanno del Lago, dated at

\textsuperscript{23}Trithemius, \textit{op. cit.}

\textsuperscript{24}Quoted from the translation by Reese, \textit{op. cit.}, p. 138.
Bologna the 24th of November, 1529, says of Johannes de Muris and Tinctoris: "che luno fusse existimato bono theologo et laltro bono astrologo." Spataro's tone in this letter is unmistakably derogatory of the talents of both Muris and Tinctoris; his reference to these two men as "a good theologian" and "a good astrologer" may be more spiteful than truthful.

In addition to the mark left by his twelve treatises and his compositions, which comprise the subject of this dissertation, the commemoration of Tinctoris has taken the form of a statue, dedicated to his honor by the people of Nivelles at a town meeting held on October 28, 1874. The following letter, written by the Minister of the Interior, who had been in touch with Vander Straeten and was clearly influenced by him, caused much discussion as to the appropriateness of the monument:

...En admettant que Tinctoris ne soit pas né à Nivelles, il est néanmoins bien démontré qu'il est Belge d'origine et qu'il se rattache à la ville de Nivelles par des liens étroits dont celle-ci est en droit de se prévaloir pour honorer sa mémoire. Il est avéré, en effet, que Tinctoris a été chanoine de la collégiale de Nivelles où il a résidé dans les dernières années de sa vie et où, probablement, il est mort. Ces circonstances paraissent suffire pour légitimer l'intervention de l'administration communale de Nivelles, d'autant plus que, si elle était récusée, Tinctoris, qui est certes une de nos gloires nationales les mieux establishes, courrait grand risque de n'avoir jamais...

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25Rome, Biblioteca Apostolica Vaticana, lat. 5318, folio 151; I am indebted to Prof. Frank Tirro, of Duke University, for providing me with excerpts of this letter.
son monument pour le signaler à l'admiration et
à l'émulation de ses concitoyens.26

According to Detilleux, the statue, bearing the inscription
"A TINCTORIS. 1875," was placed at the center of the Place Bléval,
and existed until 1940.27 It remains unanswerable whether
Tinctoris would have approved of one other tribute, namely,
a movie theater named after him, facing the site of the statue
in Nivelles.28

Perhaps the greatest monument to Tinctoris lies in the
respect he has gained, not only as a theorist, but as a composer
as well, in the views of both his contemporaries and his successors.
His twelve treatises, described in some detail by Reese,29 form
a compendium of the theoretical knowledge of his time and have
been widely read and often quoted since their writing. The
widespread distribution of his compositions—their are found in
no fewer than twenty-two manuscripts and (Petrucci) prints from
Spain to Italy—is testimony to his popularity as a composer.

26G. Detilleux, "Jean Tinctoris, savant et artiste musicien
(1435-1511); ses origines, sa vie et ses écrits," in Annales de
la Société archéologique et folklorique de Nivelles et du Brabant
(n.p.: n.d.), p. 95.

27Ibid., p. 96.

28Ibid., p. 73.

29See Reese, op. cit., pp. 140-148 and Appendix A of this
dissertation for further information regarding the treatises.
It is hoped that these compositions—four Masses, at least four motets, a Lamentation setting, and nine secular pieces—will again become as widely known as are his treatises.\textsuperscript{30}

\textsuperscript{30} A complete list of the compositions is included as a preface to the transcriptions in Volume II. The single Patrem (referred to by Reese, \textit{op. cit.}, p. 740) attributed to Tinctoris in the Speciálník Codex in the Hradec Králové Library of Czechoslovakia, is not by Tinctoris, but is the Credo of Josquin's \textit{Missa La belle se siet}. 
CHAPTER II

THE NOTATIONAL CHARACTERISTICS
OF TINCTORIS' MUSIC

The compositions of Johannes Tinctoris, which were most probably written during the last third of the fifteenth century and the first few years of the sixteenth, are preserved in manuscripts which date, for the most part, from the years around 1500. As a consequence, the notational style is white mensural notation, which was in use from ca. 1450 to about 1600.¹ Tinctoris' music, like that of most of his contemporaries, makes use of proportions, or the augmentation and diminution, in some ratio, of the notational values used within the different mensurations. In addition, notational peculiarities not always found in white mensural notation appear in some of the manuscripts preserving Tinctoris' compositions. These and other related topics will be considered in this chapter; whenever possible, the notational characteristics of the music will be related to Tinctoris' discussions of the subject in his treatises.

¹The subject of white mensural notation is discussed in detail in Willi Apel, The Notation of Polyphonic Music: 900-1600 (5th ed.; Cambridge, Mass.: The Medieval Academy of America, 1953), pp. 87-195, to which references will be made in this chapter.
Proportions

The subject of proportions has been treated by many scholars, not only as pure theory, but in the preparation of editions of fifteenth- and sixteenth-century music. In spite of the numerous studies, the subject still poses problems for the transcriber and editor of the music of these periods, partly because few composers who used proportions discussed them from a theoretical standpoint. Among those who did discuss the subject, there is frequently much disagreement. It is fortunate indeed, therefore, that Tinctoris both wrote about and used proportions, for this affords an excellent opportunity to compare theory with practice.

Even though Tinctoris dealt with mensuration and proportion both practically and theoretically, the topics are not without problems. To those problems caused by the inconsistencies and inaccuracies of the scribes must be added those which result from variations in the use of mensuration and proportional signs from one locality to another, one composer to another, and even, as Hamm has shown, within the course of a single composer's development. The many ambiguities of the mensural system have

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been treated in an essay by Arthur Mendel, in which he very logically questions and refutes many time-honored theories, some of which have been perpetuated erroneously from one source to another and frequently accepted as incontrovertible fact. In this study, Mendel also suggests that "what is needed, is . . . an orderly method of gathering and sorting of evidence from both the theorists and (particularly) the music itself." While Tinctoris was not a prolific composer, he did make use of mensural and proportional devices to such a degree that a study of his works will shed some light on a few of the ambiguities of the system.

Tinctoris, in his Proportionale musices defines proportion as "the relation of two terms to each other." In order to arrive at a relationship of the various mensural and proportional signs, it is necessary to establish first the relationship of the four

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6Proportionale, Book I, Chapter I: "Proportio est duorum terminorum ad invicem habitudo."
basic mensurations—tempus perfectum, prolatio maior (〇), tempus perfectum, prolatio minor (〇), tempus imperfectum, prolatio maior (〇), and tempus imperfectum, prolatio minor (〇)—to which all other mensural and proportional signs will be related. The relationship of these four signs, based on the equality of the minim (磔), is shown in Figure 1 below. That Tinctoris still regarded the minim as equal in all four of these mensurations is supported by the Proportionale, Examples 15, 25, and 49, in which minim equivalence is clearly in evidence. The four basic mensurations, then, are related as shown below:

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Example 47 of the Proportionale, in which the minim of 〇 is not equal to the minim of 〇 is an example of what Tinctoris feels is an incorrect use of the sign 〇.
By examining the various combinations of the above four mensurations with other mensural and proportional signs, it is possible to arrive at the correct relationships of the different proportions, as well as a possible theory regarding some aspects of tempo during this period. Each of the mensural and proportional signs used by Tinctoris will, whenever necessary and possible, be related to the appropriate discussions and examples in the Proportionale musices and will be treated here in approximately the same order as in the treatise.

Following his definition of proportion in music, Tinctoris describes, in Chapter II of Book I, the ways in which proportions are made—"through relation to the notes of the other part" (simultaneous proportion), and through "relation to the preceding number in one and the same voice" (successive proportion). He next divides proportions into those of equality and those of inequality.

Proportions of Equality

Proportions of equality—"those which are made up of equal numbers, as 1 to 1, 2 to 2 . . . ."—occur when the voices are written with the same mensuration signs and are, of course, more frequent than proportions of inequality. Their use is so common,

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8Seay, "Proportionale," p. 28.
in fact, that we hardly consider them to be proportions at all. Tinctoris' discussion seems academic, included only for the sake of thoroughness. Accordingly, he limits himself to one example, in which both voices are in \( O \) (see Example 3 of the *Proportionale*), and an example of Ockeghem's incorrect use of the sign \( \mathcal{O}^3 \) in all voices to indicate equality. Of this last Tinctoris says: "O childish ignorance of equality to join to it the proportion of inequality."\(^9\) He goes on to say that what Ockeghem intended was "a speeding up of the measure \( \underline{\text{tempo}} \)," which should have been indicated by "the drawing of a line through the middle of a circle or of part of it,"\(^10\) i.e., \( \Phi \). From this statement, the inference may be drawn that proportions of equality exist only when the four basic mensural signs—\( O, O, C, \) or \( \mathcal{O} \)—are used. All other signs indicate proportions of inequality, even when they appear in all voices simultaneously.

**Proportions of Inequality**

The proportions of inequality are those "made up of unequal numbers, such as 2 to 1, 3 to 2, 4 to 3, etc."\(^{11}\) They consist

\(^9\)Ibid., p. 29.
\(^{10}\)Ibid.
\(^{11}\)Ibid., p. 29.
of the five species of proportions discussed by Boethius. The first of these is the multiplex classification, "in which the larger number when related to the smaller contains the smaller exactly a number of times; for example, twice and it will be duple, three times ... triple, ... and so on."\textsuperscript{12}

Duple Proportion

"Proportion is duple when the larger number related to the smaller contains the smaller exactly twice, as 2 to 1, 4 to 2, 6 to 3."\textsuperscript{13} Tinctoris gives only one example, which uses the sign $C_1^2$ to indicate that two semibreves in that proportion occupy the place of one in $C$; this relationship is shown in Figure 2. In the example in the treatise, which combines $C_1^2$ and $O$, three breves of $C_1^2$ occur in the same space as one breve of $O$; the proportion is not triple, however, because the breve of $C_1^2$ is imperfect, while the breve of $O$ is perfect. Tinctoris states, later in the treatise, that imperfect quantities cannot be made in proportion to perfect quantities.\textsuperscript{14}

The proportion intended here, then, is a duple proportion to the values of $C$, which produces also a duple proportion of the

\textsuperscript{12}Ibid., p. 29f.
\textsuperscript{13}Ibid., p. 30.
\textsuperscript{14}Ibid., p. 44.
semibreve and minim in relation to \( O \) in the lower voice.

\[
\begin{array}{c}
\text{C}_1^2 \\
\text{O} \\
\text{C}
\end{array}
\]

etc.

Fig. 2. --Duple proportion indicated by \( C_1^2 \)

In Chapter 5 of Book I of the *Proportionale*, Tinctoris mentions also the use of colored (blackened) *minimae* and *minimae* "turned back at their tips"\(^{15}\) (i.e., \( \text{\textbullet} \) ) to indicate a duple proportion of that value. The former, he says, are used in minor prolation, while the latter are found more frequently in major. It should be noted that, according to this passage, a white tailed minim (\( \text{\textbullet} \)) in either C or O is equal to a blackened minim (\( \text{\textbullet} \)) in either C or O. It must also be noted that Tinctoris states vehemently that these blackened minimae "are not semiminimae . . . as some unlearned babble,"\(^{16}\) just as blackened semibreves, breves, and longs are not called semisemibreves, semibreves, and semilongs, respectively. Tinctoris' injunctions


were not destined to be remembered, for these notes are popularly called semiminimae, not only by his contemporaries, but to this present day.

One of the most common methods of indicating a duple proportion is through the use of the sign \( \text{C} \). According to the Proportionale,\(^{17}\) a breve of \( \text{C} \) is equal to a semibreve of \( \text{C} \); this produces the same values as those shown in Figure 2. The sign \( \text{C} \) is used not only with other signs as an indication of duple proportion, but also as an initial signature in all parts, in which function it appears in many of the internal sections of movements of Tinctoris' Masses. It also appears at the beginning of some of Tinctoris' secular pieces. In his dissertation on the Pixérécourt Chansonnier, Pease mentions the possibility that \( \text{C} \), by the year 1500, was interchangeable with and equal in meaning to the sign \( \text{C} \).\(^{18}\) Such a possibility is not mentioned by Tinctoris.

Despite Tinctoris' frequent objections to the use of single numbers and written words to signify proportions, the sign \( \text{C}^{2}\) and the word "dupla" are illustrated in the Proportionale as

\(^{17}\text{Ibid.}, p. 67.\)

methods of indicating a duple proportion. The former, an abbreviated form of C\textsuperscript{2}, appears only once in the sources for Tinctoris' compositions—a version of Virgo Dei throno digna in the Glogauer Liederbuch. That the sign is equal to C is confirmed by the use of C in all other manuscript sources for the motet.

Duple proportion is signified most frequently in Tinctoris' music by the use of numerals only, such as \( \frac{2}{1} \) or \( \frac{12}{6} \). In the D section of the Credo of Tinctoris' Missa sine nomine No. 1, duple proportion is twice indicated by the sign \( \frac{2}{1} \). The first occurs in relation to 0, and is discussed below (page The sign next occurs in the context of C, producing the equivalent of C. In the opening Kyrie of the Missa L'homme arnê the sign occurs in a passage in C-augmentation, halving the value of a perfect semibreve (from \( \varphi = \sigma \) to \( \varphi = \sigma \)). This constitutes, in effect, a shift to "normal" C, in which the minim is equal to the minim of 0 in the other parts. The relationship of these two signs is shown in Figure 3.

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19 Seay, "Proportio nale," Examples 43 and 44.

20 The use of C together with the canon "crescit in duplum /duplo?/" in the Ms is an indication of augmentation in which the values are doubled. See also Seay, op. cit., p. 42 for a discussion of the canon "crescit in duplo" in connection with the sign 0.
Duple proportion signified by $O^2$ occurs in one piece by Tinctoris, although he objects to the use of this sign in this manner. In the chanson *Le souvenir* (à 2), $O^2$ appears against $O$ in the lower voice, producing two semibreves in the upper part against one in the lower as shown in Figure 4.

Just as $C^2$ was used—incorrectly according to Tinctoris—as an abbreviated form of $C^2_i$, $O^2$ is used, also incorrectly, as a short form of $O^2_i$. These signs—$O^2$ and $O^2_i$—as they are used in the previously mentioned instance, produce more than just a duple proportion however; they also, in effect, alter the quality of the breve. In $O$, the breve is perfect, and the
semibreve and minim are imperfect; in $\text{O}^2$ as used here, the long, which replaces the breve of $\text{O}$, is perfect, while the breve, semibreve and minim are all imperfect. This relationship is shown in Figure 5.

![Figure 5.--Alteration of tempus in $\text{O}^2$](image)

As a theorist, Tinctoris strongly objects to--indeed forbids--the use of the sign $\text{O}^2$ to show modus. He says that the indication of modus perfectus, tempus imperfectum and prolatio minor in duple proportion ought to be effected in the following manner:

![Fig. 6.--Tinctoris' method of indicating perfect modus, imperfect tempus with minor prolation](image)

Tinctoris confirms this by saying that modus ought to be indicated by "the placing before or between of pauses," that occupy

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22 Seay, "Proportionale," p. 44.
three spaces if the *modus* is perfect, two if imperfect. In another treatise, the *Tractatus de regulari valore notarum*, he gives four examples that show, respectively, *modus maior perfectus*, *modus maior imperfectus*, *modus minor perfectus*, and *modus minor imperfectus*.23

Fig. 7.—Signs used to indicate *modus*

One must assume, therefore, that the scribe who copied the piece in question (see above, p. 26) used the form with its usual meaning instead of following Tinctoris' injunctions.

The application of the successive proportion $\frac{2}{1}$ to the measurement $O$, as seen in the D section of the Credo of Tinctoris' *Missa sine nomine No. 1*, demonstrates what is, according to Tinctoris, the correct use of that sign. Transcription of this passage shows that the sign does not change the breve from a perfect to an imperfect quantity, but produces a two-to-one proportion with the breve of $O$.24 This relationship is shown in Figure 8.

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23 The treatise appears in CS IV, 46-53. Concerning the indication of *modus*, see Chapters 2 and 3, pp. 47-49.

It should be noted that, while the signs $C^1$, $C^2$, and $C$ followed by $\frac{1}{2}$ all produce identical values, due to the fact that all note values in $C$ itself are imperfect, the same situation does not obtain with the signs $O^2$, $O^2$, $O$ followed by $\frac{1}{2}$, and, as will be shown, $\phi$.

Another instance of an indication of a proportion by a single number can be seen in the chanson *De tous biens playne*, in which the sign $\Phi^2$ signifies a duple relationship to in the lower part; i.e., in $\Phi$, $\odot = \odot$, while in $\Phi^2$, $\odot = \odot$. Tinctoris indicates this same relationship in the *Proportionale* by the sign $C^2_1$.\(^{25}\)

In the chanson *Le souvenir* (à 2) Tinctoris shows a duple relationship by the sign $\frac{12}{1}$; this sign was used instead of $\frac{2}{1}$ because Tinctoris is referring specifically to the values used (semibreves), in a cumulative series of proportions. This chanson,

\(^{25}\) *Ibid.*, Examples 52 and 56.
because of its unusual application of successive proportions, will be discussed later in this chapter.

Triple Proportion

Instances of what might be considered triple proportion occur in two of Tinctoris' compositions. In his chanson *Le souvenir* (à 2) the sign ³ in measure 8 appears in the context of ² against ⁰ in the lower voice. This establishes three perfect breves in the upper part against one in the lower; that proportion, however, is only incidentally achieved, for the sign is actually an indication—incorrect, since only one numeral is used—of a sesquialtera proportion, i.e., that three semibreves now occur in place of two in ². Thus, a simultaneous triple proportion and a successive sesquialtera proportion are produced at the same time. However, it must be remembered that as the sign ² was used here, the breve is duple (see Fig. 9).

Fig. 9.—Triple proportion indicated by ³
It should perhaps be noted at this time that Tinctoris, in Book I, Chapter 2 of the Proportionale, acknowledges the possible confusion in determining whether the proportion intended is a successive or simultaneous proportion, for he counsels that:

the simple method should be assumed, that is, that the proportions refer to the relationship with the other part, unless it works out that many proportions will be singable in the other way, that is, through relation to the preceding number in one and the same part, that otherwise would not be.26

In the manuscript sources for Tinctoris' compositions, proportions are most often indicated in relation to the previous passage in the same voice, i.e., successive proportions. Tinctoris also reveals, in Book I, Chapter 3, that there was some inconsistency in the application of the sign \( \text{[^3]} \), for he says that this sign "with certain composers indicates triple proportions, and with others sesquialtera alone."27 It is possibly for this reason that he frowns on the use of a single number to indicate a proportion.

A similar situation occurs in the chanson De tous biens playne, where the sign \( \text{[^3]} \) appears after the sign \( \text{[^2]} \) against \( \text{[^c]} \) in the lower voice.

\[26\text{Ibid., p. 28.}\]
\[27\text{Ibid., p. 29.}\]
Fig. 10.—Triple proportion indicated by $O^3$

The notation clearly indicates that the longa is perfect, and that three breves of $O^3$ equal two of $\phi^2$. The simultaneous proportion is again three-to-one.

The remaining sub-classes of the multiplex classification (quadruple, quintuple, etc. proportions) are discussed in the Proportionale, with accompanying examples, but do not appear in any of Tinctoris' compositions. Therefore, they need not be discussed here.

The second division of proportions of inequality is the superparticular classification, "in which the larger number related to the smaller contains the smaller and a further amount, for example, one half the smaller and it will be sesquialtera, a third and it will be sesquitertia, a fourth and it will be sesquiquarta, a fifth and it will be sesquiquinta, and thus with others." ²⁸

²⁸Ibid., p. 31.
Sesquialtera Proportion

The first of the superparticular proportions treated in the Proportionale is sesquialtera, which occurs when "the larger number related to the smaller contains the smaller and additionally one half the smaller, as 3 to 2, 6 to 4, 9 to 6, etc." This proportion is very common in Tinctoris' music and is indicated in a variety of ways. In the Proportionale, Tinctoris mentions the use of coloration as a method of indicating not only duple proportion but sesquialtera and other more complex relationships. The Lamentationes Jeremiae contains a passage (mm. 118-120) that involves blackened breves in a 3 to 2 proportion to white (imperfect) breves. This relationship is shown in Figure 11.

![Fig. 11—Sesquialtera indicated by coloration](image)

This passage also includes dotted blackened breves, equal in duration to a normal white breve.

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29Ibid., and Example 11.
The most common method of indicating a sesquialtera proportion is through the use of the figures $\frac{3}{2}$ or $\frac{3}{3}$. In the chanson *De tous biens playne* the sign $\frac{3}{3}$ indicates a sesquialtera at two different levels; in measure 16 it signifies that three minims replace two, as shown in Figure 12.

![Fig. 12.—Sesquialtera (minims) indicated by $\frac{3}{3}$](image)

On the other hand, in measures 8 and 25 of the same chanson this sign indicates that the sesquialtera proportion refers not to minims, but to semibreves; therefore, three semibreves now occur in the space of two in $\frac{4}{4}$, as shown in Figure 13.

![Fig. 13.—Sesquialtera (semibreves) indicated by $\frac{3}{3}$](image)

There is actually no practical difference between these two uses of the sign, for in both cases all values are in a sesquialtera proportion. However, the note values used after the signs clearly
show that in the former case the reference is to the minim, while in the latter the proportion occurs at the semibreve level.

In the chanson *Comme femme*, the sign $\frac{3}{2}$ occurs in the context of $\varnothing$; the same sign appears in passages of $O$ in the B section of the Gloria and the A section of the Sanctus of the *Missa sine nomine* No. 1. In each case, the notation following the sign shows that the proportion is at the minim level and is equal to that shown in Figure 12. In the D section of the Credo of that Mass, a sesquialtera proportion occurs at yet another level. In measure 112 of the Superius, the sign $\frac{3}{2}$ appears in the context of $O$ followed later by $\frac{2}{1}$ (indicated in this dissertation by the following symbol: $O \frac{2}{1}$); this replaces two perfect breves with three.

\begin{align*}
O & \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \\
& \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \quad \oplus \\
O & \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet \quad \bullet
\end{align*}

Fig. 14.—Sesquialtera indicated by $\frac{3}{2}$

In measure 120 of the Superius, the sign follows a passage in $C \frac{2}{1}$, substituting three imperfect breves for two, as shown in Figure 15.\(^{30}\)

\(^{30}\)See Example 1 for a transcription of this passage.
Fig. 15.—Sesquialtera indicated by \( \frac{3}{2} \)

The chanson *Le souvenir* (à 2) designates sesquialtera in several ways. In measure 11, the sign \( \frac{4}{4} \) indicates that six imperfect semibreves replace four; after an intervening duple proportion indicated by the figures \( \frac{12}{6} \), the sign \( \frac{12}{6} \) again indicates sesquialtera, replacing twelve semibreves before the sign with eighteen after.\(^{31}\)

A much more complex situation obtains in the D section of the Credo of the *Missa sine nomine* No. 1. In addition to the indication of sesquialtera by the figures \( \frac{3}{2} \) as mentioned above, that proportion is signified by the appearance of \( C^{\frac{3}{2}} \) in the Tenor (m. 121); this means that three minims of \( C^{\frac{3}{2}} \) occur in the space of two minims of \( C \) (and therefore of any of the four

\(^{31}\)Although the proportional signs could refer to breves as well as to semibreves here, it should be noted that the first proportional sign used in this voice (\( \frac{3}{2} \)) indicated a sesquialtera proportion of semibreves only—not breves. It therefore seems logical to assume that the subsequent signs indicate proportions of semibreves also, even though other notational levels are affected in the same proportion (see Example 2, p. 46).
basic mensurations). The use of many different proportional signs within a few measures is perhaps best shown by a musical example.

Example 1

The sign $\text{O}_3$ is also used by Tinctoris to indicate a
sesquialtera proportion. For example, in the B section of the Sanctus of his Missa L'homme armé, beginning in \( \text{Cj} \), the sign \( O^3 \) appears in all three voices at intervals of one breve (See Figure 16). Transcription of these measures shows that three semibreves after \( O^3 \) occupy the same space as two in the preceding measures of \( \text{Cj} \); in other terms, a perfect breve replaces an imperfect breve. This is the same relationship shown by Tinctoris in Example 42 of the Proportionale by the sign \( 3^2 \) alone after \( \text{Cj} \); \(^{32}\) it is a duple diminution of the values produced by the sign \( 3 \) in the context of \( O \).

\[
\begin{array}{c}
\text{Cj} \\
\text{Cj} \\
\text{Cj}
\end{array}
\begin{array}{ccccccccc}
\text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} \\
\text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} \\
\text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I} & \text{I}
\end{array}
\]

Fig. 16.--Sesquialtera indicated by \( O^3 \)

In some of Tinctoris' compositions, the sign \( O^3 \), men-

tioned earlier in connection with triple proportion, appears as an indication of sesquialtera, even though the theorist disapproved of using only one number for a proportion. In the final section of the Agnus Dei of his Missa L'homme armé, it produces the values shown in Figure 17; three semibreves of $O^3$ are equal to two of $O$.

![Figure 17](image-url)

Fig. 17.—Sesquialtera indicated by $O^3$

The Missa sine nomine No. 1 contains yet another method by which sesquialtera is indicated; in the final "Kyrie," the word emiola is found. This produces a sesquialtera proportion of minimis, as illustrated in Figure 18.

![Figure 18](image-url)

Fig. 18.—Sesquialtera indicated by the word emiola
This practice does not please Tinctoris, however, for he says in Book II, Chapter 2 of the Proportionale:

That which is done quickly is done better; and what is more inept than to indicate by a long succession of letters or syllables what could be shown by two small figures.\textsuperscript{33}

Sesquitertia Proportion

Sesquitertia proportion exists when "the larger number related to the smaller contains the smaller and additionally a third part."\textsuperscript{34} It appears in three of Tinctoris' compositions, indicated in three different ways. In the chanson Le souvenir (à 2), the sign $\frac{2}{3}$ in measure 10 indicates that four imperfect semibreves replace three semibreves of the preceding passage in the same voice. This also means that the breve, which was rendered perfect in the preceding passage by the sign $\frac{3}{2}$ (in the mensuration $O^2$) is once again imperfect. This relationship is shown in Figure 19.

\textsuperscript{33} Seay, op. cit., p. 40.

\textsuperscript{34} Ibid., p. 33.
In the chanson *De tous biens playne*, the sign $\frac{4}{3}$ in the upper voice produces, in addition to a duple proportion against $\frac{3}{2}$ in the lower voice, a sesquitertia relationship to the preceding values in the Superius. This relationship, shown in Figure 20, takes place at the semibreve level.

This passage constitutes one of the few instances in which Tinctoris seems to be signifying a proportion in relation to the other part, rather than to the preceding values "in one and the same voice."

In the chanson *D'ung aultre amer*, the sign $\frac{3}{2}$, which by
this period had fallen almost completely into disuse as an indication of sesquitertia proportion, signifies the replacement of three minims by four; this relationship is shown in Figure 21. The sign as used here could also be interpreted as a two-to-one proportion to $\Phi$ in the lower part.

![Diagram of sesquitertia indicated by $O$](image)

Fig. 21.—Sesquitertia indicated by $O$

Tinctoris mentions the use of this sign in the *Proportionale*, but says that it is "so frivolous, so wrong, and so removed from all appearance of reason" that he "did not believe it worthy of an example."\(^{35}\)

Tinctoris treated the superpartiens, multiplex superparticular, and multiplex superpartiens classifications exhaustively in the *Proportionale*. Since no examples of these types of proportions appears in his compositions, they will not be discussed here.

In Book II of the *Proportionale*, Tinctoris discusses "proportions of inequality which are made by the relation of a smaller

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number to a larger.\textsuperscript{36} These are the inverted forms of the proportions treated in Book I; they produce augmentations of the integer valor as opposed to the diminished values produced by the proportions discussed above. These augmentations are designated by the prefix "sub" placed before any of the forms of diminution; for example, sesquitertia indicates a four-to-three proportion, subsesquitertia a three-to-four proportion.

**Subdupla Proportion**

Subdupla proportion is that "in which the smaller number related to the larger is contained in it exactly twice."\textsuperscript{37} It can be signified by the sign $\frac{1}{2}$, as in Example 37 of the *Proportionale*, or, as in the *Missa L'homme armé*, by a mensuration sign together with the canon "crescit in duplum."\textsuperscript{38} In that Mass, the canon occurs in conjunction with the sign $\mathbb{C}$, producing a duple augmentation of the values of that mensuration, i.e., a subdupla proportion. In this passage, a minim of $\mathbb{C}$-augmentation (the terminology we shall use here for the combination of $\mathbb{C}$ with the canon *crescit in duplum*) occupies the space

\textsuperscript{36}Ibid., p. 37.

\textsuperscript{37}Ibid., p. 38.

\textsuperscript{38}See above, p. 25 and fn. 20.
of two minims of 0, which signature is used in the remaining three voices. These signs are combined in this relationship in the initial sections of both the Kyrie and Agnus Dei. In the C section of the Sanctus, C'-augmentation is combined with C, as shown in Figure 22. These two signs indicate, respectively, a duple augmentation and a duple diminution of the minim value of the mensurations C and C, neither of which is present.

![Fig. 22.—Subdupla indicated by the canon crescit in duplum](image)

Subsesquialtera Proportion

Subsesquialtera proportion is that "in which the smaller number related to the larger is contained completely in the larger one time and in addition, one half the smaller, as 2 to 3." 39 This proportion occurs each time a sesquialtera proportion is cancelled by a return to the original mensuration, as

shown in Figure 23.

Fig. 23.--Subsesquialtera indicated by a cancellation of sesquialtera

It is found also in the Missa L'homme armé, where the sign $\frac{2}{3}$ indicates a two-to-three relationship to the values of $\phi$ (more concerning $\phi$ later in this chapter). Tinctoris also mentions the use of the sign $\frac{2}{3}$ to signify a subsesquialtera; although this sign is not used alone in his music, a shortened version— the figure $2$ alone—commonly appears as a cancellation of sesquialtera shown by the figure $3$ alone. Tinctoris' objection to these signs has already been noted.

Fig. 24.—Subsesquialtera indicated by $2$

Other Proportions

Although Tinctoris did not discuss subsuperbipartiens septimus,
which proportion would be indicated by the figure $\frac{7}{9}$, an identical relationship, produced by the sign $\frac{14}{16}$, appears in his two-part setting of *Le souvenir*. The sign indicates here that fourteen semibreves replace eighteen of the previous passage. This proportion is the last in a long succession of cumulative proportions, all of which, beginning with the sign $\frac{3}{4}$ in measure 8, refer to the semibreve. This passage, because of its complexity, is perhaps best illustrated with a musical example.

*Example 2*
Apparently the application of so many successive proportions, further complicated by the use of note values (breves) different from those to which the proportions refer (semibreves), proved to be too much for the scribe, for he erroneously used longae after the sign $\frac{14}{18}$ instead of breves, which would have been correct. This error has been taken into account in the transcription; the longs are transcribed not as quarters, but as eighth notes. It should be noted that the semibreve after the sign $\frac{15}{12}$ is one-ninth its original length in the upper voice (in $O^2$) and is equal to one-eighteenth of a semibreve in the lower part (in $O$). In the final measure of the third score in the excerpt shown, all proportions in the upper part are cancelled by the sign $O^2_1$, which effects a return to the values of $O^2$, the sign used at the beginning of this voice.

Subduple superbipartiens tertias, mentioned in the Proportionale, occurs in the final section of the Agnus Dei of the Missa L'homme armé, where the sign $C^3_8$ in the Altus appears against $O^3$ in the other parts. The only logical interpretation for $C^3_8$ is that three minims of that proportion are equal to eight of $C$. The values of $O^3$, an abbreviated form of $O^3_2$, are in a sesquialtera proportion to the minim of $O$ or $C$, which then relates them to $C^3_8$ as shown in

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40 Ibid., p. 39 and Example 41.
Figure 25. This is another instance where proportions are made to a "standard" set of values, here the basic mensurations C and O, which are not present (see also Figure 22). The implications of these passages as regards a fixed tactus rate will be discussed later in this chapter.

Fig. 25.—Subduple superbipartiens tertias indicated by C3₂

Of all the proportional signs found in the manuscript sources of Tinctoris' compositions, none has proved to be as problematic as the sign O. In his article on the notational ambiguities of the mensural system, Arthur Mendel presents several possibilities for the interpretation of signs with ver-
tical or oblique strokes through them:

It \[\text{the stroke}\] may decrease the duration of all values in either a two-to-one, three-to-one, or three-to-two ratio, some other definite ratio, an undefined ratio, or not at all; it may, in addition, cause the symbol to refer to modus instead of tempus.

Mendel is referring here to more than one sign with a slash through it; since we are concerned here with only one sign—\(\phi\)—we may reduce the possibilities to three or perhaps four, namely, that the sign \(\phi\) may involve a duple proportion to \(\circ\), a sesquialtera proportion to \(\circ\), an indefinite relationship to \(\circ\), or, least likely, it may mean exactly the same as \(\circ\).

Several of these seem, at first glance, to be possible interpretations, based on passages in the music of Tinctoris.

Before studying Tinctoris' use of the sign in his compositions, however, it would be well to examine what he says in the \textit{Proportionale}. In Book I, Chapter 3 of the treatise, Tinctoris refers to the sign \(\phi\) as an indication of "an excited sesquialtera"; he comments, later in that chapter, that "... it is proper to show the speeding up of the measure by this sign."\(^{43}\)

\(^{41}\) Mendel, \textit{op. cit.}, p. 155.

\(^{42}\) "... concitae instar sesquialterae;" See Seay, \textit{"Proportionale,"} p. 29.

\(^{43}\) "... proprium est ei mensurae accelerationum significare;" \textit{ibid.}
These two statements could be interpreted as meaning that the sign produces either a sesquialtera (to the values of $O$) or an indefinitely faster tempo than $O$. In a later chapter, Tinctoris makes a reference to the sign $\breve{c}$ as an indication of a duple proportion (to the values of $C$);\footnote{Ibid., p. 41.} since he does not also mention $\breve{O}$ at this point, it seems clear that he does not view $\breve{O}$ as a two-to-one proportion to the values of $O$.

Several other theorists have had occasion to refer to signs with slashes or strokes through them. As Hamm notes, both Anonymous XII and Ornithoparcus refer to the stroke as an indication of a reduction by one "part," i.e., one of two parts of $C$ and one of three parts of $O$.\footnote{Hamm, op. cit., pp. 63 and 64.} This is among the possibilities considered by Mendel and renders $\breve{C}$ as an exact duple proportion to $C$ and $\breve{O}$ as an exact sesquialtera proportion to $O$. Sachs has cited a passage of the Dodecachordon of Glareanus (Book III, Chapter 8) in which the theorist refers to a "hastening of the tactus" by crossing the circle.\footnote{Curt Sachs, Rhythm and Tempo (New York: W. W. Norton, 1953), p. 223.} The theorists, then, offer the same choices of either an indefinitely faster tempo or an exact sesquialtera. Hamm arrived at the conclusion that the difference between $O$ and $\breve{O}$ in Dufay's compositions of the
late 1420's and early 1430's is one of tempo, and suggests that the same scale of reduction be used for both (i.e., a semibreve equals a half note). Before attempting any such proposals about the meaning of $\emptyset$ in the music of Tinctoris—written some 50 years after the above dates—it is necessary to examine the music itself, to determine what, if any, relationship is suggested therein.

It should be pointed out, before proceeding to an examination of specific passages, that Tinctoris never combines $\emptyset$ with any other sign. This, at first, seems unfortunate, for the simultaneous use of $\emptyset$ and another sign would clearly establish the meaning of $\emptyset$. The lack of such a simultaneous combination, however, actually confirms one of the possible interpretations of $\emptyset$, namely, that it does not indicate an exact proportion.

In the C section of the Gloria of the Missa L'homme armé, the sign $\emptyset$ appears as an initial signature in all four parts, followed, in measure 118, by the sign $\frac{3}{2}$ in all parts simultaneously. The latter sign presumably indicates that two semibreves now occur in the space of three of $\emptyset$, producing the relationship shown in Figure 26.

If the sign $\phi$ were assumed to be a three-to-two proportion to the values of $O$, that is, an exact sesquialtera, then the values of the notes after the sign $C_3^2$ would be equal to those produced by the sign $C$ alone. Why, then, did Tinctoris use the sign $C_3^2$ and not just $C$ at this point? There are two possible explanations: 1) it may be that Tinctoris, aware of the uncertainty surrounding the meaning of the sign $\phi$, included the figures $\frac{2}{3}$ after the sign $C$ to confirm the relationship of the basic mensuration to the "excited" sesquialtera of $\phi$; 2) one might argue, on the other hand, that the use of the sign $C_3^2$ constitutes a refutation of $\phi$ as an exact sesquialtera, for that relationship could have been indicated by using the sign $C$ alone.

In the F section of the Gloria of the Missa sine nomine No. 1, Tinctoris alternates passages in $O$ and $\phi$; both signs always appear in all voices simultaneously. If an exact

sesquialtera were intended here, Tinctoris could have used the sign $\text{O}_2^3$ or $\frac{3}{2}$ rather than $\phi$, as he does in several other instances. This passage contains, moreover, repetitions of a rhythmic figure (see measures 118 and 119) that suggest not a sesquialtera, but a duple relationship between $O$ and $\phi$. This duple relationship can be seen in Figure 27.

The figure in the Contratenor is an exact duple augmentation of the values in the Tenor and Superius parts. Therefore, if $\phi$ were assumed to be a duple proportion to $O$, the values produced in transcription would be exactly the same both before and after the sign $\phi$. It is this relationship that Feldmann chose in his edition of the Mass. However, no matter what the interpretation of $\phi$ here, the values will still be proportionately equal.

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Tinctoris' two-part arrangement of the chanson *Comme femme*, found only in the Segovia manuscript, presents another interesting—and perplexing—situation with respect to the sign $\emptyset$. The chanson is incomplete, due to a missing folio that undoubtedly contained the remainder of the Superius and the entire Tenor part. The Tenor in the transcription in Volume II has been extracted from a two-part setting by Agricola, found on folio 201 of the Segovia Ms. In this and in versions of this piece by Binchois and Ockeghem, the Tenor is written in $\text{O}$; the Tenor of these versions can be made to fit the Superius of Tinctoris' setting, in $\emptyset$, only if the two signs are transcribed in a duple relationship. Barring the discovery of this missing folio—an extremely unlikely event—the sign that Tinctoris used for the Tenor, which might have provided us with a definite value for $\emptyset$ in this work, will remain a mystery.

In the final "Agnus Dei" of the *L'homme armé* Mass, Tinctoris provides us with additional data to be considered in any judgments about the sign $\emptyset$. At the beginning of this section, he combines the signs $\text{O}^3$ and $\text{C}_{\frac{3}{8}}$; the former, a shortened form of $\text{O}_{\frac{3}{2}}$, produces an exact sesquialtera to the values of $\text{O}$, as was discussed earlier. The sign $\text{C}_{\frac{3}{8}}$, also discussed above, produces a proportion in which three minims occur in the space of eight in $\text{C}$. The point to be made here, however, is that, once again, Tinctoris has used a numerical sign—in this case
O₃—to indicate an exact sesquialtera, and not the sign $\Phi$.

Thus, while no passages in the music of Tinctoris and no statements in the Proportionale enable us to determine that $\Phi$ produces any definite proportion—three-to-one, three-to-two, or two-to-one—there are many passages in both his music and the treatise that seem to suggest that $\Phi$ is, in fact, a faster tempo than O, and, perhaps, an approximate sesquialtera. This is supported by the facts that he never combines $\Phi$ with any other sign, and that whenever he desires an exact proportion, he uses signs other than $\Phi$. Since Tinctoris was, above all, a theorist, it is logical that he should be concerned with the proper indication of proportion; his frequent admonitions to those who indicated them incorrectly are many and well known. Perhaps as further evidence is gathered from the music of Tinctoris' contemporaries, more light will be shed on this problem, long a subject of controversy and an obstacle to the faithful performance of much late fifteenth-century music.

In Book III of the Proportionale, Tinctoris discusses the proper use of proportions of inequality, and how, when, and where they must be indicated. Although some of his injunctions have already been mentioned, it would be well to review them here, for it is particularly in the way proportions should be indicated that Tinctoris the theorist is at variance with Tinctoris the composer (or, perhaps more accurately, the scribes
The rule that suffers the most abuse in Tinctoris' compositions is that which states that two figures, not just one, ought to be used to show proportion, for . . . nothing is stranger . . . to arithmeticians, from whom we take our proportions than to show a proportion by a sign belonging to a number by itself, that is, without any relationship of one number to another, that is, where one is compared relatively to the other.  

In numerous instances in his works, however, a single number is used to show duple (2), triple (3), sesquialtera (3), and subsesquialtera (2) proportions. Tinctoris recognizes that such improper indications of proportion are common in his time, replying that "the leaders of the blind and the blind, who have wandered far from the clarity of the truth about the science of proportion, must be reguided." In view of his earlier citation of a familiar proverb--"that which is done quickly is done better"--one wonders why he did not accept this common practice, much as he did the "tolerable" use of ø as an indication of duple proportion.

Another injunction rarely observed in the music of Tinctoris' contemporaries and never in his own, is the rule that defines the proper signification of modus; Tinctoris says that

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51 Ibid., pp. 40-41.
modus should be indicated by the insertion of pauses occupying either two or three spaces.\textsuperscript{52} As we have seen, the sign $\text{\O}\text{\textsuperscript{3}}$ was used to produce perfect modus with imperfect tempus,\textsuperscript{53} and in no instance was modus indicated in the manner that Tinctoris prescribes in the treatise.

Although Hamm believes that the scribes were generally faithful to the composer's wishes concerning the use of mensural and proportional signs,\textsuperscript{54} it is evident that such was not always the case in Tinctoris' music, unless, of course, Tinctoris openly violated his own precepts. Perhaps the reason such a statement could be made regarding Dufay's music lies in the possibility that Dufay used, at each "stage" of his development, the most commonly accepted methods of indicating mensuration and proportion. Tinctoris, on the other hand, might logically be expected to hold firmly to what he as a theorist felt was the "proper" method of indicating mensuration and, especially, proportion. In his treatise, he does denounce many of the common practices, making uncomplimentary remarks about composers who follow these rather than the proper methods. The scribes, however, who were likely

\textsuperscript{52}See above, pp. 27 and 28.

\textsuperscript{53}See above, pp. 26f and 30.

\textsuperscript{54}Hamm, \textit{op. cit.}, p. ix.
to be totally unconcerned about either Tinctoris' opinions or any inconsistencies between theory and practice, would be inclined to use signs familiar to them and to singers in their locality. Some support is lent to this view by the use of the sign $\circ^3$ with more than one meaning, as well as by the fact that the motet *Virgo Dei throno digna* appears in the manuscript sources with either the signature $\frac{C}{4}$ or $C^2$. 55 It does not seem plausible that Tinctoris would himself openly violate precepts that he so strongly sets forth in his treatises. It must also be noted, in defense of Tinctoris' tenacity, that most of the ambiguous situations in his music connected with proportions were the result of violations of one or another of the rules presented in the *Proportionale*.

**Syncopation**

Syncopation (sincopa) is defined in Tinctoris' dictionary as "a division of some note into two parts by an interposed larger note." 56 This definition is very nearly that given by

55 See above, p. 25.

Phillippe de Vitry and Jean de Muris a century and a half earlier; these two theorists, however, considered the device only in relation to perfect, or triple values, while Tinctoris seems to relate syncopation only to imperfect, or duple values. Syncopation in the fifteenth century was much closer to the present-day concept—the stressing of a normally weak or unaccented part of a measure or beat—than to the medieval concept, which involved the displacement of one or more units of a perfection.

With very few exceptions, syncopation in Tinctoris' music is limited to the simpler forms commonly found in most music of the period, wherein an imperfect unit is divided by the interposition of one or two notes, as shown in Figure 28.

\[
\begin{align*}
\text{Fig. 28.--Simple syncopation}
\end{align*}
\]

Rhythmic figures produced by syncopation of this type, at whatever mensural level, are so prevalent in the music of the period that they may be considered a stylistic characteristic.

\[57\text{See Apel, The Notation of Polyphonic Music, p. 395.}\]
of almost every composer active during the time. More complex situations, in which triple units are displaced in a fashion very much like the medieval practice, are much less common in the fifteenth century; two examples can be found in Tinctoris' music, however. The two-part chanson Tout a par moy contains a passage in which perfections of blackened semibreves, minims, and semiminims separate the first three parts of a breve (of \( \frac{\text{C}}{\text{f}} \)) from the fourth. The passage is shown in Figure 29.

This passage, transcribed into modern notation, is shown in Example 3.
A similar situation, involving several displacements, is found in the chanson *De tous biens playne*. The mensural unit (the breve) is broken in measure 25 by the interposition of four groups of semibreve triplets in sesquialtera, which do not coincide with the breve units in the lower voice (see Example 4). The balance is restored at the end of measure 27, but, in measure 29 a dotted semibreve causes another shift by half a unit; this is balanced by the last note of measure 29, another dotted semibreve. The note values in this voice as they appear in the manuscript are shown in Figure 30; the dotted lines have been added to separate the mensural units.

![Fig. 30.—Complex syncopation in *De tous biens playne*](image)

The passage is transcribed as follows:
Other Notational Peculiarities

Most of the unusual notational situations found in the sources of Tinctoris' compositions have been noted above. It remains to discuss some uses of coloration that bear examination. One of the most puzzling features of the notation of this period is the use of so-called "minor color"—a black semibreve and black minim occurring in the space of a normal white semibreve. The question concerns the exact values produced by this combination, and, consequently, the relationship between the black semibreve and black minim. Apel, in his study of notation, explains that this combination "no doubt . . . originally indicated a triplet rhythm, in conformity with the general meaning
of coloration," but that "in the later fifteenth century . . .
it's meaning changed into a dotted rhythm, identical with that
expressed by a dotted M \overline{\text{minim}} \text{ followed by an } Sm \overline{\text{semiminim}}.\text{''}^{58}
In the music of Tinctoris and other composers in this period,
minor color is used interchangeably with the figure \(\text{♩ ♩} \), as
Apel suggests, often appearing one way in one source, the other
way in another. The problem, then, involves also the question
of why two different figures existed for one and the same rhythm--
\(\text{♩ ♩} --\) assuming, of course, that \(\text{♩ ♩} \) does in fact equal \(\text{♩ ♩} \).
In Chapter 6 of Book I of the Proportionale, Tinctoris says of
blackened minimae:

These . . . filled minimae may appear not alone but subject to larger notes than themselves, however, and then they imitate completely the character of their accompanying larger notes; by the filling in of this type, either they are imperfected or they are reduced or they are taken in duple proportion or they are taken in ses-\(\text{quialtera.}^{59}\)

This statement would seem to indicate that the value of a black
minim depends on the note that precedes it--that is, if it
follows a dotted white minim, it must "imitate the character"
of this note and would therefore be interpreted as a duple pro-

\(^{58}\text{Apel, Notation, p. 128. See also the entry ''minor color'' in the index of that work for further references in the text. In the accompany transcriptions, both coloration and minor color are indicated by angle brackets (」「).}\)

\(^{59}\text{Seay, ''Proportionale,'' p. 32.}\)
portion to a white minim, resulting in the following transcription: \( \frac{3}{4} \cdot \frac{1}{2} = \frac{1}{4} \cdot \frac{3}{4} \); if, however, it follows a black semibreve, it must similarly imitate the character of this note and should be interpreted in sesquialtera, transcribed as \( \frac{3}{4} \cdot \frac{3}{4} \). This explanation, of course, does nothing to solve the problem, but it does suggest that Tinctoris, as a theorist, still thought of minor color as a sesquialtera proportion. The use of minor color in his compositions, however, fails to bear out this interpretation.

The chanson *Helas* provides a good example, for, in measures 25 through 40, the rhythm \( \frac{1}{4} \cdot \frac{3}{4} \) appears many times, notated as both \( \frac{1}{4} \cdot \frac{3}{4} \) and \( \frac{1}{4} \cdot \frac{1}{4} \). This work is found in seven sources, no two of which use minor color in exactly the same places. In addition, several passages in the chanson—again, not always the same places in each source—use \( \frac{1}{4} \cdot \frac{3}{4} \) in close juxtaposition with \( \frac{1}{4} \cdot \frac{1}{4} \), or, more significantly, exactly paralleled by \( \frac{1}{4} \cdot \frac{1}{4} \) in another voice. Even in a style that tolerates some degree of polyrhythm, it hardly seems likely that the rhythms \( \frac{1}{4} \cdot \frac{3}{4} \) and \( \frac{1}{4} \cdot \frac{3}{4} \) would be placed directly against each other, and the triplet figure would seem incongruous in the context of dotted rhythms surrounding it. A survey of Tinctoris' music reveals no consistent pattern in the use of these two notational procedures. It is probable, therefore, that Apel's conclusions are correct as far as Tinctoris' compositions are concerned and that
the two procedures mean the same thing. Regardless of the theorist's statements to the contrary, the many variants in the seven sources of Helas show that the scribes used the two procedures interchangeably, and each introduced minor color to suit his own caprice.

What Apel refers to as "minor color temporis"—a single black breve followed by a black semibreve—occurs in the B section of the Sanctus of the Missa sine nomine No. 2, within the mensuration $\text{C}$, which, of course, takes the breve as its basic mensural unit. If, as Apel suggests, this figure constitutes minor color at a higher mensural level, the notes in question could be transcribed as either $\text{d} \cdot \text{f}$ or $\text{c}_3 \text{f}$. 60

Several other unusual situations in Tinctoris' compositions involve colored notes. Several cadences in the Missa L'homme arme use coloration to indicate an added note in the final chord; the final cadences in the A section of the Credo and the C section of the Sanctus consist of the following double note shape: $\text{c} \bar{\text{c}}$. The blackened note in both cases is the third of the chord. In the B section of the Agnus Dei, the black note reinforces the root of the chord, which appears also in another part. Presumably, these added notes indicate a divisi of the voice; they

60 Apel, Notation, p. 130.
appear to be in the hand of the original scribe.

The Gloria of the Missa sine nomine No. 3 contains a ligature, in measure 83, the second note of which is half colored, i.e., \( \texttt{\textsuperscript{1/2}} \); the purpose of this coloration is not immediately discernible. Transcription of the passage shows that the second note must have the value of a normal dotted semibreve. This ligature must also receive two syllables of text, rather than the single syllable usually accorded to a ligature, if the works are to be accommodated to the existing notes. Since this syllabic division should easily, and properly, have been indicated by using single semibreves instead of a ligature, it may be that we are dealing here with a corrective procedure, perhaps made by a performer.

**Tempo**

The closely related questions of tempo and tactus must be briefly mentioned here, even though Tinctoris has little to say on these subjects. Unlike Tinctoris, theorists of the early sixteenth century usually included elaborate tables in their treatises, to show the application of the tactus to note values of both basic and proportional mensurations. These theorists, however, often disagree as to whether the tactus was always the same speed or whether there existed both a slow and a fast tactus. Tinctoris implies, with his reference to "a speeding up of the
that there was more than one tactus rate. In any case, the treatises afford us no definite proof of any exact value for the tactus, and the many theories proposed by modern scholars concerning the speed of the tactus during this period are as diversified as the opinions of Renaissance theorists. The whole problem stems, of course, from the fact that in the fifteenth and sixteenth centuries there existed no mechanical means by which tempo could be measured accurately—Galileo's pendulum was more than a century distant. The most common method for measuring the tactus seems to have been a "normal" pulse rate; other theorists refer to "a common weedcutter's beat." A pulse rate may vary from sixty to eighty beats per minute even under normal conditions, and a weedcutter's beat is even less certain.

The fact that we cannot today exactly fix the value of the tactus in the late fifteenth century does not, of course, render that term invalid; it is very likely that a "subjective" tactus rate existed in much the same fashion that a "standard" march tempo exists today—a tempo which is not absolute, but variable within certain narrow limits. That such a tempo standard would have been acceptable to composers and performers during the Renaissance is given some credence by the fact that today—in

61See above, p. 49ff.
an era in which the speed of the beat can be exactly fixed—
tempo is still a very subjective and highly variable element.
One rarely sees, after all, a conductor using a metronome in a
performance, or even, for that matter, at a rehearsal. The
whole problem centering around the term tactus is treated at
some length by Hamm, who closes his discussion by saying: "it
is probably futile to attempt to discover exactly how fast it
[This tactus] was."63

Despite the lack of theoretical proof of an absolute tactus
rate, certain characteristics of the music itself do imply that
a definite tactus rate may have existed; that the minim was re-
garded by Tinctoris as equal in O, C, O, and C
suggests that these signs, even when used in different movements
or compositions, may involve something more than the organiza-
tional patterns discussed earlier—a definite set of relative
time values, for example. The use of certain signs to indicate
a proportion relative to one of the basic mensurations tends to
reinforce this supposition. For example, the use of O in
all parts—that is, without making a simultaneous or successive
relation to one of the basic signs, such as O—to indicate a
"speeding up of the measure" or "hastening of the tactus" sug-
gests some standard for measurement. The use of the sign C3 in

63 Ibid.
the L'homme armé Mass—where that proportion is made not to another mensuration being heard, but to one which is not heard, and which was not heard in the preceding passage—also suggests an absolute tempo for the basic mensuration C. It is indeed unfortunate that Tinctoris did not shed some light on this important consideration in his treatises.

In any case, it seems clear that there was a definite relationship between the different mensurations, whatever the "speed" of the normal tactus. If one also accepts the proposal that these signs indicated something more than the organization of different note values, it is possible to arrive at a set of relative values for each type of note in any mensuration or proportion. Whether or not an absolute value ever existed for the minim or any other note value, there remains a valid relationship between the different mensurations and proportions, based on the different combinations in which they appear in the music. For example, if x and y are used in one passage, and y is combined with z in another, it is therefore possible to establish a relationship between x and z by virtue of the common factor y. The relative values shown in Figure 31 were derived from a cumulative series of such common factors. In most cases, the calculations were made from relationships to one or another of the four basic mensurations; exceptions are indicated in the figure by the inclusion of the mensural basis in parentheses. The
sign $\varnothing$, which produces an indefinitely faster tempo, and the
sign $C^2_3$, calculated in relation to $\varnothing$ and therefore also
indefinite, are not included in the figure.
Fig. 31.—Possible relationships between the mensuration signs and proportions used in Tinctoris' music
CHAPTER III

MELODIC AND RHYTHMIC CHARACTERISTICS

OF

TINCTORIS' MUSIC

This chapter will be concerned with a stylistic analysis of the music of Johannes Tinctoris, treating, particularly, its modal, melodic, and rhythmic characteristics. The analyses, with some exceptions, will be based primarily on the vocal works of Tinctoris; the two-part instrumental chansons, quite different in style, will be given separate treatment whenever necessary. As in the previous chapter, references will be made to Tinctoris' treatises when his discussions are pertinent to the question.

Modal Characteristics

One of the problems encountered in many studies of fifteenth-century music centers on the question of its modal characteristics. Most such studies eventually lead to the conclusion that some gap existed between modal theory and the compositional practice of the time, and that to explain the one in terms of the other is to apply a melodic theory to a musical style that had long
since outgrown the modal system in its pure form. Perhaps the greater part of the problem, however, is caused by our attempts to force a twentieth-century harmonic modal theory—a concept totally foreign to the fifteenth century—on early Renaissance polyphony. The theorists themselves—Tinctoris, Gaffurius, and Aron among them—are guilty of inadequately explaining the modal characteristics of the music of their time, a result of their attempts to reconcile compositional practice with theory despite the incompatibilities between the two. Whether the theorists recognized the inadequacies of their discussions will never be known; if they saw the gap between theory and practice they chose not to mention it in their treatises.

The problem begins with the very definition of mode or tone; Tinctoris and most other theorists define a tone as a melodic entity, "the manner by which the beginning, middle and end of any melody is governed."\(^1\) As we will see, certain problems arise when one attempts to apply this definition to a polyphonic complex, a situation that the theorists recognized,

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for they state that the mode of each voice of a polyphonic composition should be considered separately. In the early chapters of his *Liber de natura et proprietate tonorum*, Tinctoris discusses the different species of *diatessaron* (fourth) and *diapente* (fifth), and shows how each of the modes is created from combinations of these. The three types of fourth and four types of fifth, each of which is characterized by a specific combination of intervals, are shown in Figure 32. Tinctoris distinguishes "regular" modes, ending on the normal finals D, E, F, and G, from "irregular" modes, which are transpositions to other pitch levels. This terminology will be used to make the same distinction here.

Fig. 32.—Diatessarons and Diapentes used to construct modes

Of particular interest is Tinctoris' discussion of the Lydian, or *tritus* pair, the fifth and sixth modes. These modes,

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2 *Liber de natura* . . . , Chapter 2.

3 Ibid., Chapters 3-12.
normally constructed from the third species of diapente and diatessaron (those having the semitone between the last two notes), can also be constructed "as seldom as possible," however, using instead the fourth species of diapente in place of the third.\(^4\) In short, Tinctoris allows, as do most earlier theorists, a variation of the Lydian mode that is identical to the Ionian mode; the latter, of course, was not officially recognized by theorists until the *Dodecachordon* (1547) of Glareanus.

Six of Tinctoris' works are written in the Lydian mode, both regular on F and irregular on C, and all but one used the altered Lydian described above.

The mode of each of Tinctoris' compositions has been determined, as he specified, according to the mode of the Tenor part:

> Hence, whenever any mass or cantilena or any other kind of composition will have been put together from different parts of different tones, if anyone when asked may wish to seek absolutely of what tone such a composition may be, he should absolutely reply according to the quality of the tenor, for the reason that it is the principal part of every composition as the foundation of the whole relationship.\(^5\)

While this quotation may seem to be an unequivocal declaration, 


it is not without its ambiguities, specifically in those situa-
tions when the Tenor is not the main structural foundation.

The chanson *Le souvenir* (à 4), because of the imitation of
the structural voice (in this case the Altus) at the fifth in
the superius, consists of a combination of regular and irregular
modes on F and C respectively. The Altus, which is a melody
borrowed from Morton's chanson of the same name, begins in F
Lydian and presents all of Morton's melody in that mode through
measure 18. At this point, the Superius, which imitates the
Altus throughout at the fifth above, restates the final phrase
in C Lydian, accompanied by a similar shift in the three lower
voices. The work ends on a C triad, including the third, and
the ambivalence between F and C is retained even to the plagal
extension at the cadence. Although the composition ends in C
Lydian, the greater part of the work, as well as the original
melody on which it is based, lies in the F Lydian mode. Thus,
in spite of Tinctoris' statement that "a thing is named from
its end," the work has been classified as regular (F) Lydian.
It should be noted that composers of the period were not averse
to a conflict between the mode of a composition and the mode of
a borrowed melody used in that work. Ockeghem's *Missa Caput*,

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6 *Liber de natura* . . . , p. 17 ("A fine denominator res").
which introduces a Mixolydian cantus firmus into a Dorian composition, is adequate illustration of this. 7

The two-voice instrumental chanson Tout a par moy presents a slightly different problem; it appears in the Segovia Manuscript without a signature in either part and seems to be Mixolydian on G. Other versions of the piece, however, including the original three-voice chanson from which Tinctoris borrowed the Tenor, 8 have a B-flat in the Tenor. This change has been incorporated in the transcription in Volume II by means of editorial accidentals and results in a Dorian mode on G.

The instrumental arrangement of Comme femme lacks the Tenor in the Segovia Manuscript, but the part has been supplied from a two-voice arrangement by Agricola that appears on folio 201 of the same Manuscript. The Tenor, ending on C, is clearly in the irregular Lydian mode, and the work as a whole is therefore Lydian on C.


8The original is attributed to Frye in the Mellon and Laborde Chansonniers, and to Binchois in the Chansonnier Nivelle de la Chaussee; see Dragan Plamenac, "A Reconstruction of the French Chansonnier in the Biblioteca Colombina, Seville," in The Musical Quarterly, XXXVIII (1952), 106-107 (this is the second of a series of three articles).
Mixtio tonorum and Modal Perfection

One of the major differences between fifteenth-century and present-day theories involves the extension of modal patterns beyond an octave. To theorists of the Middle Ages and Renaissance mode was a matter not only of differences in degree relationships, but also of range; each mode was limited to one octave plus one or sometimes two additional notes at either the upper or lower end. If this concept of the modes was inappropriate and insufficient as a means of classifying and explaining chants (which often exceeded an octave in compass), it falls far short of being adequate to explain Renaissance polyphony. The extension of the range of a voice beyond the limits of the pure mode was seen, not as a mere extension of that mode, but as a combination of modal pairs (mixtio tonorum) or as a mode "more-than-perfect" in some aspect of its range; the latter concept was introduced by Marchettus a century and a half before Tinctoris' period.

Mixtio tonorum is explained by Tinctoris, as well as by Gaffurius a little later, as a combination of an authentic mode with its plagal (below) or a plagal with its authentic (above). Mixtio tonorum can account for such ranges as c' to f" with f'

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9 Franchinus Gaffurius, Practica musicae (1496), translated and edited by Clement Miller, "Musicological Studies and Documents," No. 20 (American Institute of Musicology, 1968), Book I, Chapter 8 (pp. 50f).
as the final, which would be a combination of the fifth and sixth modes, or Lydian with Hypolydian. A voice having the range c' to f" with either c' or c" as its final cannot be accounted for within the concept of mixtio tonorum, however; this range exceeds the boundaries of both the Lydian transposed (c' to c") and the Hypolydian transposed (g to g') and does not involve a pairing of an authentic with its plagal. Such a voice part, then, must be explained in terms of its modal "perfection." According to Tinctoris, an authentic mode is perfect if it extends from its final to its octave plus one or two additional notes below the final. A plagal mode is perfect when it extends only a fourth below its final and only a fifth above plus one or two additional notes. Anything more or less is seen as, respectively, a more-than-perfect mode or a less-than-perfect mode. A part that extends from c' to f" and has c' as its final

10Throughout this dissertation specific pitches will be referred to according to the octave classification following: CC, C, c, c', c", in which c' equals middle c; the notes in that octave are c' to b', and c" refers to the octave above middle c.

11Liber de natura . . . , Chapter XXI; Tinctoris differs from other theorists in several respects here. Most theorists speak of only one "allowable" note below the final in a perfect mode or above the range of a plagal mode; Tinctoris specifically allows two notes. Most theorists also restrict a more-than-perfect mode to an extension of one or two notes beyond the range of a perfect mode; Tinctoris sets no limits to the extension of more-than-perfect modes.
is then an authentic mode, more-than-perfect in ascent and, presumably, perfect in descent. If one were to follow Tinctoris' system, a voice with the same range but with c' as its final instead would have to be described as a plagal mode more-than-perfect in descent and less-than-perfect in ascent. The determining factor in this system would be only the position of the final in relation to the total range of the part. The result of this system of classification (as well as its inadequacy) can be demonstrated by applying it to the opening "Kyrie" of the Missa sine nomine No. 1, which contains voices with the following ranges, finals, and resultant modal characteristics.

<table>
<thead>
<tr>
<th>Voice</th>
<th>Mode</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Superius</td>
<td>Mode II, irregular, imperfect in ascent, more-than-perfect in descent</td>
<td></td>
</tr>
<tr>
<td>Tenor</td>
<td>Mode II, irregular, perfect in ascent, perfect in descent</td>
<td></td>
</tr>
<tr>
<td>Contra</td>
<td>Mode I, irregular, more-than-perfect in ascent, perfect in descent</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 33.--Mode classification in the opening "Kyrie" of the Missa sine nomine No. 1

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12 Tinctoris does not state whether a mode, to be perfect, must include the "allowable notes above or below; presumably, a mode may still be considered perfect if its range encompasses only the normal octave.

13 In the figures in this Chapter, as well as in those of Appendix B, the range extremes are indicated by black notes, the final by a whole note and the cadence notes (if different from the final) by a black note in parentheses.
The tone of this Mass, according to Tinctoris' rule for determining the mode of a polyphonic composition by the mode of the Tenor, as well as according to the inscription in the Manuscript—"Secundi toni irregularis cum contratenore extra manum in diapenthe sub ut"—is mode II, irregular on C. The system described above is acceptable as a means of explaining the modal characteristics of the Tenor and Contratenor; it is obviously not an acceptable explanation of the Superius part. Clearly, this section of the Mass is an example of the inadequacy of modal theory when applied to the individual voices of a polyphonic composition. It seems probable that even Tinctoris would not have carried the system to such an extreme but, instead, would have admitted that a voice can end on the octave of the final, as the Superius clearly does. In many instances—especially when a fourth voice has been added—one or more parts will cadence on notes other than the final of the mode. The Tenor of the first "Kyrie" of the Missa L'homme armé, for example, cadences on the dominant (see Figure 34).
Superius Mode I, irregular, more-than-perfect in ascent, perfect in descent

Altus (c.f.) Mode I, irregular, more-than-perfect in ascent, perfect in descent

Tenor Mode II, irregular, perfect in ascent, more-than-perfect in descent (cadence on fifth above final)

Contra Mode I, irregular, more-than-perfect in ascent, perfect in descent

Fig. 34.—Mode classification in the opening "Kyrie" of the Missa L'homme armé

This case is doubly difficult because it is the Altus, not the Tenor, that carries the cantus firmus and is therefore, presumably, the "main" structural voice. The Tenor, with its final cadence on d', cannot be considered the voice that determines the mode. The situation is due in part to the harmonic considerations of a four-part cadence formula; the final note of the Tenor can only be d', for to end on the final—g—would involve either parallel or consecutive perfect consonances or highly irregular voice leading. The fifth degree is the only remaining choice under the rule permitting only perfect consonances at final cadences. This cadence on d' in the Tenor must be considered merely a harmonization of the final and therefore does not determine the modal characteristics of either that voice or the piece as a whole. This situation, common not only in Tinctoris' works but in much Renaissance polyphony, leads to several important
theoretical questions that Tinctoris ignores in his treatises.

The first concerns the order in which the voices of a composition are composed. In the above-described situation, it seems obvious that the Altus (the l'homme armé tune) was composed first, and not the Tenor. Yet Tinctoris mentions no exceptions to his rule (in the Liber de natura . . .) that the Tenor determines the mode of the piece. Whether he meant the Tenor (as the main structural voice), rather than the Tenor (as merely one of the voices) can be only conjectural, although this seems more logical. The question of successive or simultaneous composition of individual voices becomes significant in the Missa L'homme armé, especially in those sections where the cantus firmus migrates from one part to another; clearly, successive composition in such instances is highly unlikely. The subject will be discussed further in Chapter VI.

Another question that Tinctoris does not answer concerns the concept of confinalis. In earlier medieval theory, this term seems to have referred to the transposition of modes to different finals. Tinctoris uses instead, the term "irregular" to designate such transpositions, and there is some speculation as to the meaning of confinalis during this period. The problem centers on whether the term still meant modal transposition or whether it referred to the possibility that a voice might cadence on a note other than the final of the mode. That this happens
has already been shown; unfortunately, neither Tinctoris nor any
other contemporary theorists offer an explanation for a voice
that cadences on a note other than the final of the mode. Whate-
ever the meaning of confinalis at this time, cadences seem to
have been allowed on notes other than the final--not only the
fifth and the octave, but also, as we have seen, on the third
above the final. The modal characteristics of the individual
voice parts in each movement or composition by Tinctoris can be
determined from the information presented in Appendix B, which
shows the range, final, and cadence note(s) of each part.

Commixtio tonorum

Tonus commixtus, or commixtio tonorum, is explained by
Tinctoris in Chapters 13 through 18 of the Liber de natura . . . ;
it consists of a mode that is "mixed" with a type of fourth or
fifth not normally associated with that mode. The principle has
been misunderstood by some present-day authors, and statements
that define tonus commixtus as a "combination of an authentic
with a different plagal" are misleading because they do not

14See Chapter V, dealing with cadences in Tinctoris' works.

15Marchettus uses the former term, Tinctoris the latter.

16Willi Apel, "Commixtio tonorum," in the Harvard Dictionary
of Music (2nd ed.; Cambridge, Mass.: The Belknap Press of Har-
include all the possibilities inherent in the concept of *commixtio tonorum*. Tinctoris gives the following as examples of the first tone mixed with the seventh (Example 5) and of the second tone mixed with the eighth (Example 6).  

**Example 5**

**Example 6**

Example 5 does not contain any notes not found in the normal Dorian mode; nor does it exceed the range of that mode. What, then, constitutes *commixtio tonorum* in the example? It is those notes that outline and emphasize the diapente of the fourth species—the notes g–d, which are normally found in the seventh mode, not the second. Likewise, in Example 6, no notes are found outside of the second mode, except for the allowable extension of one or two upper notes. Again, the *commixtio tonorum* consists of a shift of emphasis, here to the notes g–c'—the final and dominant of the eighth mode. Because the principle of *commixtio*

tonorum involves shifts of structural fourths and fifths, it implies a temporary shift in the modal center, much like a temporary modulation in tonal music.

The effect of commixtio tonorum in a polyphonic complex is even more complex; that it does occur is clearly demonstrated by both Tinctoris' compositions and his treatise. In Chapter XXIV of the Liber de natura . . . , Tinctoris says:

Denique notandum est quod commixtio et mixtio tonorum non solum fiunt in simplici cantu, verum etiam in composito, tali que modo ut si cantus sit cum duabus, tribus, quatuor aut pluribus partibus compositus, una pars erit unius toni altera alterius; una autentici, altera plagalis; una mixti altera commixti.18

If the same principles apply to the use of commixtio tonorum in polyphonic composition as in monophonic music, the Altus in Example 7, from Tinctoris' Missa sine nomine No. 3, combines the first mode with the fifth. Those notes under the brace (---) outline the third species of diapente (f-g-a-b-c) and cadence on the final of the fifth mode. Measures 2-4 of the Superius also outline the diatessaron of the fifth mode (c-d-e-f). Because the other voices are clearly in modes I and II, the effect of commixtio tonorum in the Altus is almost totally obscured, and will be heard, at least by modern ears, in the context of the

18 Tinctoris, Liber de natura . . . , Chapter XXIV; see Seay's translation, p. 24.
mode of the entire polyphonic complex, i.e., Dorian, just as the combination of modes I and II will be heard not as two different modes, but within the more general classification of the genus protus. The fact that commixtio tonorum in an individual voice may not be perceptible within the polyphonic whole does not negate the validity of that concept, however; it is, after all, only a means of explaining what is occurring in a single part.

Example 7
In some instances in Tinctoris' works, commixtio tonorum is clearly perceivable by the listener, because the shift involves all of the voices, producing an obvious change of mode. In measures 84-92 of the "Et resurrexit" of the L'homme armé Mass, the cantus firmus, which normally centers on G (irregular Dorian), is transposed to D (see the transcription in Volume II); this modal center is further implied by the ranges of the other voices in these measures (see Figure 35). In measure 96, the paraphrase of the tune in the Superius outlines the first diatessaron (g-a-b^\text{#}-c) and centers on C, as do the other active voices; the combination here of the fourth type of diapente (c-d-e-f-g) with the first type of diatessaron above it results in a transposed seventh mode on C. In measure 99, the cantus firmus (in the Altus) returns to its normal center on G Dorian, the mode of the Mass. The modal scheme, then, for the "Et resurrexit" is as follows: \footnote{See also the discussion of the section of the Mass in Chapter VI.}

\begin{table}
\begin{tabular}{|c|c|c|c|}
\hline
Superius & Altus & Tenor & Contra \\
\hline
\multicolumn{4}{|c|}{Mn. 84-92} \\
\hline
\multicolumn{4}{|c|}{Mn. 96-98} \\
\hline
\multicolumn{4}{|c|}{Mn. 99-end} \\
\hline
\end{tabular}
\end{table}

Fig. 35.—Modal centers in the "Et resurrexit" of the Missa sine nomine No. 3
The Missa sine nomine No. 1 also contains interesting examples of commixtio tonorum. The opening section of the Credo, for instance, begins in the C Dorian mode (with two flats in the signature); this is the basic mode of the Mass. Beginning with the imitative passage of measures 7 and 8, a change to Lydian on E-flat takes place, cadencing first on B-flat in measure 11, and then on E-flat two measures later. Not only do the cadences occur on the final and dominant of the mode, but the melodic contours of the individual voices in this brief passage clearly outline the diapente and diatessaron of the Lydian mode on E-flat. The original mode is reached again at measure 15, followed almost immediately by another shift, this time to a mode centered on F. Exactly which mode is reached at this point depends to some extent on the application of musica ficta. In view of the A-flat in the Contratenor, it seems likely that the A's in the Superius and later in the Contra should be flatted as well. This would produce a combination of the first diapente (f-g-a_b-b-c) and the first diatessaron (c-d-e_b-f) and would transpose the first or second modes to end on F. The whole question of the effect of ficta upon the mode of a piece is, unfortunately, a topic that Tinctoris chose not to discuss. However, in Chapter XXV, he says: "Prima quidem est quod commixtio interdum fit per necessitatem . . ." — commixtio tonorum is sometimes made of

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Tinctoris, Liber de natura, Chapter XXV.
necessity. This may refer to the problems caused by the application of \textit{musica ficta}.\textsuperscript{21}

The principle of \textit{commixtio tonorum}, legitimately applicable to the individual voices of a polyphonic work, is of significance to the "over-all mode" only when a sufficient number of voices are involved to create, in effect, either a modal transposition or a change of mode. The occurrence of \textit{commixtio tonorum} in a single voice, like the difference between an authentic mode and its plagal, will be obscured by the modal and harmonic implications of the combination of all voices. It must be remembered that the theoretical explanation of events need not reflect the audibility of these events. The real problem in the application of modal theory to a polyphonic composition lies in the origin of the theory as strictly melodic concept. It may be, too, that the whole question of modality in a polyphonic composition was not of vital concern to theorists or composers, but was rather a matter in which the performer, through the use of \textit{musica ficta}, could exercise his personal preference.\textsuperscript{22} Certainly the sparseness and brevity of Tinctoris' statements about modality in polyphonic works indicate either that this was the case or that he was at a loss to account for certain situations.


\textsuperscript{22}\textit{Ibid.}, p. 274.
Melodic Characteristics

In his book *The Style of Palestrina and the Dissonance*, Knud Jeppesen states that "the curves of elevation or undulation in the melody, which characterize all musical art, show a striking variety in different epochs, and reveal much of the psychologically fundamental contents of the style." It is axiomatic, then, that much of the essence of fifteenth-century polyphony rests in the nature and characteristics of the individual melodic lines. Because the purely melodic characteristics of a melody are almost inseparably bound together with its rhythmic characteristics, it is difficult to treat them individually without doing some injustice to the music. Nevertheless, certain melodic elements of the contrapuntal lines can be isolated. Because of the nature of the two-part instrumental works, it is again necessary to consider them separately from the vocal works.

Range

It is difficult to make any generalizations about range in Tinctoris' works without first considering the function of the

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individual parts. A voice that carries a cantus firmus, for example, is governed by the characteristics of the borrowed melody. The Gregorian Tenor of the Alleluia has a range of only a seventh. In the L'homme armé Mass, the tune likewise stamps its character on those voices in which it appears. Since these borrowed melodies are not Tinctoris' own, they cannot reflect his own style and therefore will not be considered in this study.

Most of the melodies that are purely the product of Tinctoris are rather wide in range, generally covering a total compass of from a tenth to a twelfth, although the range of any part depends to a degree upon its relationship to the other parts and their range. The ranges of each voice part in Tinctoris' works are given in Appendix B. The Missa sine nomine No. 1 is written for three voices; the lower two are labelled Tenor and Contratenor in the manuscript, and the top part is not labelled. The total range, from the lowest note of the Contratenor to the highest of the upper part—the Superius—is two octaves and a sixth, from BB-flat to g'. All these voices of the Mass lie in an unusually low register; the Contratenor extends from BB-flat to f, the Tenor from F to b-flat, and the Superius from c to g'. These are shown in Figure 36. The Contratenor in this Mass descends to depths found in few compositions of the period, although some of Ockeghem's works are notable in this respect.
Given the esteem in which Tinctoris held Ockeghem as a composer, it is not impossible that this Mass was written in imitation of the latter's style. The Superius and Tenor parts are also lower in range than is customary in Tinctoris' works. The outer voices span a compass of a twelfth, the Tenor an eleventh; but, as can be seen in Appendix B, these extremes are not found in every movement. More typically, the outer voices will cover an eleventh, while the Tenor is usually restricted to a tenth.

Fig. 36.—Voice ranges in the Missa sine nomine No. 1

The Missa sine nomine No. 2, also written for three voices, lies at the opposite extreme as regards range. Only the Superius is written in a more or less normal range. The other two voices are unusually high, especially the so-called "Tenor," which lies in the same range as the Superius; the tessitura of the Tenor, however, is generally lower than that of the Superius.

Fig. 37.—Voice ranges in the Missa sine nomine No. 2
Both the Superius and Contratenor parts lie about an octave above their counterparts in the Missa sine nomine No. 1; clearly, there is little relationship between the position or function of a voice and the range in which it lies. Nor does there seem to be any relationship to what are considered "normal" voice ranges (see Figure 38).

Whether Tinctoris was imitating other composers, exploring different ranges for pedagogical or aesthetic reasons, or merely writing for the voices at his disposal is not known.

Curiously, the Missa sine nomine No. 3 for four voices has a smaller total range than either of the three-voice Masses, encompassing only two octaves and a semitone. The b-flat' at the upper extreme appears both as an accidental in the manuscript and as ficta.

Each of the outer voices covers an eleventh, while the downward
extensions of Altus and Tenor causes them to span a twelfth and a thirteenth respectively; this is unusual, for the outer voices more often are wider in range than the inner. Only the Tenor part, however, exceeds a tenth in any one movement (see Appendix B). This Mass is unusual also in that the two lower parts occupy very nearly the same range; the tessiture of these two parts are different, however.

In the Missa L'homme arme it is the upper two parts that occupy nearly the same range, while the Tenor and the Contratenor Bassus ranges differ by only a third; however, the Superius and Altus differ in tessitura. The inner voices are somewhat narrower in range than the outer; the former encompass a ninth or tenth, the latter usually an eleventh or twelfth in any section. The inner parts are still narrower in range when they sound the cantus firmus, which encompasses only an octave. The total range of the voices in this Mass is two octaves and a sixth, as shown below:

\[
\begin{array}{cccc}
\text{Superius} & \text{Altus} & \text{Tenor} & \text{Contratenor Bassus} \\
\end{array}
\]

![A section is a division of a Mass movement; they are labelled with upper case letters, A, B, C, etc. in Volume II.](image)
In the *Lamentationes Jeremiae* the Altus and Tenor are similar in range; in section C-1, however, the Tenor covers only a fifth, an unusually narrow range for any part in the works of Tinctoris. The range of all voices consists of two octaves and a fourth.

<table>
<thead>
<tr>
<th>Superius</th>
<th>Altus</th>
<th>Tenor</th>
<th>Contratenor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Fig. 41.—Voice ranges in the *Lamentationes Jeremiae*

The voices of the two three-part motets, *Virgo Dei throno digna* and *O virgo miserere mei* are similar in range, as can be seen below:

<table>
<thead>
<tr>
<th>Superius</th>
<th>Tenor</th>
<th>Contratenor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Virgo Dei...

O virgo...

Fig. 42.—Voice ranges in the three-part motets

The two two-part motets, on the other hand, are very different from each other as regards range; both parts of the *Fecit potentiam* lie between a and d", while the two parts of the *Alleluya* extend from g to d" and from d to c' respectively.
The three-part Italian piece, *O invida fortuna*, spans a total range of two octaves; the Tenor and Contratenor cover the same range, a tenth from C to C' and the Superius spans the octave from C' to C'' (see Figure 44). The remaining vocal works are also individual with respect to their ranges. The three voices of *Helas* span two octaves and a fifth; each part covers a tenth. The Superius and Tenor of *Vostre regart* span adjacent octaves; the Contratenor duplicates the Tenor range plus a fifth below. Each of the four parts of *Le souvenir* spans either a tenth or an eleventh; note that the Contra and the Tenor lie in nearly the same range.

25 Helen Hewitt feels that this work may have been intended for instruments; see Helen Hewitt (ed.), *Harmonice Musices Odhecaton A* (Cambridge: Medieval Academy of America, 1942).

26 The two whole notes beneath the braces in the Altus, Tenor and Contratenor denote the two modal centers in these voices.
The mode in which a composition is written affects the range to some degree. Obviously, the voices of a work in the Dorian mode on D will lie above those of a work in Dorian transposed down a fifth to G. The size of individual voice ranges, however, seems not to be a function of mode in any way; instead, this is more likely to be affected by other factors, such as the presence of a cantus firmus. The general tendency seems to be that the outer voices in the four-part works have a greater compass than the inner parts; this is less likely to obtain in three-part compositions, wherein the voices tend to be nearly equal in compass.

Voice crossing

Crossing of voices—a characteristic of most of Tinctoris' works—naturally varies in degree according to the disposition of
the voice parts. In those works where adjacent voices occupy nearly the same range extremes or overlap to a significant degree, considerable voice crossing is inevitable. In some works—the Missa sine nomine No. 1 and Missa sine nomine No. 2, for example—voice crossing is frequent not only between the upper and middle, but also between the middle and lower parts. Because of this and the melodic and rhythmic similarities in the style of the individual voices, these two works have a compact, closely-knit texture. This also is true of the Missa sine nomine No. 3, due, in part, to the fact that its total compass is less than that of some three-part works. The close disposition of the several parts tends to decrease the effect of imitation, be it mainly motivic or more extended, as in the Missa sine nomine No. 2.

In three-part polyphony, the Tenor and Contratenor often alternate in functioning as the lowest part; the two parts are also similar in style. In four parts, however, there appears to be a much clearer separation between the function of the Tenor and Contratenor Bassus parts; the latter often performs a harmonic as well as a melodic function, while the former is more strictly melodic in character. This separation of style and function is, no doubt, closely related to the decreased frequency of voice crossing between the two lowest parts. Voice crossing in four-part works more typically occurs between the upper three parts, and most especially the Tenor and Altus, although this
depends on the ranges of these parts. In the Missa sine nomine No. 3, for example, the Altus and Tenor are in approximately the same range; therefore, these two voices cross more often than any other pair. In the L'homme armé Mass it is the two upper parts that lie in nearly the same range and that cross more frequently. In matters of range and voice crossing, the music of Tinctoris seems to occupy a transitional stage between the older fifteenth-century practice and the standardization of SATB distribution of voices that took place in the early sixteenth century.

**Intervallic Structure**

Most studies of a contrapuntal style, whether that of Palestrina or Bach, begin with an examination of the intervallic characteristics of the individual melodic lines. Such information, even if it represents a separation of this element from the total melodic style, is valuable, for it shows clearly the structural characteristics of the individual voices, as well as the differences between them. The Tables in Appendix C show both the number of each type of interval in each voice part and the percentages that these figures represent. While it would, of course, be ideal to include statistics based on a count of all the intervals in Tinctoris' music, sufficiently accurate data can be gathered by an examination of representative portions of selected works. The introductory comments to Appendix C give further
details concerning the portions of each composition examined.

As one might expect of a melodic vocal style, the smaller intervals are the most common in all parts; and with the exception of octaves, increasingly larger intervals become increasingly less frequent. Seconds and thirds appear in great abundance, both ascending and descending. A typical Tinctoris melody consists mainly of stepwise progressions and thirds with an occasional fourth or fifth.

Although the general tendency is to follow leaps of fourths and fifths with either stepwise movement or a leap in the opposite direction, it is not unusual to find the melodic movement continuing in the same direction as the leap. This movement is characteristically stepwise, but two successive leaps in the same direction are not uncommon, especially in the Bassus. They most frequently outline a triad in some form, or fill an octave with the intervening fourth or fifth (Example 9).
Less frequently, successive skips in the same direction will encompass a seventh, appearing as two fourths, as a combination of a fifth and a third, or even as successive thirds, which may cover a ninth. These occur both ascending and descending.

Skips of a sixth are rare, both ascending and, particularly, descending. Most consist of ascending minor sixths; only one major sixth occurred in the music examined (see measure 49 of the Contratenor in IIIA of the Missa L'homme arme).

The skip of a seventh is extremely rare as a live interval—an interval with no intervening rest; the single example in the music examined is found in measure 21 of the Bassus in
Le souvenir (à 4). Skips of an octave are relatively common; they are more typically encountered in the lower parts (especially the Bassus), although in some works they appear about equally in all parts (see the Missa sine nomine No. 3, the Superius of which contains an unusual number of octave leaps). Skips greater than an octave are not characteristic of Tinctoris' style. Ninths occur only as dead intervals, between phrases, and a few tenths can be found, although none was encountered in the music tabulated in Appendix C.

Repeated notes, which were not tabulated in this study, occur with some frequency in Tinctoris' music. Occasionally they are found as anticipations, especially near cadences using the under-third formula (see Chapter IV). More often, repeated notes occur in pairs or in groups of three to five notes that create declamatory motives emphasizing particular textual phrases, as can be seen in the following excerpts from the Missa sine nomine No. 1.
That the L'homme armé Mass also uses repeated notes to a significant degree probably reflects the influence of the cantus firmus, which itself contains so many of them.

The Tables in Appendix C reveal another interesting characteristic of not only Tinctoris' melodic style, but also of most fifteenth-century music, namely, that the lower the voice part, the more frequent are the larger intervals. This situation may be interpreted, with some reserve, as an indication of a growing concern for the vertical aspects of counterpoint and the progression of successive vertical combinations. It should be noted
that the lowest part can sound only the root or third of a triadic structure, due to the rules of consonance, while the upper voices may sound any of the three notes of a triad. The lowest part, therefore, is more likely to move in larger intervals—fourths and fifths—than are the upper parts. The Bassus, in addition to performing a purely melodic function, taking part in imitation or paralleling one of the other parts, often drops that function and becomes a supporting part for the upper voices; this change, which is especially common before cadence points, leads to progression by roots and normally results in a greater frequency of large intervals. There is, then, an increase in the angularity of the melodic line as one moves from the upper to the lowest part; this tendency can be seen in Appendix D, in which the melodic contours of each voice part are graphically represented. Tinctoris' melodies only rarely approach the smooth curvilinear qualities that are so characteristic of the styles of Josquin and Palestrina. They tend, instead, to wander a great deal, moving between extremes of range in an almost aimless flow. Each individual voice seems spontaneous, with frequent—sometimes sudden—digressions.

The excerpt shown in Example 12 is typical in these respects.

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27 This does not obtain in those chansons written in a non-quartal or nearly non-quartal style (see infra, pp. 177 ff.).
The non-directional nature of the individual melodic lines is heightened by a scarcity of well-defined motives, as well as by a sparse use of imitation and sequential repetition. The few instances in which Tinctoris does make fairly extensive use of sequential writing merely serve to illustrate and accentuate the effect of their absence elsewhere. His treatment of sequential patterns is often characterized by interesting rhythmic conflicts between these patterns and the prevailing metric structure (see Example 13).

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28 These characteristics may be the intentional results of Tinctoris' desire to avoid *redictae* (see *infra*, pp. 134 ff.).
Except for these few instances and the use of characteristic melodic figures such as the nota cambiata, Tinctoris' melodies lack the devices that might give them a directional force—they seem to be ever changing, always new.

Rhythmic Characteristics

The rhythmic character of a particular voice part is somewhat related to its melodic structure, in that those voice parts that move in larger intervals, such as fourths and fifths, tend also to move in larger note values. In addition, the rhythmic character is related to the nature of the imitative elements of the work and the absence or presence of a cantus firmus. In general, the variation in the rhythmic styles of the different voice parts is less marked in three-part than in two-part or four-part counterpoint; this may be due to the difference in the function of the Contratenor in three-part polyphony. The Tables presented here show the number of each type of note value in each voice in a representative section (all in \( \mathcal{O} \)) in two, three, and four parts.\(^\text{29}\)

In the two-part counterpoint represented by Table 1, 36 of

\(^{29}\)In tables 1 through 4, the longae that appear at the end in each voice part were not counted; dotted breves are included in the column with breves.
125 notes, or about 30 per cent of the notes in the upper part are breves or semibreves, with the remaining 70 per cent consisting of shorter values. In the lower part, by contrast, about 40 per cent (40 of 103) of the notes are longer values, and the number of semiminims and fusae is greatly reduced.

TABLE 1

RELATIVE FREQUENCY OF DIFFERENT NOTE VALUES IN A TYPICAL TWO-PART SECTION OF THE MISSA SINE NOMINE NO. 3

<table>
<thead>
<tr>
<th></th>
<th>H</th>
<th>♩</th>
<th>♩</th>
<th>♩</th>
<th>♩</th>
<th>♩</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Part</td>
<td>2</td>
<td>13</td>
<td>21</td>
<td>13</td>
<td>38</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Lower Part</td>
<td>8</td>
<td>2</td>
<td>30</td>
<td>8</td>
<td>43</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

In a three-part section of the Missa sine nomine No. 1, the situation is considerably different; not only does the Contratenor have more notes than either the Superius or Tenor, but the percentage of notes smaller than a semibreve is greater in this than in either of the other parts (more than 80 per cent). It is the Tenor here that contains the greatest percentage of large notes (about 25 per cent), and the fewest notes.
TABLE 2

RELATIVE FREQUENCY OF DIFFERENT NOTE VALUES
IN A TYPICAL THREE-PART SECTION OF THE
MISSA SINE NOMINE NO. 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≈</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td></td>
</tr>
<tr>
<td>Superius</td>
<td>5</td>
<td>1</td>
<td>14</td>
<td>15</td>
<td>36</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Tenor</td>
<td>3</td>
<td>2</td>
<td>23</td>
<td>13</td>
<td>36</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>Contratenor</td>
<td>1</td>
<td>5</td>
<td>15</td>
<td>14</td>
<td>49a</td>
<td>2</td>
<td>46</td>
</tr>
</tbody>
</table>

*a plus a triplet of three minims.

In a typical three-part section of the Missa sine nominem No. 2, in which one might expect the voices to be more similar in style because of the increased imitative activity, the following obtains:

TABLE 3

RELATIVE FREQUENCY OF DIFFERENT NOTE VALUES
IN A TYPICAL THREE-PART SECTION OF THE
MISSA SINE NOMINE NO. 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≈</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td>♩</td>
<td></td>
</tr>
<tr>
<td>Superius</td>
<td>2</td>
<td>7</td>
<td>15</td>
<td>18</td>
<td>16</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Tenor</td>
<td>0</td>
<td>12</td>
<td>11</td>
<td>25</td>
<td>11</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Contra</td>
<td>2</td>
<td>9</td>
<td>7</td>
<td>23</td>
<td>13</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
In this work, the larger values comprise about 15 per cent, 20 per cent, and 20 per cent of the Superius, Tenor, and Contratenor, respectively.

Table 4 presents the distribution of values in a typical four-part section of the *Missa sine nomine* No. 3. In this case, the larger values comprise the following approximate percentages of the different parts: Superius-35 per cent; Altus-40 per cent; Tenor-39 per cent; Contratenor-65 per cent.

**TABLE 4**

RELATIVE FREQUENCY OF DIFFERENT NOTE VALUES IN A TYPICAL FOUR-PART SECTION OF THE *MISSA SINE NOMINE* NO. 3

<table>
<thead>
<tr>
<th></th>
<th>1/8</th>
<th>1/4</th>
<th>1/2</th>
<th>3/8</th>
<th>3/4</th>
<th>1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Superius</strong></td>
<td>8</td>
<td>5</td>
<td>36</td>
<td>23</td>
<td>30</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td><strong>Altus</strong></td>
<td>13</td>
<td>3</td>
<td>43</td>
<td>12</td>
<td>42</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td><strong>Tenor</strong></td>
<td>10</td>
<td>6</td>
<td>29</td>
<td>9</td>
<td>41</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td><strong>Bassus</strong></td>
<td>23</td>
<td>6</td>
<td>35</td>
<td>1</td>
<td>30</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Parallel Motion

Certain melodic and rhythmic characteristics are apparent only when the voices are considered together, that is, as a com-
plete polyphonic complex. Even though each individual part presents its own melodic and rhythmic characteristics, these are often heard only in relation to the composite of all voices. One such characteristic is parallel movement. Despite the rhythmic and melodic independence of the individual voices, parallel motion is one of the most prominent characteristics of Tinctoris' music; it usually occurs as thirds, sixths, or tenths between voices. This trait was evidently perceived by some of Tinctoris' contemporaries, for he is mentioned by Gafurius, together with several other composers active at the time, as a writer of counterpoint "in which notes of the baritonans proceed in parallel tenths with those of the cantus, the tenor moving in concord with both." Parallel movement in Tinctoris' works involves both adjacent and more distant voices; occasionally a single voice will be paralleled by a melodic figure that is transferred from one voice to another. Three voices often proceed in parallel sixth chords; such progressions, common in most of his works, are especially characteristic of the Missa sine nomine No. 2, where they often precede final cadences of sections (see Example 15).

\[\text{\footnotesize 30}\]\footnote{Clement Miller, \textit{op. cit.}, p. 144.}

\[\text{\footnotesize 31}\]\footnote{Parallel fourths, which Tinctoris called "fau bourdon" \cite[see Albert Seay, "Johannes Tinctoris' 'The Art of Counterpoint,'" \textit{Musicological Studies and Documents}, V (New York: American Institute of Musicology, 1961), p. 34], may be used if accompanied by the fifth or third below the fourth.}
Despite Tinctoris' misgivings about both major and minor sixths, which have "more asperity than sweetness," he does not suggest, as Reese claims, that they "should be excluded from music à 2, both improvised and written." He does, however, restrict the circumstances under which the sixth should be used in two parts; he admits that it does sound well and is permitted only when "one or many other sixths follow it." In counterpoint or composed music of more than two voices, he says that "the sixth is always suave . . . if a third or tenth is placed under it, but much more suave if a fifth or twelfth." Parallel movement in sixths is fairly common between any two parts in his compositions.

There are several instances, whether intentional or merely oversights, of parallel perfect consonances in succession. Some

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32 Seay, The Art of Counterpoint, p. 34.


34 Seay, Art of Counterpoint, p. 35.

35 Ibid., p. 36.
of these occur between a dissonant passing tone and another part (see Chapter IV); others, however, are more obvious. Parallel perfect consonances of any type—fourths, fifths, octaves, or unisons—are, of course, forbidden between the Tenor and any other voice; Tinctoris feels that they should be permitted "as seldom as possible" between any other pair of voices, even when a rest intervenes, "unless in a composition of four or five or many parts, by the need of some delightful perfection or planned progression." Parallel fifths and octaves do appear, sometimes with intervening rests, very brief intermediate notes, by contrary motion, or between voices which move to the fifth or octave at different times; in each of these cases, the infraction is somewhat poorly disguised (see Example 16).

Example 16

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36 Seay, Art of Counterpoint, pp. 34 ff.
Simultaneous Style

Tinctoris makes very limited use of chordal style, in which all parts move simultaneously in the same or nearly the same rhythmic values. Except for fauxbourdon-like passages, such as that seen in Example 15, simultaneous style is restricted to two short interludes between sections of the Missa sine nomine No. 1. These passages, which appear in the Gloria between the B and C sections and between the F and G sections, consist of chordal declamations on the words "Jesu Christe." They are shown in Example 17.

Example 17

Hocket

Among the more antiquated aspects of Tinctoris' style must be counted his use of hocket technique. Although he does not make extensive use of the device, it does occur in several compositions. A very brief alternation of single notes takes place between the Tenor and Bassus of the opening section of the Credo.
from the Missa sine nomine No. 3; the second and third excerpts below are more extended passages of hocket found in the Credo of the Missa sine nomine No. 1.

a) Example 18

b) Example 18

(c) Example 18
As was characteristic of hocket during the thirteenth and fourteenth centuries, the alternation of voices involves either single notes, as in a) or groups of notes, as in b) and c). Example 18a is unusual in that the Tenor part moves for several measures with the stuttering pattern characteristic of hocket but is actually complemented by hocket in the Contratenor in only the third and fourth measures of the example. The effect here is quite similar to that produced by an example from the Liber de arte contrapuncti; in Chapter 6 of Book III of the treatise, Tinctoris prohibits "the making of repetitions (redictae) when singing above plainchant" and also in "every part in composed music" except when imitating the "sound of bells and trumpets," in which instance they are "tolerated."\[^{37}\] In this same chapter he includes the following example as illustration of the device:

Example 19

\[^{37}\text{Seay, The Art of Counterpoint, pp. 137 f.}\]
Non-Quartal Harmony in the Chansons

While most of Tinctoris' sacred compositions are written in a style that allows fourths between upper parts when supported by a third, fifth, or one of their compounds, the three-part vocal chansons are written in a style that approaches what Charles Warren Fox has called the "non-quartal" style.\(^{38}\) In this style—characteristically encountered in the works of certain composers during the period from ca. 1460 to ca. 1520—no fourths occur between any two parts, except as non-harmonic dissonances. Whether the purpose of this technique was to allow performance of any two parts without the third is uncertain, but, as Fox points out, this may have been the case. In his article, Fox lists many of Tinctoris' contemporaries as composers of non-quartal songs, among them Agricola, Busnois, Caron, Compère, Morton, and Ockeghem. None of Tinctoris' chansons is non-quartal in the strictest sense of the term, but they do belong to a category that Fox refers to as marginally non-quartal. Works in this category use fourths only at cadences or to allow for the strictest imitation. In the three-part chanson *Helas*, only two fourths are found\(^{39}\); both are unavoidable if the imitation


\(^{39}\)Not just one, as stated in Fox, *op. cit.*, p. 46.
is to remain strict (see Example 20a). Vostre regart also contains only two fourths between voices; one occurs on a note value so short as to be insignificant, the other, between the Superius and Contratenor, in an octave-leap cadence (see Example 20b).

Example 20

Although Tinctoris lists the fourth among the concords in the early pages of his counterpoint treatise, he clearly has misgivings about its sound. Although it "was placed as the first of all concords by our ancestors," Tinctoris says that "it is not . . . a concord by any means," and that, "produced by itself
for learned ears... it produced an intolerable discord. In view of the rarity of fourths in the two chansons mentioned, it seems likely that Tinctoris was aware of non-quartal style, although there is no mention of it in his treatises. A possible reason for the fact that Tinctoris wrote no chansons in a purely non-quartal style may be his affinity for older techniques, such as fauxbourdon, which, as Fox notes, is not compatible with the non-quartal style.

Imitation in Tinctoris' Works

Imitation, which was to become the dominant contrapuntal device of the sixteenth century, rarely plays a structural role in fifteenth-century polyphony. What little imitation is used, moreover, never interferes for long with the melodic independence of the individual voice parts. The music of Tinctoris, therefore, like that of Ockeghem and others active during the last quarter of the century, must be described as essentially nonimitative. As Bukofzer notes, we are forced to resort to negative terminology in much of our discussion of fifteenth-century contrapuntal styles, because of our notions that counterpoint and imitation are inseparable—notations that are fed by the importance

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40 Seay, The Art of Counterpoint, p. 28.
41 Fox, op. cit., p. 39.
of the device in the following century.

Although Tinctoris' style may be referred to as nonimitative, it should not be construed that he makes no use whatever of imitation, for such is not the case. Where imitation does appear, it is primarily motivic—that is, imitation of short melodic fragments— in contrast to the more extended passages typical of sixteenth-century styles. There are, however, several notable exceptions to this statement. The B section of the Credo of the Missa L'homme armé, contains a thirty-two measure canon at the fourth between the Superius and Altus— the only extended canonic passage in all of Tinctoris' works. The Superius and Altus of his four-part setting of Le souvenir engage in statement and repetition of each phrase, which can be called a kind of imitation. The Missa sine nomine No. 2 is the only one of Tinctoris' works in which imitation assumes a structural function; each movement begins with a point of imitation presenting the head-motive of the work (to be discussed in Chapter VI). With the exception of the works noted here, motivic imitation is the only imitative process used in Tinctoris' compositions.

Short imitated motives generally are preceded by rests, which effectively set them apart from the surrounding counterpoint. After but a few notes—from four to eight, generally—the imitation dissolves into free counterpoint (see Example 21).
Occasionally, the imitated motives appear, not at the beginning of a musical phrase, but in the course of the counterpoint (see Example 22).

The relative unimportance of imitation in Tinctoris' style is confirmed by the fact that a great majority of the imitative entries involve only two voices, even in sections scored for three or four parts. Imitation involving three parts is less frequent, but can be found in three- and four-part counterpoint; four-part imitation is rare, probably because of the frequent pairing of voices in works for four voices.
It is not unusual for Tinctoris to present a motive of moderate length (more than six to eight notes) in imitation between two voices with an abbreviated imitation in a third part, as shown in Example 23. Most typically it is the lowest voice that presents the abbreviated motive; this, no doubt, results from the function of the lowest voice as a harmonic support for the upper parts.

Example 23

As one might expect, imitation may take place at the unison, fourth, fifth, or octave and may occur either above or below the first statement or both above and below. Although imitation at the unison and octave is more common than at the fourth or fifth, the interval and pitch level at which the motive is imitated depend to some extent on the voice ranges. Imitation between two adjacent voices (the Superius and Altus, for example) is less likely to take place at the octave than is imitation between, say, the Superius and Bassus. In the Missa sine
nomine No. 2, where the voice ranges overlap a great deal, imitation most typically occurs at the unison, although it is found at the fourth, fifth, and even at the octave (see Kyrie C).

The interval at which imitation occurs is also dependent to some extent on the degree of the mode on which the first statement takes place. A statement beginning on the final will most likely be answered a fifth above or a fourth below, if not at the unison or octave; a statement beginning on the dominant would most often be answered at the fourth above or fifth below. Either possibility, of course, is found together with imitation at the unison or octave. No examples of tonal imitation, wherein an initial interval of a fourth in the first statement is answered by a fifth (or the reverse) were found in Tinctoris' music; this may be due, in part, to the fact that the melodic outlines rarely involve these intervals prominently at the beginnings of motives.

It is perhaps with respect to temporal elements that Tinctoris' use of imitation is most interesting. The time interval at which the imitation occurs varies from entries a semiminim apart to entries separated by as much as three imperfect longs. Imitation most typically occurs at the distance of a few minims or semibreves; more widely spaced entries generally occur in faster moving mensurations, such as . The distance at which a motive is imitated clearly affects the perception of
its character and its importance; generally, the more obvious motives are imitated at greater time intervals or in the same positions in the metric scheme. For example, a motive that is imitated at a distance of three semibreves in \( \bigcirc \) will be more easily grasped by the listener and will seem more important than the same motive imitated at the interval of a minim, before the listener can grasp it as a rhythmic and melodic entity. A predominance of short, nondistinctive motives overlapping at close time intervals contributes to the overall impression that Tinctoris' polyphony is essentially nonimitative.

An important aspect of Tinctoris' use of imitation is the relationship between the metric scheme and the time interval that separates the motivic fragments. In some instances, as one would expect, the answering imitation takes place at the distance of a complete mensural unit; as a result, the statement and imitation maintain the same relationship with respect to the mensuration (see Example 24). Often, however, successive appearances of a motive in imitation shift their position in relation to mensural units. In the Missa sine nomine No. 2, for example the regular appearance of the head-motif at intervals of two semibreves conflicts with the mensuration \( \bigcirc \), which is organized in groups of three semibreves (see Example 25). It seems almost certain that the listener would perceive these opening measures as duple rather than triple.
Such conflicts between the true mensuration and that suggested by successive entries of imitated motives are frequent in Tinctoris' music; they occur in many different relationships and are, no doubt, partly responsible for the nonmetric feeling of much of his music. Of the many instances that can be found, three should suffice to illustrate the procedure (see Example 26). In the first excerpt, the imitation interval of eight semibreves conflicts with the grouping of \( \bigcirc \), in units of three semibreves. In the second excerpt, imitation at the interval of four semibreves and the duple metric pattern implied by the motive itself
are more typical of \( \text{C} \) than of the real mensuration, \( \text{O} \).
The last excerpt, in \( \text{O} \), contains three entrances of a motive, at intervals of five semibreves.

Example 26

Imitation sometimes takes place between two voices that are in different mensurations, as in Example 27. This seems to confirm the implication of the previous examples that mensuration itself does not establish a regular accent pattern.
In imitative passages for more than two voices, Tinctoris frequently varies the time interval between successive entries, thus also introducing different vertical relationships between overlapping answers. In Example 28, the initial and second statements are separated by three semibreves, while the third is two semibreves from the second.

More complex relationships, some combining imitation at different vertical distances as well as different time intervals, can be seen in Example 29. In the first excerpt, four statements of a motive are separated by time intervals of five, seven, and five minims. The third statement is at the octave above the other three. The last entry lacks the initial note
(A), and each statement is accompanied by repeated notes on D.

In the second excerpt, the initial motive is imitated after six minims at the interval of a twelfth and then at the fifth above after one minim. In the third excerpt, the first three of four statements are separated by intervals of three minims, with the final statement coming six semibreves after the third; again, the third statement is an octave above the others.

In addition to shifts in temporal relationships between imitative entries, Tinctoris sometimes introduces melodic or rhythmic alterations in some or all of the answering statements (see Example 30).

Example 29
As illustrated in these excerpts, note values may be changed from even to dotted rhythms, or notes may be omitted to compress the answering statement and to transform the dux into the comes, as in the second excerpt shown.

Example 30

In Example 31, three motives appear in imitation; probably because of range considerations, the b motive is imitated by the lower voice at the fifth below instead of at the unison, as the a and c motives are.

Example 31
The simultaneous imitation of two different motives, both of which are answered at different vertical and horizontal distances, can be seen in Example 32. The two motives are presented in such a fashion that the second is introduced by the Contratenor before the last statement of the first in the Superius.

Example 32

The excerpts in Example 33 illustrate a kind of false pairing of voices in three-part counterpoint, creating the effect of additional parts. In both cases, the two motives are combined almost as subject and countersubject. In the answering statement of the second excerpt, the two motives begin in a different temporal relationship than the initial statement; by the subsequent omission of notes to the value of an eighth at the point marked with a +, the balance is restored.

Example 33
Imitative entries—statements and answers alike—are often paralleled at the third, sixth, or tenth by another voice; as was mentioned earlier, parallel imperfect consonances are so prevalent in Tinctoris' compositions that they may almost be considered a stylistic mannerism. In Example 34, the parallel tenths between the Superius and Bassus are reduced to thirds between the Altus and Tenor; the meter implied by the four-minim distance between statements conflicts with both mensurations used in the passage (O and C).

A device sometimes encountered in passages involving imitation is Stimmtausch, or voice exchange—a device that dates as far back as the late twelfth-century organa of the Notre Dame School. Although this device may result in invertible counterpoint, Tinctoris usually limits himself to the simple exchange of voices at the same pitch level, as in the first three excerpts of Example 35. When true invertible counterpoint does occur, it often results in no more than a change from parallel thirds to sixths, as in the fourth excerpt of Example 35.
Example 34

Example 35
By repeating an imitated motive sequentially in one or more parts, Tinctoris sometimes creates the effect of imitation in more voices than are actually present. Used in this manner, sequential repetition may be considered imitation within a single voice part (see Example 36).

Example 36
Despite the diversity in Tinctoris' treatment of imitation, the sparseness of its use characterizes his compositions, as it does those of his contemporary, Ockeghem. Both men present a startling contrast to composers of the next generation, whose works rely heavily on imitation for their structural coherence. In his study of the Caput Masses, Bukofzer observes that "imitation as such presupposes well-defined and profiled motives, without which it cannot operate successfully." He also notes, significantly, that Ockeghem was "quite capable of inventing precise motives," citing his chansons as evidence. The same might be said of Tinctoris. Although in his counterpoint, imitation and sequence are noticeably in short supply, he shows himself, especially in the Missa sine nomine No. 2, capable of inventing well-profiled motives, easily grasped and remembered. One must ask, therefore, why these composers systematically avoided the use of imitation in any significant degree.

As far as Tinctoris is concerned, several passages in his Liber de arte contrapuncti offer possible explanations. In Book III, Tinctoris frowns on any devices that show "a most obvious

43 Ibid., p. 282.
44 Ibid.
affinity with repetitions \textit{\textit{redictae}}.\textsuperscript{45} Not only does he warn against cadencing too frequently on the same perfection, but he admonishes against "the continuous reiteration of one or many motifs."\textsuperscript{46} In this respect, it is also worth noting his opinion that "variety must be sought for in all counterpoint."\textsuperscript{47} His example in Chapter 6 of Book III, illustrating the reiteration of motives, among other things, contains asterisks above several instances of what can only be called motivic imitation and sequential repetition.\textsuperscript{48} These are to be avoided, presumably, because of their affinity with \textit{redictae}. If Tinctoris' opinions may explain the \textit{scarcity} of imitation in his works, they are not entirely compatible with the presence of imitation and sequence in any degree at all. A few of the situations can be explained in terms of their resemblance to "the sound of bells and trumpets," under which conditions \textit{redictae} "are tolerated everywhere."\textsuperscript{49} There is, however, a limit to the number of times

\textsuperscript{45}Seay, The Art of Counterpoint, p. 139.

\textsuperscript{46}Ibid.

\textsuperscript{47}Ibid., p. 139.

\textsuperscript{48}Ibid., p. 137 f.

\textsuperscript{49}Ibid., p. 137.
one can explain in this way what really must be considered a growing interest in and acceptance of imitation as a structural device—a device that was to become one of the major characteristics of the music of the following century. If it appears, at first glance, that Tinctoris, like Ockeghem, "n'a pas de système," it may be because one of his objectives was the systematic avoidance of such devices as imitation and sequence.

CHAPTER IV
THE TREATMENT OF DISSONANCE
IN TINCTORIS' MUSIC

Among the more significant changes taking place in the compositional practice of the late fifteenth and early sixteenth centuries must be counted the changing attitudes towards consonance and dissonance and the manner in which the latter was treated. It is clear that Tinctoris recognized his generation's new approach to dissonance, for he says that he will "pass over the compositions of older musicians in which there were more discords than concords." He then describes the treatment of dissonance by "almost all more recent [musicians], not only composers but also those singing super librum."¹ The differences between the two practices lie not so much in the intervals that were considered consonant or dissonant as in the way dissonances were used. Both major and minor thirds had been considered imperfect consonances since the first quarter of the thirteenth century, for they are so designated in a treatise from that

¹Albert Seay, The Art of Counterpoint, p. 113 (brackets his).
period, De musica libellus. ² Sixths, about which even Tinctoris had misgivings, ³ were not accepted even as imperfect consonances until later. The major sixth when progressing to the octave was granted status as an imperfect consonance "by chance" in the Compendium discantus of ca. 1250 ⁴; the minor sixth was not admitted as an imperfect consonance until the late thirteenth or early fourteenth century by Anonymous XIII, and then only when it led to the fifth. ⁵ The fourth, listed by Tinctoris as a concord (even though he did not use it as such), was considered "a dissonance in progression" by the author of the Compendium discantus.

The contribution of the early Renaissance was the regulation of dissonance, which, in both the Middle Ages and Renaissance, was largely the product of melodic ornamentation. After presenting and discussing concords in Book I of his Liber de arte contrapuncti, Tinctoris turns in Book II to a discussion of


³See above, p. 112.

⁴Riemann, op. cit., p. 97 f.

⁵Ibid., p. 101 f.
discords, including the "false consonances"—the diminished and augmented fifths and octaves as well as their compounds; Chapters 23 through 34 deal with the regulation of dissonance in figured counterpoint. In simple counterpoint, he emphasizes, "discords are simply and absolutely prohibited."^6

Tinctoris' discussion of current practice in the treatment of dissonance may be summarized as follows: (1) a consonance above the first or another part of a minim in both major and minor prolongation and above a semibreve in minor prolongation may be followed by a dissonance of the same or smaller value; (2) immediately preceding a cadence, a dissonance may appear above the first of two minims or above the first half of a minim in both major and minor prolongation, and also above the first of two semibreves or above the first half of a semibreve in minor prolongation; and (3) if a cadence is approached by several minims in major and minor prolongation, or by several semibreves in minor prolongations, a dissonance by syncopation may appear on the first part of any of them. The first category accounts for unaccented passing tones, auxiliaries, echappées, cambiatas, and anticipations; the second category includes the

^Seay, The Art of Counterpoint, p. 113.
cadential suspension; the third specifically authorizes the commonly found chains of suspensions leading to a cadence. In effect, these three categories of dissonance may be reduced to two different principles of ornamentation: (1) those dissonances which are the result of melodic ornamentation of consonant progressions (type 1 above); and (2) those which are the result of a temporary replacement of a consonant interval by a dissonance (types 2 and 3 above). Tinctoris then illustrates these kinds of dissonance in an example of three-part polyphony. He continues for several chapters with discussions and illustrations of the allowable note values for dissonances in different mensurations and proportional relationships (see below).

In Chapter 32 he discusses the manner in which a dissonance must be approached and left: "either ascending or descending, it will be placed always after one of the concords nearest to it, as a second after a unison or third, a fourth after a third or fifth, a seventh after a fifth or octave, . . . and a concord only one or two steps away from it, although this latter, most rarely, will immediately follow this kind of discord." He further qualifies this by saying that "if there is an ascent or

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7This category would also include the appogiatura and accented passing tone; Tinctoris does not use these in his works, however.

8Seay, The Art of Counterpoint, p. 128.
descent from one place by any discord, one must not continually return to the same place unless this discord be so small that it will scarcely be heard." He has previously stated that no dissonance should consist of more than "an integral half part of that note by which the measure is defined."10

In Chapters 33 and 34 Tinctoris states that false concords—either diminished or augmented fifths and octaves must be avoided, whether within the mode naturally or caused by musica ficta. He notes, however, that they are common immediately preceding cadences in the music of his contemporaries; they appear also in his own works. The diminished fifth and augmented octave are illustrated in the following excerpts from Example 34 in the Liber.11

Example 37

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9Seay, The Art of Counterpoint, p. 128.

10Ibid., p. 126; by this, Tinctoris means that a dissonance longer than a minim should not be used in those mensurations in which the semibreve is the unit, while in those where the breve is the unit, no dissonances longer than a semibreve are allowed.

11Ibid., p. 131.
If the augmented octave that results from the application of ficta to the g' in the Superius in the second excerpt is, as he says, a common occurrence, it would seem that musica ficta was applied with considerably more freedom than many modern editors are willing to admit.

As Fox notes, it is often difficult "for us to grasp the fact (and it is a fact) that the composer writing c. 1500 was still conceiving harmony in terms of combinations of intervals rather than of chords conceived as a unit." To the fifteenth-century theorists and composers, the vertical aspect of counterpoint was largely a matter of intervallic relationships of one melodic voice to another or to others, i.e., they were thinking in terms of vertical combinations of consonant intervals and progressions of these. The introduction of melodic ornaments to these progressions often resulted in dissonances; many characteristic melodic figures that are consonant in two-part polyphony produce dissonances in three or four parts. In the excerpts shown in Example 38, the voice leading of the upper parts results in two-part counterpoint that is entirely consonant; the additions of the lowest part, however, transforms these common melodic patterns into characteristic dissonance types--the suspension, cambiata, and passing tone.

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12 Fox, op. cit., p. 46.
The following discussion of dissonances found in Tinctoris' works will be presented according to the number of voices active; those sections that involve a cantus firmus will not be considered, because the presence of a cantus firmus in long note values establishes different relationships between voice parts. The chansons, Le souvenir (à 4), Helas, and Vostre regart, all of which may contain borrowed melodies, will be included, however, since there is little or no difference in the melodic style of the different voices, the cantus firmus notwithstanding. In the case of larger works, a representative portion (generally two complete movements) was examined; the statistics presented in Appendix E and the information in this chapter are based on the portions examined. All of the sections for two voices were examined, and they are tabulated together. The number of each type of dissonance in the different voice parts is shown in the Appendix; the dissonances in the examples in the text are marked with asterisks.
The Passing Tone

Of all the dissonances found in Tinctoris' works, the passing tone was, as might be expected, the most frequently encountered. It comprises from 60 to 70 per cent of the total number of dissonances, and is, in addition, the most frequently used in each voice. Like most dissonances, it appeared most often in the uppermost part. In accordance with the rules presented earlier, the passing tone constitutes half of less of "the value that defines the measure." It appears both ascending and descending, at different levels of rhythmic importance. The weakest form occurs as either the second or fourth semiminim of a semibreve value in imperfect prolation, or as the second or third minim in perfect prolation; stronger forms appear as the second half of a semibreve or as the third of four semiminims.

The Passing Tone in Two-Part Counterpoint: In two parts, a passing tone never appears above the first part of a semibreve in O or of a breve in ¶. Characteristic forms are shown in Example 39.

Example 39
A passing tone immediately following a syncopation or a dotted value may appear stronger despite its weak position. The dissonance in the following example is the first of two semiminims after a dotted semibreve; its position against a sustained note in the upper voice also tends to increase its prominence.

Example 40

Two consecutive passing tones in the same or different voices occur with some frequency in Tinctoris' compositions; they usually are the result of movement in both voices and produce consecutive or parallel dissonances (Example 41).

Example 41

The Passing Tone in Three-Part Counterpoint: In three-part counterpoint, just as in two parts, passing tones are the most frequently encountered type of dissonance. They appear most often
in the upper part, and less frequently but evenly divided between the lower parts. Passing tones may be found in a single part or in two parts simultaneously in either parallel or contrary motion.

Example 42

A passing tone is sometimes combined with other kinds of dissonance or another passing tone in such a way that consecutive or simultaneous dissonances result (see Example 43).

Example 43

The Passing Tone in Four-Part Counterpoint: The treatment accorded the passing tone in four parts is not significantly different than was the case in two or three parts. The dissonance is usually either a minim or a semiminim in a weak rhythmic position, according to the principles discussed earlier. In the Missa sine nomine No. 3, however, several examples of passing
tones on the first half of the semibreve can be found; one of these is shown in Example 44.

Example 44

In four-part writing, passing tones often appear in two voices simultaneously or consecutively, in contrary or parallel motion; this sometimes produces consecutive or parallel dissonances (Example 45).

Example 45

In the following example, a passing tone and two échappées, themselves in parallel fourths, ornament a succession of sixth chords; parallel sevenths between the Superius and Tenor parts result.
In four parts, as in three, consecutive dissonances in a single voice are not infrequent.

The Suspension

After passing tones, the most frequently used dissonance is the suspension; its treatment agrees with Tinctoris' prescriptions in relation to the value that defines the measure. In any mensuration with imperfect prolation, suspensions may occur as minims or semibreves of which only the last half is a dissonance. In perfect prolation, the suspension may occur with the dissonance over the second of three parts of a semibreve. It is found also as a breve of which the second half is dissonant in tempus imperfectum diminutum (♀). The resolution of a suspension over a
semibreve in ♩ or ♪, or over a breve of ♩, is typically ornamented with an anticipation, an auxiliary, or both; those that occur over shorter values are generally not ornamented.

The Suspension in Two-Part Counterpoint: In two parts, only the 7-6 suspension in the upper voice and its inversion, the 2-3 suspension in the lower part, are common. The former is generally ornamented in some fashion, the latter only rarely. Both the 9-8 and the 4-3 suspensions are rare in two parts; even rarer is the 4-5 suspension in the lower part. Examples of each are given in Example 48.

Example 48
The next to last excerpt in Example 48 illustrates the chains of suspensions that frequently occur, as Tinctoris says, when "a descent into some perfection is made by . . . many semibreves." Suspensions over a changing bass are not common in two parts; Example 49 is taken from the Missa sine nomine No. 3.

Example 49

The Suspension in Three-Part Counterpoint: The suspension constitutes a smaller percentage of the total number of dissonances in three-part than in two-part counterpoint. Whereas some 25 per cent of the dissonances in two parts were suspensions, only about 12 per cent are suspensions in three parts. The addition of a third part, however, makes possible a greater variety in the treatment of the suspension. The Tenor, when it was the lower of two voices, was limited almost exclusively to the 2-3 suspension; when it is the middle part, it often introduces both the 4-3 and 7-6 suspensions. The 4-3 suspension, rare in two

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13Seay, The Art of Counterpoint, p. 113.
parts, is perhaps the most common form in three-part polyphony, because the addition of a voice below converts the standard 7-6 cadential suspension of two-part counterpoint into the 4-3. The octave-leap cadence and the cadence in which the lowest part descends a fifth contain only the 4-3 suspension; cadences in which the lowest part descends by step to the final is often preceded by either a 7-6 suspension or a double suspension (both 7-6 and 4-3), of which either element may or may not be ornamented. Characteristic forms of these various suspensions are illustrated in Example 50.

Example 50

In the Missa sine nomine No. 1 an unusual dissonance is produced by a suspension in the Superius combined with a passing
tone in the Contratenor; the ornamental resolution, completed over
a change of bass on the fourth quarter note, involves a dissonant
passing tone against the Contratenor on the last half of the previous
quarter. This situation appears to be the result of composing both
outer parts against the Tenor.

Example 51

The Suspension in Four-Part Counterpoint: Suspensions in four
parts occur in much the same forms as those in three parts. The
upper voice may contain either the 4-3, 7-6, or 9-8 suspensions.
The 4-3 suspension is found also in the Tenor, and the 7-6 appears
commonly in the Altus, although both types can be found in either
voice. The lowest part, be it the Tenor by voice-crossing or
the Contratenor, is restricted to the 2-3 suspension. Double
suspensions are common and sometimes involve resolutions in dif-
erent note values or at different points in the two voices.
In the Missa sine nomine No. 3 a triple suspension, with reso-
lutions of different lengths appears over a change of bass.
That Mass also contains a 4-3 suspension prepared by what, in
the Palestrina style, would be called a "consonant fourth."
The passage involves an ornamented progression of sixth chords
in the upper three parts over an octave-leap cadence. Both this cadence and the triple suspension mentioned above are shown in Example 52.

Example 52

The resolution tone of a suspension (marked with a + in the example) is sometimes, though not often, doubled in another part (see Example 53).

Example 53

The Auxiliary Tone

Tinctoris apparently felt that the auxiliary, because it is followed by a return to the original pitch, should be "so small that it will scarcely be heard" (see above, p. 140). In Chapter 32 of the Liber, he quotes a passage of Ockeghem's Missa La belle se siet that "dissents a great deal from our arrangement
Tinctoris seems to be referring to Ockeghem's use of a minim auxiliary. Auxiliaries in both the Liber examples and in Tinctoris' own compositions are always smaller than a minim in value. They occur more commonly in the upper parts, and the lower auxiliary is found almost to the exclusion of the upper, in the same rhythmic positions as the normal unaccented passing tone. Its most frequent use is in ornamental resolutions of suspensions.

The Auxiliary in Two-Part Counterpoint: The auxiliary in two parts most frequently involves the interval of a seventh or a ninth against the other part and appears in the upper part about 60 per cent of the time. The second excerpt in Example 54 contains an auxiliary dissonance of a fourth occurring as the first half of a minim; the mensuration is $\phi$.

Example 54

The Auxiliary in Three-Part Counterpoint: The lower auxiliary in three parts amounts to some 10 per cent of the total number of dissonances, whereas it comprised less than 5 per cent of the dissonances in two parts. The statistics are somewhat misleading, however, for the apparent increase is due to the fact that the auxiliary figure is frequently consonant in two parts; the auxiliary in Example 55, for instance, becomes a dissonance only with the addition of the lowest voice. The upper parts consist of an ornamented two-part cadence progression in which the auxiliary produces no dissonance.

Example 55

Auxiliaries are often found against a passing tone of the same value in another voice. A particularly striking combination of dissonances occurs in a passage where an auxiliary precedes an accented dissonance that is in turn followed by dissonant passing tones (Example 56), that produce parallel fourths in the two lower parts.
The Auxiliary in Four-Part Counterpoint: While only the lower auxiliary was common in two- and three-part counterpoint, both the upper and lower auxiliary are found frequently in some of the four-part works, notably the Lamentationes Jeremiae and the Missa L'homme arme; Example 57 is taken from the former.

The lower auxiliary is frequently paralleled by an identical, but entirely consonant, melodic idea in another voice, as in the Altus and Tenor parts of Example 58.15

15Although the auxiliary in the Altus is not dissonant, it seems clear that the neighboring g's are the important notes of the combination; the f is merely part of an ornamental resolution of a 7-6 suspension above the bass.
The Echappée

In its most common form during the fifteenth century, the échappée, or escape tone, consists of a stepwise descent into a dissonance followed by a skip of a third up to a consonance. In Tinctoris' music, however, it appears also with a skip of a fourth or, less often, a fifth; it is found also in its inverted form, though rarely. The échappée is one of the most common melodic ornaments of the period and is often used in the cadence formula that includes the Landini sixth.

The Échappée in Two-Part Counterpoint: The cadential échappée in two-part counterpoint, involving the sixth and fifth above the lower part, introduces no dissonance. Certain unusual two-part cadences, however, do involve dissonant échappées: in the excerpt below, from the Missa sine nomine No. 3, the under-third formula is combined with a descent of a fifth in the lower part and introduces a dissonance.
The échappée is also found in two parts, though infrequently, in non-cadential situations (see Example 60).

Example 60

The échappée in Three-Part Counterpoint: The dissonant échappée is only slightly more common in three-part than in two-part polyphony. Échappées with leaps of a fourth or a fifth up to the succeeding consonance, which are rare, can be seen in the second and third excerpts in Example 61. Again, it is the presence of a third part that sometimes creates unusual situations with normal melodic progressions (see the second excerpt).
A double \textit{échappée}, also rare, is found in the Superius and Contratenor of the following excerpt from the Missa sine nomine No. 2 (see Example 62).

\textit{Example 62}

The \textit{Échappée} in Four-Part Counterpoint: In four-voice polyphony, \textit{échappées} are most often found in the uppermost part, but they appear in any of the four voices in both cadential and non-cadential situations. As in three-part counterpoint, they are sometimes combined with other melodic figures; in the first passage in Example 63, a cambiata in the Altus is combined with the \textit{échappée}, here with a leap of a fourth, in the Superius. The second excerpt shows the less common inverted \textit{échappée}.

\textit{Example 63}
The Cambiata

The cambiata, like the schappée, is one of the characteristic melodic figures of the period. In the fifteenth century, it usually consisted of a three-note figure—a dissonance approached by step from above and left by a skip of a third in the same direction (see below). In the sixteenth century, the figure generally consisted of four notes, the last of which could be either consonant or dissonant, and appeared in several rhythmic variations of the melodic shape shown.

Example 64

15th Century 16th Century

\[ \begin{array}{c}
\text{15th Century} \\
\text{16th Century}
\end{array} \]

Although both forms can be found in Tinctoris’ music, the first is far more common.

The Cambiata in Two-Part Counterpoint: Only two examples of dissonant cambiatas were found in the two-part sections of Tinctoris’ works; they involve dissonances of a seventh and a fourth over the lower part, the latter also occurring with a change of bass (see Example 65).
The Cambiata in Three-Part Counterpoint: In three-part counterpoint, the cambiata is found about equally in the upper two parts, less often in the lowest. It occurs as either a minim or a semiminim and is sometimes accompanied by a passing tone in another voice.

The Cambiata in Four-Part Counterpoint: The cambiata in four-part polyphony appears in virtually the same forms as in three parts, and occasionally involves a dissonance on a fusa rather than a minim or semiminim. In the movements examined, cambiatas occurred only in the Superius, Altus, and Contratenor--no examples were found in the Tenor parts, which, it should be
noted, were not cantus firmus parts. In the first excerpt in Example 67, the cambiata figure is rendered dissonant only by the appearance of a passing tone in the Superius.

Example 67

The Anticipation

In two-, three-, and four-part counterpoint alike, the anticipation is one of the least used of the regular dissonance types. It is restricted, as a rule, to one-fourth of the value that defines the measure; e.g., to a minim in $\Phi$ or to a semiminim in $O$ and $C$. It often appears immediately before the preparation of a suspension near a cadence.

The Anticipation in Two-Part Counterpoint: Only one example of an anticipation occurs in those sections of Tinctoris' works that are scored for two voices; it precedes a suspension.
The Anticipation in Three- and Four-Part Counterpoint: In three-part polyphony the anticipation appears most often in the Superius, at non-cadential points as well as preceding cadential suspension. In the second excerpt in Example 69, the anticipation in the Superius is dissonant with the Contratenor and with the Tenor, which also moves to a dissonance, an échappée, on the last eighth note of the measure. The Tenor and Superius, if considered alone, resemble a cadential chain of suspensions. The treatment of the anticipation in four parts is virtually the same as in three-part counterpoint.

Other Types of Dissonance

Several unusual dissonances that do not fall into any of
the above categories can be found in Tinctoris' compositions. Some of these may be the result of errors, either by the composer or the scribes, while others result from rhythmic variations in the normal movements of one or more parts; still others appear to be intentional, for they are used consistently in a given work.

A rather unusual dissonance occurs in the Missa sine nomine No. 2—so unusual, in fact, that it is probably the result of an error in one of the parts. In Example 70 a dissonance in the Superius follows a rest. It is thus not properly prepared; neither is it resolved in any normal way. The fourth note of the Tenor (g) is also dissonant with the Contratenor, which, in this case, seems to be incorrect. In all probability, the d in the Contratenor should not be sustained for a dotted semibreve, although the fact that it is a ligature c. o. p. indicates that it could be no smaller than a normal semibreve. The d' in the Contratenor, on the other hand, may be an unusual form of a 4-5 suspension in the bass.

Example 70
The dissonant figure illustrated in Example 71 is used only in the Lamentationes Jeremiae; it can best be described as an anticipation followed by an auxiliary, which produces two successive dissonances in the same voice. In the first two passages quoted, the sixteenth notes in the lowest part are dissonant with the Altus (g) and Superius (d') respectively. The dissonant figuration is paralleled by a melodic figure in which the anticipation could also be regarded as a relatively accented passing tone. These figures should perhaps be viewed as an unusual use of the common ornamental resolution of a suspension.

Example 71

Another unusual situation appears in the following passage from the Lamentationes Jeremiae; the real dissonance, a 4-3 suspension in the Altus, is obscured by the minim delay in the movement of the Contratenor to a d and of the Superius to an a' (see Example 72). The dissonance here, then, is the result of a rhythmic variation in the normal progression of voices; both the basic underlying progression and the passage in the Lamen-
tationes are given in Example 72.

Example 72

Basic Progression

Lamentationes Jeremiae

In the Missa L'homme armé, an inverted échappée in the Superius is combined with a free dissonance in the Contratenor, which is introduced by skip and left by step in the opposite direction (see the first excerpt in Example 73); in the second excerpt, from the Missa sine nomine No. 3, the last note of the Contratenor also consists of a dissonance approached by skip and left by step, here continuing in the same direction. Perhaps in this instance, Tinctoris forgot that the c' in the Altus was still sounding.

Example 73
The introduction of dissonant tones, which frequently produces parallel or consecutive dissonances, is also responsible on occasion for parallel perfect consonances. These, according to the Liber, are forbidden between the Tenor and another voice and are frowned on by Tinctoris between any two parts. In any case, parallel perfect consonances do occur, often in connection with dissonances. In Example 74, the relatively accented passing tones in the Superius are paralleled at the octave below by the Tenor. The passage also contains some fifths—rather poorly disguised by the intervening dissonances—between the two lower parts, and a set of fifths caused by the dissonance between the Superius and Altus (see the second and third beats of measure 2 in the example). This unusual excerpt may be the result of some "planned progression" (see above page 113): it may, on the other hand, be the unintentional result of some monumental miscalculation on Tinctoris' part. Whatever the case, it is impossible to "correct" the passage with a simple alteration in any one voice.

Example 74
Dissonance Treatment in the Cantus-Firmus Compositions

The different relationship that exists between the voice parts of a cantus firmus composition—a difference due primarily to the contrast in the melodic and rhythmic styles between the cantus firmus and the other parts—affects certain elements of Tinctoris' treatment of dissonance. The most obvious effect of this combination of styles is that the dissonances appear, almost without exception, only in the "figured" parts, that is, the parts other than the cantus firmus. Tinctoris' Alleluia, for example, contains in the Superius, twenty-seven passing tones, two suspensions, six auxiliaries, and one échappée; the cantus firmus Tenor, on the other hand, contains no dissonances at all.

The two-part instrumental chanson arrangements are characterized by a dissonant style that differs considerably from that found in the vocal works. Appendix E shows the types and numbers of dissonances used in each of these five compositions. Several differences are immediately perceivable: (1) the relative freedom in the treatment of accented dissonances, such as accented passing tones and accented auxiliaries (including many upper auxiliaries), (2) the almost complete absence of échappées, cambiatas, anticipations, and suspensions, and (3) the introduction of many unprepared dissonances, many of which
do not fall into the categories discussed earlier. The two-
part setting of Tout a par moy is typical of these pieces in
the treatment of dissonance (Example 75).

Example 75
The treatment of dissonance in these instrumental pieces is typical of much lute music of the period; although such pieces were undoubtedly performed on more than one kind of instrument, they may have been intended for performance by a lutenist and a tenorista. Very few dissonances appear in the Tenors of these pieces—only six dissonances in the five Tenors. This is due, in part, to the fact that a dissonance is more readily heard as a short value against a longer value in another part, and, since the longer values in these pieces are largely confined to the Tenors, the dissonances often are heard in the upper "figured" parts. Even some of those dissonances that appeared in the Tenors in the original settings may not be perceived as dissonances in Tinctoris' settings. For example, the Tenor of Tout a par moy by Binchois (or Frye?) contains a suspension (2-3 below the Superius, 4-3 above the Contratenor; see Example 76). Although this suspension is still present in Tinctoris' two-part setting, the dissonance may be perceived instead in the upper part, merely because the values in that voice are shorter than those of the Tenor (see measure 27 of Example 75).

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16 See below (page 265) for further details.

17 See above (page 77 and footnote 8).
Tinctoris' comments and rules in the treatises regarding the treatment of dissonance are perhaps the most comprehensive of any of the theorists of the period. He seems, as a composer, to be somewhat conservative in his treatment of dissonance, the instrumental works notwithstanding. In a period that saw an increase in the strictness with which dissonance was used, this conservatism on his part may actually represent a "progressive" attitude. In his Liber de arte contrapuncti, Tinctoris mentions not only his distaste for the dissonant style of the "older musicians" but also the freedom with which several of his contemporaries treated dissonances, commenting unfavorably on the practice. It is characteristic of Tinctoris, in this as well as in other areas of theory, that he leaves much to the "judgment of the ear"; this is certainly a practical, if unconventional, approach to music theory. It is clear, from both

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19 Ibid., p. 135.
his music and his treatises, that an exact codification of dissonance types and their treatment had not yet been achieved; it is also clear, however, that during Tinctoris' generation, much of the groundwork for a later codification was being set forth. In view of what was to take place in the succeeding century, the regulation of dissonance constitutes not only an important theoretical development, but an important characteristic of Tinctoris' musical style as well.
CHAPTER V
CADENCE FORMULAS IN
TINCTORIS' MUSIC

In an effort to place the music of Tinctoris more accurately in the historical development of contrapuntal styles, a study of his cadential formulas is essential; for, as Apel suggests, "the various formulas are characteristic of their period, and may well serve as identifying marks."\(^1\) It is also possible, therefore, that the types of cadences in Tinctoris' music will help to establish or corroborate a chronology for his works. According to the above-quoted scholar, the period between ca. 1450 and ca. 1500 saw significant changes in the types of cadence formulas used; the music of Tinctoris, falling as it does between these dates, should provide an excellent corpus in which to view these changes.

A preliminary examination of cadences in Tinctoris' music revealed that the type of cadence can be a function not only of the date of composition but of other factors as well. These include the mode of composition, the position of the cadence, and,

most significantly, the number of voices active at the cadence point. It was also evident that the cadences could best be studied if final and internal cadences were treated separately. Final cadences include those at the ends of sections and movements as well as at the end of a composition; internal cadences occur during the course of the counterpoint and usually do not result in a complete cessation of contrapuntal motion. The former, being fewer in number and more standardized in form, will be examined first.

Final Cadences

In contrast to such composers as Dufay, who tend to use the same cadential pattern rather consistently within a given work, Tinctoris seems to prefer some degree of variety in cadences; perhaps this is another application of his concept of *varietas* in large works such as Masses. Although the cadences could be classified according to several different

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3 Seay, *The Art of Counterpoint*, p. 139 f. See also the discussion of *varietas* in Chapter VI of this dissertation.
criteria, the simplest and clearest seems to be the number of voices active at the cadence point. More than any other variable, indeed, the number of voices seems to be the most significant determinant of cadence type. The following discussion, then, will consider cadences in two-, three-, and four-part writing, with further subdivisions, when necessary, according to such factors as ornamentation, melodic voice leading, and root movement.

**Cadences in Two-Part Counterpoint**

Almost every two-part cadence in Tinctoris' music consists of movement from the second scale step to the final in one part and from the seventh to the final in the other, i.e., a sixth moving to an octave, or, less frequently, a third to a unison. This formula, often called a clausula vera, usually appears with a suspension (the clausula diminuta) or some other form of ornamentation.

*Example 77*
An unusual variation of this formula, in which the upper part moves up from the second degree to form a third with the Tenor before dropping to a unison on the final, appears in the Missa sine nomine No. 1. Although the movement is scored for three voices, the use of hocket at the cadence produces a two-voice texture (Example 78). Another unusual two-part cadence leads somewhat more boldly to a third at the end of the "Christe" in the Missa sine nomine No. 2 (Example 79).

Example 78

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\[\text{Musical notation image}\]
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Example 79

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\[\text{Musical notation image}\]
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The "under-third" formula—a 7-6-8 movement in the upper part—is rare in two-voice cadences. It is common in three and four parts, however, and will be discussed more completely later in this chapter. The cadence occurs only three times in the two-voice counterpoint of Tinctoris.
The basic two-part cadence formula—7-8 in one voice, 2-1 in the other—is a component of almost every type of three- and four-part cadence and is the foundation around which the more complex types are constructed. The addition of a third voice between the two parts of the clausula vera formula results in the so-called "double-leading-tone" or "Burgundian" cadence, the cadence characteristic of the early fifteenth century and common in the music of Machaut. This formula uses the raised fourth and seventh degrees, leading to the fifth and octave respectively. Tinctoris uses the cadence in both its unornamented form and with suspensions, which are themselves often ornamentally resolved. In final cadences, the double-leading-tone formula always appears with the voices arranged as in Example 81, i.e., with 7-8 in the upper part, 2-1 in the lowest, and 4-5 in the middle.
Another three-part formula is the "octave-leap" cadence, in which the Superius and Tenor have the basic two-part progression, while the added third part—the Contratenor—leaps an octave from the fifth below the Tenor to the fifth above. This formula is, in effect, an authentic cadence, or a dominant-tonic progression. As Tinctoris uses it, the cadence always includes a suspension, usually a 4-3 in the Superius. It occurs with particular frequency in the Missa sine nomine No. 2 (see Example 82).

The variation of the octave-leap cadence shown in Example 83 is found in the Missa L'homme armé. It seems almost certain that the upper note of the Contratenor shows the basic progression of that voice, while the blackened note is a secondary divisi note. Such divisions at the final chord occur in several of Tinctoris' works and generally involve the root and a
blackened third or fifth above.

Example 83

The formula that is most characteristic of the Missa sine nomine No. 1 is the authentic cadence in three parts. Below the clausula vera progression, Tinctoris adds a third part, which moves from the fifth to the final of the mode; this produces a close on three finals without a fifth. In simultaneous style, the cadence appears as shown in Example 84.

Example 84

More characteristically, it is used with a 4-3 suspension in the Superius, in one of the forms shown in Example 85. In every case, the V-I progression is preceded by a harmony on either the final or flatted sixth degrees of the mode.
A feature common to many cadences in Tinctoris' compositions is the "under-third" melodic formula, involving a 7-6-8 or 4-3-5 voice leading in one part, usually the Superius. This cadence is often referred to—somewhat inaccurately—as the Landini sixth, or Landini cadence. Its widespread use during the period of Dufay and Binchois has also led some writers to include it among the group of so-called Burgundian cadences. It was introduced, of course, before this period, and the fact that it outlived the Burgundian era is amply demonstrated by its extensive use in the music of Tinctoris in the last third of the century. It does appear, indeed, as late as the first years of the seventeenth century.

As a melodic formula, the under-third cadence in Tinctoris' music differs little from the forms favored by Dufay and his contemporaries. The earlier composers, however, combined it with their characteristic double-leading-tone and octave-leap cadence, while Tinctoris prefers to combine it with the more modern authen-
tic cadence formula. In his three-part compositions, this cadence occurs in the melodic and rhythmic variations shown in Example 86. Without exception the penultimate harmony is preceded by a chord built on the final of the mode, resulting in a I-V-I progression.

Example 86

The cadence shown in Example 87 lies somewhere between a simple authentic cadence with the leading tone in the Superius and a true under-third cadence. Because of its relatively stronger rhythmic position, the sixth scale degree is more prominent than the leading tone that follows.

Example 87

Some of Dufay's later works, however, combine the 7-6-8 formula with the authentic cadence.
In only two instances did Tinctoris combine the under-third melodic formula with the octave-leap cadence; both of these cadences are unusual in other respects as well. In the first cadence shown below (Example 88), the penultimate harmony is preceded by a chord on the flatted seventh degree, instead of the usual (for Tinctoris) chord on the final. This produces a cross-relation with the next chord, if the leading tone is raised by musica ficta. The second cadence in Example 88 is the only one in all of Tinctoris' compositions where the 7-6-8 movement appears in any voice other than the uppermost. In addition, the Superius, crossing below the Tenor, includes both the final and an unresolved third by divisi. Both cadences are unusual in that the Tenor, rather than the Contratenor, leaps the octave to the fifth scale degree.

Example 88

Cadences in Four-Part Counterpoint

In the four-part works of Tinctoris, the true authentic cadence is used almost exclusively either with or without the under-third melodic formula. Within these limits, however, Tin-
toris introduces almost limitless variety, by combining suspen-
sions with various melodic figurations and by using different
harmonies preceding the cadence proper. For the most part, four-
part cadences consist of the three-voice authentic type discussed
earlier, with an additional voice stating the fifth degree of
the mode in both the penultimate and final harmonies. This
static voice may be either the Altus or Tenor; the clausula vera
formula appears, then, in the Superius and the remaining inner
part, with a dominant-to-tonic movement in the Bassus. The
cadence, in its simplest form, occurs in simultaneous style in
the Missa sine nomine No. 3 and the Lamentationes Jeremiae (see
Example 89).

Example 89

Several different types of figuration may be added to this
basic cadential progression. The excerpts in Example 90 demon-
strate its use in conjunction with suspensions, both plain and
ornamented, and with cadential extensions, which will be treated
more fully later in this chapter.
The last two cadences in the above example are of the type described by Lowinsky as the "four-chord Dorian cadence," consisting of a VII-I-V-I progression, here transposed to G Dorian. This cadence, which began to appear in the later works of Dufay and the composers of Tinctoris' generation, became characteristic of the sixteenth century.

The under-third cadence in four parts occurs almost without exception above a I-V-I progression, with the 7-6-8 voice-leading in the Superius; it is found in many variations, some of which are shown in Example 91.

The final cadence in the B section of the Gloria of the Missa L'homme armé is one of only two cadences in Tinctoris' four-part counterpoint that do not contain a descending fifth or an ascending fourth in the lowest voice (both are shown in Example 92). The Contratenor moves from the second degree of the mode to the third before dropping to the final. This gives the effect of a deceptive cadence in Dorian on D, but the actual progression is V-I-II-III-I in transposed Dorian on G. The second cadence in Example 92, the only octave-leap cadence in four parts, is found in the Lamentationes Jeremiae.
Cadences with Thirds and Cadential Extensions

Before examining the distribution of final cadence types in Tinctoris' compositions, two significant features of some cadences remain to be discussed, namely, the inclusion of the third in the last chord, and the closely related cadential extensions. The changing attitude regarding the consonant or dissonant quality of major and minor thirds during the fifteenth century provided the basis, together with other controversial problems, for some raging arguments. As imperfect consonances, thirds were not allowed at either the beginning or end of counterpoint except under certain conditions. Among the revolutionary ideas presented by Ramos in his Musica practica of 1482 was his startling (at least in theory) classification of the major and minor thirds as consonances without the restrictive "imperfect" qualification. Tinctoris, in Book III, Chapter 1 of the Liber de arte contrapuncti, states that "all counterpoint ought to begin and end with a perfect concord." He

\[\text{Example 92}\]

Seay, The Art of Counterpoint, p. 132.
later qualifies this statement, admitting that "it is not a bad thing if, with many singing super librum \( \text{\textit{i.e.},}\) improvising polyphony, some of them stop on an imperfect concord."\(^8\) Exactly what Tinctoris means by the word "counterpoint" in the first quotation above is not clear; the most logical interpretation would be that he is referring either to a complete composition or to one of its complete parts, such as a movement or section of a movement. Almost all of his compositions, as well as their subdivisions, end with perfect concords only, while internal cadences often include the imperfect concord of the major or minor third. In any case, his qualification concerning the singing of parts super librum would not apply to res facta, or written-out counterpoint,\(^9\) in which the voices are "mutually interdependent."\(^{10}\) The confusion about the meaning of the term "counterpoint" as used above is further complicated by his later statement that this rule concerning the ending of a counterpoint on a perfect concord is demonstrated most clearly by

\[^8\text{Ibid.}\]

\[^9\text{See E. T. Ferand, "What is Res facta?" \textit{Journal of the American Musicological Society}, X (1957), 141-150 for a different interpretation of the term res facta.}\]

\[^{10}\text{Seay, \textit{The Art of Counterpoint}, p. 103.}\]
"all the examples of this book."\textsuperscript{11} In fact, at least one example in the treatise violates this rule by including a third in its final cadence.\textsuperscript{12} Yet another passage in the \textit{Liber} refers to the use of a perfect concord in the "medium and final clausula . . . according to the rule, although an imperfect one is inserted from time to time in its place."\textsuperscript{13} This statement is followed by an example that shows the use of the third in internal cadences only; again, his position on the third in final cadences is left unclear.

If Tinctoris was somewhat conservative in this respect as a theorist, his inclusion of a third in one or more final cadences in five of his eighteen works is evidence that he was more adventurous as a composer. While cadences at the ends of internal sections are similar to those that close a movement, only in the Sanctus of the \textit{Missa L'homme armé} does a complete movement end with a cadence including the third. Except for this single instance, thirds are present only in a few cadences of initial and internal sections in the large sacred works. A third is also found in the final cadence of one secular work--the chanson \textit{Le souvenir} (â 4).

\begin{footnotes}
\item\textsuperscript{11}Ibid., p. 132.
\item\textsuperscript{12}Ibid., p. 103 f.
\item\textsuperscript{13}Ibid., p. 136.
\end{footnotes}
Even more significant, perhaps, are the many "resolved" thirds that occur in final cadences. In these, the third invariably resolves by movement to the fifth, while the other voices sustain their final notes (see Example 90 on page 185). Such cadential extensions involving the resolution of the third appear in some of Dufay's later works and are quite commonly found in the works of Tinctoris' contemporaries, such as Compère, Regis, Busnois and others. They seem to represent a compromise between theoretical strictures and a growing desire to include the third in the final chord. Only in the sixteenth century would that desire be completely fulfilled.

Extensions of greater length, with pedal points in one or more voices, became common in the early sixteenth century, in the works of Josquin, for example, and in the later half of the century in the works of such composers as Victoria. Only one extension of this kind occurs in Tinctoris' works, this in the chanson Le souvenir (à 4).

Example 93
Cadential Distribution

In the process of examining the formulas used by Tinctoris for final cadences, it became evident that, while most of the cadence types appear in more than one work, the sectional pieces are nonetheless distinguished from each other by typical sets of cadences. For example, the Missa sine nomine No. 2 uses only the three-voice double-leading-tone and octave-leap cadences at the ends of sections; the former appears only in this Mass, which is also Tinctoris' only Mass with neither the under-third cadence nor a perfect authentic cadence at the end of any section. The Missa sine nomine No. 3, on the other hand, contains only authentic cadences, two with the under-third formula. The types of cadences and the frequency of their use in each of Tinctoris' larger sectional compositions are shown in Table 5. Despite the distinctions evident in the table, it seems that the types of cadences in a work, while they might be helpful in establishing a chronology for Tinctoris' compositions, provide a questionable basis on which to formulate conclusions without the aid of additional evidence. A composer such as Tinctoris--conservative in many respects--might well use the older forms of the double-leading-tone and octave-leap cadences long after newer forms began to appear.
### Table 5

**Final Cadence Types**

*In Tinctoris' Larger Compositions*

<table>
<thead>
<tr>
<th></th>
<th>Double-leading-tone</th>
<th>Octave-leap</th>
<th>7-6-8</th>
<th>7-8</th>
<th>Other</th>
<th>Unresolved</th>
<th>3rd present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missa L'homme armé (4 v)</td>
<td>0 (1) (^a)</td>
<td>11 (^b)</td>
<td>6 (^c)</td>
<td>1(^c)</td>
<td>2</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Missa sine nomine No. 1 (3 v)</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>15</td>
<td>2(^d)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Missa sine nomine No. 2 (3 v)</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Missa sine nomine No. 3 (4 v)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lamentationes Jeremiae (4 v)</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^a\) See Example 68.

\(^b\) Plus one cadence that combines features of the perfect authentic and octave-leap formulas (see Example 68).

\(^c\) See Example 77.

\(^d\) See Examples 63 and 73.

\(^14\) Table 5 does not include cadences in fewer than 3 voices.
Internal Cadences

Although internal cadences generally involve the same formulas as final cadences, they do differ in several important respects. Unlike the majority of final cadences, internal cadences frequently introduce a third in the second cadential chord; this is quite in agreement with current practice as well as with Tinctoris' statement, cited earlier, to the effect that an imperfect concord may appear from time to time in internal cadences.\(^{15}\) In addition, internal cadences frequently serve both to mark the end of a phrase and to introduce a new motive in imitation, an entrance of the cantus firmus, a new pair of voices, or a new textual phrase. One of the most significant differences between internal and final cadences, therefore, is that one or more voices in the former often maintain the contrapuntal movement. The several devices by which this is achieved will be discussed shortly. First, however, it would perhaps be well to examine some of Tinctoris' remarks that apply specifically to internal cadences.

Contrary to Apel's statement in the \textit{Harvard Dictionary of Music}, Tinctoris does not use the term "clausula" to mean cadence.\(^{16}\)

\(^{15}\)See above, p. 154 f.

It seems quite clear from his definition in the *Terminorum dif-
finitorium musicae* that a clausula is a phrase, not a cadence. 17 Tinctoris' term for cadence is *perfectio*, which refers also to the perfect quality of note values. His definition of the term is not without problems, however. He says:

Perfectio equivocum est ad duo; nam notae in sua perfectione permanentiam, et totius cantus aut particularem ipsius conclusionem designat. 18

After a brief definition dealing further with the first meaning, he adds:

Et pro secundo sic: Perfectio est totius cantus aut particularem ipsius conclusio. 19

An understanding of this definition depends in part on the meaning of the word *cantus*, which, according to the *Terminorum*, can refer either to a melody (*cantus simplex*) or to a part-song (*cantus compositus*). 20 A cadence, then, may occur both at the ends of phrases and at the end of a composition, which, of course, is in accord with our understanding of cadence today. Tinctoris' use of the term *perfectio* undoubtedly reflects the fact that

17"Clausula est cuiuslibet partis cantus particula in fine cuius vel quies generalis vel perfectio reperitur:" *Terminorum diffinitorium musicae*, Chapter III (see CS IV, 180).

18 See CS IV, p. 186.

19 The text, given incorrectly by Coussemaker (ibid.) and Parrish (op. cit., p. 48), can be found as above in Armand Machabey, Johannis Tinctoris: *Terminorum Musicae Diffinitorium* (C. 1475); Lexique de la musique; Texte latin, traduction française, Introduction et Commentaires (Paris, Richard-Masse Éditeurs, 1951), p. 42.

20 CS IV, 179 f.
most cadences involve one of the perfect consonances.

Tinctoris makes several other statements regarding "perfections" that must be examined at this point. The fifth general rule presented in Book III of the Liber reads:

Supra nullum prorsus notam sive media, sive superior, sive inferior fuerit perfectio constitui devet per quam cantus distonatio contingere possit.\footnote{\textit{Tbid.}, p. 149.}

As one might expect, this statement has received several translations, with somewhat different meanings.

Above absolutely no note, be it medium, superior, or inferior, should a perfection be taken by which a removal from its mode \textit{distonatio} can happen.\footnote{Seay, \textit{The Art of Counterpoint}, p. 135.}

This translation by Seay contrasts with the following two by Jeppesen and Reese respectively:

A cadence is not permitted over any tone, whether high or low, if it interferes with the development of the melody.\footnote{Knud Jeppesen, \textit{Counterpoint}, trans., G. Haydon (New York: Prentice-Hall, 1939), p. 12.}

A cadence should not be introduced on any note—high, medium, or low—if it breaks up the development of the melody.\footnote{Reese, \textit{op. cit.}, p. 144.}

The first translation assumes a reference to degrees of the mode on which a cadence should not be made, while the latter two in-
terpret distonatio as a break in melodic continuity. The example that accompanies the rule in the Liber seems to confirm the translations of Jeppesen and Reese; it contains asterisks where perfections could have been introduced over the progressions b-c, d-c, and g-f, but were avoided in order to maintain "the development of the melody." It is interesting to note that Tinctoris feels the application of the rule "should be left to the judgment of the ears"; as he often does, Tinctoris relies here on aesthetic judgment in the formulation and application of contrapuntal rules.

Tinctoris' seventh general rule states that, in singing above plainchant, "two or more perfections ought not to be made continuously in the same place." In the two-part example illustrating the rule, the Superius cadences on d', a, and d', all above d in the Tenor. Here again, Tinctoris is concerned with avoiding repetitions. After illustrating the rule, he goes on to say that one ought not to compose Tenors that require consecutive cadences in the same place. Tinctoris follows his own prescriptions, for, in the Missa L'homme armé, whose Tenor is "appropriate to this procedure," successive cadences on the same degree are not common; in the opening

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25 The passage, translated incorrectly by Seay (p. 135), reads: "Quod quidem penitus aurium judicio relinquendum censeo"; the translation above is mine.

"Kyrie," for example, with its many cadences, only two occur successively on the same tone, this the final.

The vague definitions discussed above make it difficult, on occasion, to determine when a cadence has actually taken place, for common cadential voice leadings often appear during the course of the counterpoint, yet seem not to be cadence points; these points often occur in the middle of textual phrases, and do not mark the ends of musical phrases. It would not seem appropriate, therefore, to consider them to be cadences in the usual sense. In the following discussion, only "true" internal cadences will be considered; these generally mark the close of a textual phrase in at least one voice, as well as a musical phrase in one or more parts.

The following discussion will consider the types of internal cadences found in Tinctoris' music and such important factors as the methods by which Tinctoris maintains the contrapuntal movement through the cadence point, the degrees on which the cadences occur, their frequency, and the relationship between internal and final cadences in a given work. Since the formulas used for internal and final cadences are identical and are related to the number of active voices, they need not be illustrated again. Any unusual formulas, however, will be treated here.
One of the devices most frequently used by Tinctoris to maintain the contrapuntal flow is the so-called "interrupted cadence," which involves a delayed entry in one voice at the second cadential chord; after the rest, the delayed voice then generally begins a new phrase. The interrupted cadence is found in two, three, and four parts; characteristic interruptions at cadences can be seen in Example 94. The interruption may appear in any of the voices; however, no cadences with delays in more than one voice were found.

Example 94

Tinctoris commonly introduces irregular or unusual voice leadings as a means of maintaining the motion through a cadence point; strictly speaking, any cadence including a third involves an unusual voice leading and is itself a device for maintaining the flow. Such irregular cadences are harmonically weaker than the standard cadential patterns and are often combined with an interruption in one part, as may be seen in Example 95. The last three excerpts shown in this example are unusual variations on
the octave-leap formula; in the first two, instead of an octave, the Contratenor leaps a major sixth up to the third of the second cadential chord. The last excerpt involves voice crossing between the Superius and Altus and also between the Tenor and Bassus at the cadence point.

Example 95

Another device commonly used to maintain the movement through the cadence is to continue one or more voices without pause; some typical examples—only a small sampling of the large number of such cadences—are given in Example 96.
Another frequently-encountered cadence is that in which some of the voices continue, while one voice is interrupted by a rest. This cadence is found in two-part counterpoint, but is more common in three or four parts (see Example 97).

Example 97
A common device in Tinctoris' music, and another method of maintaining movement through a cadence point, is the deceptive cadence, involving bass progressions up a step. These lead most often to the sixth degree (sometimes lowered) of the mode—i.e., a V-VI progression; they may also occur on the third degree, i.e., a II-III progression. Deceptive cadences often include the devices mentioned earlier, such as the delayed cadence in one part or a voice continuing through the cadence point, that further maintain the contrapuntal movement. The deceptive cadence cannot occur as a variation of the octave-leap or double-leading-tone formulas, since both of these require the fifth degree of the mode in both chords. It is, rather, a variation on the normal movements of the authentic formula. Some examples are shown in Example 98.

Example 98

Internal cadences often mark points of structural importance, such as the entrance of another voice, of a pair of voices, or of
a motive in imitation. These entrances, of course, also maintain
the contrapuntal continuity across the cadence point. The entrance
of a third voice at the cadence can occur, naturally, only in works
for three or four voices; the technique is used frequently in all
of the Masses and, in the Missa L'homme armé, often introduces a
cantus firmus statement (Example 99).

Example 99

The introduction of another pair of voices at internal
cadences is common in four-part counterpoint, when alternation of
voice pairs occurs (see Example 100).

Example 100
A similar effect is created in three-part works when a continuing voice is paired with an entering voice at the cadence, as in Example 101. Internal cadences can be a very effective means, not only of introducing new voices or a cantus firmus phrase, but also of setting off entries of a motive in imitation. The Missa sine nomine No. 3 frequently uses internal cadences in the latter way (see Example 102), although structural imitation is not characteristic of Tinctoris' style.

Example 101

From the same Mass comes the following excerpt (Example 103), in which the imitative entry between the Tenor and Contratenor begins in the measure preceding a cadence in the upper two voices. This technique is common in the continuously imitative style of the following generation but is rare in the music of Tinctoris.
Although the great majority of internal cadences in Tinc­
toris' compositions minimize the disruptive effect of frequent
cadences by one or another of the methods discussed above, there
are several instances in which the contrapuntal movement tem­
porarily stops in all parts on the cadential chord. It is sig­
nificant that such cadences occur only at structurally important
points, such as at changes in mensuration or textual divisions
within a section. In the first three excerpts in Example 104,
the cadence encloses a mensural change. The last cadence shown
effectively separates the "Et incarnatus" from the following
"Crucifixus" in the Missa sine nomine No. 1. In the same Mass,
a cadence of this type introduces a passage of hocket--a contrast
with the previous measures--between the two lower voices (see
above, p. 115 and Example 18 ).
In the *Lamentationes Jeremiae*, four cadences are written like final cadences with longs and fermatas, but clearly function as internal cadences. Not only do they contain the third in the second chord, but they avoid the authentic formula and use instead the half-cadence, Phrygian, and plagal formulas (see Example 105).
An important factor to be considered with regard to cadences in Tinctoris' works concerns the relationship between the types of formulas used for internal and final cadences in a given work. Other important considerations are the frequency with which internal cadences appear, the degree of the mode on which they occur, and the percentage of cadences including the third. These data for the first two movements of each of Tinctoris' Masses are presented in Table 6, which reveals some interesting characteristics of individual works and should be compared to the data on final cadences presented in Table . For example, the Missa sine nomine No. 2, in which final cadences are limited to the double-leading-tone and octave-leap formulas, contains several other formulas at internal cadence points. The under-third cadence, which is found in all the other Masses, does not occur as either a final or internal cadence in this Mass. The Missa sine nomine No. 3, which uses only the authentic cadence in final positions, contains all forms at internal points and favors the octave-leap formula above all others. The Missa sine nomine No. 1, on the other hand, is characterized by an overwhelming majority of
TABLE 6
INTERNAL CADENCE TYPES IN
THE FIRST TWO MOVEMENTS OF TINCTORIS' MASSES

<table>
<thead>
<tr>
<th></th>
<th>2-1 Bass Movement (including double-leading-tone cadences)</th>
<th>Octave-leap</th>
<th>Deceptive</th>
<th>Half</th>
<th>Plagal</th>
<th>Other</th>
<th>Total</th>
<th>With 7-6-8 in one part chord</th>
<th>Third present in second chord</th>
<th>On Final</th>
<th>On Dominant</th>
<th>On other degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>L'homme arme(^a) 235 measures</td>
<td>10 12 6 11 3 1 2(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45</td>
<td>6 27 26 12 7(^d)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sine nomine No. 1 171 measures</td>
<td>3 17 0 4 2 1 1(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>2 12 19 6 4(^e)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sine nomine No. 2 94 measures</td>
<td>7 1 3 2 0 0 2(^c)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>0 7 11 3 1(^f)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sine nomine No. 3(^g) 187 measures</td>
<td>6 8 12 2 1 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29</td>
<td>2 16 17 7 5(^g)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Gloria and Credo.
\(^b\) Includes deceptive cadences on the sixth degree (V-VI) and on the third degree (II-III) of the mode.
\(^c\) All involve a 7-8 progression in the lowest voice.
\(^d\) All on the fourth degree of the mode (G Dorian).
\(^e\) One deceptive cadence on the second degree (I-II), one deceptive cadence on the fourth degree (III-IV), one cadence each on the third and fourth degrees of the mode (C Dorian).
\(^f\) One on the sixth degree of the mode (C Lydian).
\(^g\) On the third degree of the mode (D Dorian).
authentic cadences in both internal and final positions. In each of the Masses, as is to be expected, the tendency is toward a greater variety of cadence types at internal than at final cadences.

As Table 6 clearly shows, cadences do occur on degrees other than the final and dominant of the mode; such cadences, however, comprise a very small percentage of the total. In each of the Masses, more than half of the cadences occur on the final of the mode, with most of the remainder occurring on the dominant. In certain of the cadences on other degrees, the possibility exists that a shift in the modal center has taken place, with the result that the cadence actually occurs on the final or dominant of a temporary modal center. For example, authentic cadences on the flatted seventh and third degrees are found in the Missa sine nomine No. 1 (Example 106).

Example 106

Since no octave-leap cadences appear in that portion of the Mass examined for this study, the table does not accurately reflect the fact that this cadence does appear in the work; it is, however, far less common in this than in any other of Tinctoris' Masses.

See the discussion of commixtio tonorum on p. 84 ff.
In both passages, the presence of an A-flat in the manuscript seems to indicate a shift in the modal center, from Dorian on C to a Lydian form on E-flat in the first passage and to centers on both E-flat and B-flat in the second. This work also contains several prominent cadences on the fourth degree and therefore appears to be in Lydian on F at these points.

There seems to be little, if any, relationship between the mode of a composition and the degrees other than the final and dominant on which cadences occur. For example, three of the Masses are in either the regular or irregular Dorian mode. Yet,
of these three works, the Missa L'homme armé cadences seven times on the fourth degree in just its first two movements. The Missa sine nomine No. 1 has cadences on the second, third and fourth degrees, and in the Credo on the seventh degree as well (see Example 106). The Missa sine nomine No. 3 cadences five times on its third degree in the two movements examined. Tinctoris' Masses, like the examples in his treatise on counterpoint, tend to refute Seay's translation that cadences should not cause "a removal from the mode." \(^{28}\) Tinctoris' observance of the seventh general rule, which states that consecutive cadences in the same place (on the same perfections) ought to be avoided, \(^{29}\) has already been mentioned.

While an exposition of the various types of internal cadences provides some insight into Tinctoris' style, the frequency with which he used these cadences is equally significant. In the portions of the Masses examined, about the same number of cadences occurred in a given number of measures, but individual movements or sections may vary from this norm. In the Missa L'homme armé, for example, the opening "Kyrid' with twenty-six measures plus the final note, contains at least fourteen points where a cadence

\(^{28}\) See above, p. 195 and fn. 22.

\(^{29}\) Seay, The Art of Counterpoint, p. 139.
formula appears. The Missa sine nomine No. 3, on the other hand, cadences only eight times in the forty-two measures preceding the final chord of its opening section. This difference, of course, is due in part to the presence of a cantus firmus in the former Mass, where many of the cadential points correspond to the initial or final notes of the cantus firmus phrases.

The most significant characteristics of internal cadences in Tinctoris' compositions, then, are the maintenance of contrapuntal movement over the cadence point, the use of internal cadences to set off points of structural or textual importance, and the greater freedom as regards the formulas used and the degrees on which the cadences occur. Tinctoris' formulas for both internal and final cadences are truly representative of the period in which he lived. His use of cadences supports Apel's statement, cited earlier,30 concerning the significant changes taking place in cadential formulas during this period. While many of the cadences are common in the works of his predecessors—seemingly a conservative facet of Tinctoris' style—they are typical of his contemporaries as well. His cadences incorporate older elements, such as the Landini sixth, double-leading-tone, and octave-leap formulas, but they also point to the styles of future generations in their use of cadential extensions, the authentic formulas, and, particularly, the presence

30See above, p. 174.
of a third in the second chord. It is perhaps this last feature that is the most significant—an indication of the changing attitude toward this sound. The inclusion of an imperfect consonance constitutes a sin of which the composer must still absolve himself by "resolving" it to a perfect fifth. That the tide was turning, however, is clear not only from the music of the period—that of Tinctoris included—but also from statements, such as that by Tinctoris, that "it is not a bad thing" if an imperfect concord appears in some cadences. 31 It is obvious that the sound of a complete triad at the ends of movements and compositions was beginning to please the composers of the period.

31See above, p. 188 and fn. 8.
CHAPTER VI

STRUCTURAL AND UNIFYING DEVICES

Of the many contributions made by the composers of the fifteenth century to the development of Western music, the establishment of the five-movement polyphonic Mass Ordinary as a musically unified whole must be considered their central achievement. Attempts at unification in the Mass began with the grouping of plainchants into liturgically unified cycles. The appearance of musically unified pairs of polyphonic Mass movements in the early fifteenth century quickly led to complete cycles, which are frequently classified according to the means by which their movements are unified, i.e., motto beginnings or a cantus firmus. Some recent articles have shown, however, that our views on unification have perhaps been too limited and that certain techniques antedate the more frequently mentioned devices.1 As Philip Gossett remarks, "the notion that early pairing involved only mottoes or borrowed tenors is clearly inadequate."2 Although this statement


2Philip Gossett, op. cit., p. 231.
was made in reference to early fifteenth-century paired movements, it is equally applicable to Mass cycles, including those of Tinctoris, written during the closing years of the century. Other unifying techniques, and their external signs, include:

1) unity of mode and range, indicated by the agreement of finals, clefs, and signatures;

2) unity of meter, as demonstrated by use of the same mensuration or the same succession of mensurations;

3) unity of musical structure and general style, as evidenced by the number and type of voices, and the way those voices are treated; and

4) unity of melodic and contrapuntal style, as seen in cadences, dissonance treatment, melodic and rhythmic characteristics, etc.

To these unifying techniques, composers soon added the motto beginning and the cantus firmus, which establish thematic or melodic relationships between movements. The earlier techniques may seem to us so normal as to be the unconscious result of writing paired Mass movements, but the appearance of several in conjunction can only have been intentional. Even more intentional, obviously, are the thematic devices, which may often overshadow the earlier techniques, but which do not, however, replace them. Our purpose here, then, is to examine the various ways in which Tinctoris unifies his Mass cycles.
Unity of Mode and Range

Unity of mode and range in cyclic Masses is so much taken for granted that its absence is conspicuous. Yet, the outward signs of this unity—consistency in the use of finals, clefs, and signatures—have sometimes been ignored in modern studies, as well as in earlier times. For example, these details match with much less regularity in early fifteenth-century Mass movements that were brought together by a scribe than they do in movements that were composed as pairs. Tinctoris' Masses, like those of most composers, are remarkably consistent in their use of the external indicators of modal unity. As may be seen in Table 7, the finals, clefs, and signatures of a given voice part remain relatively consistent throughout a work. In the Missa sine nomine No. 1, several sections lack any clef whatsoever, but the placement of the signature of two flats confirms its normal position. Only in the Tenor of the Missa sine nomine No. 3 do we find frequent changes of clef position. In some instances, departures from normal clef positions occur in sections where one voice drops out and the voice with a clef change assumes a different polyphonic function. In IIIIB, for example, where the Tenor replaces the silent Contra-


4 Complete information for each subdivision of the Masses is given in Appendix B.
tenor, the clef change accommodates its lower range. On the other hand, although each of the clef changes in the Missa sine nomine No. 2 is accompanied by a slight drop in range, other sections in this lower range are written without a change of clef. The lone clef change in the Missa L'homme armé—from C² to C¹ in the Superius in IIIB—is accompanied by a significant change of range. In eleven of seventeen sections in this Mass, the range of the Superius is from g to c³; five of the remaining sections vary from this range by only one note. In the section with a clef change, however, the Superius lies between c¹ and d⁴, reflecting the change of clef downward. The change of range here may be the result of the canonic writing in which the Altus sings the Superius melody at the fourth below.

The high degree of modal unity in Tinctoris' Masses is perhaps best demonstrated by the fact that in each Mass all movements and sections have the same modal center and, with one exception, cadence on the final of the mode. The lone exception occurs in the Missa sine nomine No. 1, in which the A section of the Agnus Dei ends with a half cadence; this situation reflects the manuscript division of the first "Agnus Dei" into two sections. Although temporary changes of mode may occur within sections (see Chapter III), in no instance do they obscure the prevailing modal scheme.
### TABLE 7

**CLEFS, SIGNATURES, AND FINALS IN TINCTORIS' MASSES**

<table>
<thead>
<tr>
<th>Clefs</th>
<th>Signature</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S A T CT</td>
<td></td>
</tr>
<tr>
<td>Missa sine nomine No. 1&lt;sup&gt;a&lt;/sup&gt;</td>
<td>C&lt;sup&gt;4&lt;/sup&gt; F&lt;sup&gt;4&lt;/sup&gt; Fam&lt;sup&gt;3&lt;/sup&gt; b&lt;sup&gt;b&lt;/sup&gt;, F&lt;sup&gt;b&lt;/sup&gt;</td>
<td>C</td>
</tr>
<tr>
<td>Missa sine nomine No. 2&lt;sup&gt;b&lt;/sup&gt;</td>
<td>C&lt;sup&gt;1&lt;/sup&gt; C&lt;sup&gt;1&lt;/sup&gt; C&lt;sup&gt;3&lt;/sup&gt; none</td>
<td>C</td>
</tr>
<tr>
<td>Missa sine nomine No. 3&lt;sup&gt;c&lt;/sup&gt;</td>
<td>C&lt;sup&gt;2&lt;/sup&gt; C&lt;sup&gt;4&lt;/sup&gt; C&lt;sup&gt;4&lt;/sup&gt;+F&lt;sup&gt;3&lt;/sup&gt; F&lt;sup&gt;3&lt;/sup&gt; none</td>
<td>D</td>
</tr>
<tr>
<td>Missa L'homme armé&lt;sup&gt;d&lt;/sup&gt;</td>
<td>C&lt;sup&gt;2&lt;/sup&gt; C&lt;sup&gt;3&lt;/sup&gt; C&lt;sup&gt;4&lt;/sup&gt; F&lt;sup&gt;4&lt;/sup&gt; b&lt;sup&gt;b&lt;/sup&gt;</td>
<td>G</td>
</tr>
</tbody>
</table>

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<sup>a</sup>Clefs are absent from the Superius part in IIIA, IIIB, IIIE, the entire Sanctus, and VA and VC; the Tenor lacks clefs in the Gloria, and Sanctus, and IIIA-D. In IIIE, VA, and VC, the following clef replaces the normal F clef: \( \text{f} \). This Mass is the only one in the Ms Verona, Biblioteca capitolare DCCLV in which the Gamma clef ( \( \text{g} \) ) is found.

<sup>b</sup>In IVB the Superius has C<sup>2</sup>, as does the Tenor in IC; in IVD, a C<sup>1</sup> replaces the usual C<sup>3</sup> of the Contra.

<sup>c</sup>The Tenor has C<sup>4</sup> in IIA, IID, IIIA, IVD, F<sup>3</sup> in IIIB, IIIC, IVA, IVC, and C<sup>5</sup> in IIC (the Mass is without a Kyrie and Agnus Dei).

<sup>d</sup>In IIIB, the Superius has C<sup>1</sup>; the Altus in IIIB is not notated, since it is in canon with the Superius.
Unity of Mensuration

In conformance with a common practice of the fifteenth century, mensurations and patterns of mensural succession appear as unifying structural devices in the Masses of Tinctoris. These patterns are different in each Mass and range from fairly simple and regular in the Missa sine nomine No. 2 to highly complex in the L'homme armé Mass. All of the Masses, however, have one factor in common, namely the use of perfect tempus with minor prolation (O) for the initial section of every movement.

As shown in Figure 45, the mensural patterns in the Missa sine nomine No. 1 appear to be fairly simple, but the use of only the signs O, C, ¾, and Ç as initial signatures obscures the internal mensural complexity of some sections (see the discussion of IID in Chapter II). Except in the Sanctus, Tinctoris uses some form of tempus perfectum (either O or ¾) for the last section. Between the opening and closing sections in perfect tempus, Tinctoris introduces one or more sections in either C or Ç in somewhat irregular patterns.

\footnote{In Figures 45 through 48, mensural signs used successively are indicated by a dash (-); signs used simultaneously are indicated by a plus sign (+); dotted lines indicate repeated sections.}
The Missa sine nomine No. 2 is the simplest and most regular in its mensural patterns. Perfect tempus and tempus imperfectum diminutum appear in alternate sections, beginning, of course, with

A B C D E
Kyrie  O  O
Gloria  O  O  C  O
Credo  O  C  O
Sanctus  O  C  C
Agnus Dei  O  C  C

Fig. 45.--Mensural Signs in the Missa sine nomine No. 1

A B C D
Kyrie  O  O
Gloria  O  O  O
Credo  O  O
Sanctus  O  O
Agnus Dei  O  O

Fig. 46.--Mensural Signs in the Missa sine nomine No. 2
As in the other Masses, the initial section of each movement of the Missa sine nomine No. 3 is written with the sign \( O \). The second sections of the Credo and Sanctus are in \( \emptyset \); this is probably the mensuration intended also for the second section of the Gloria, which, although it lacks a sign, is clearly in some form of tempus perfectum. If this is the case, each internal section of all three movements is in some accelerated proportion. Because of the repeat of the "Osanna," each movement closes with a section in \( \emptyset \) (see Figure 47).

\[
\begin{array}{cccccc}
A & B & C & D & E \\
\text{Gloria} & O & [\emptyset] & \frac{3}{4} & \emptyset \\
\text{Credo} & O & \emptyset & \emptyset \\
\text{Sanctus} & O & \emptyset & \emptyset & \frac{3}{4} - \emptyset \\
\end{array}
\]

Fig. 47.—Mensural Signs in the Missa sine nomine No. 3

Perhaps the most interesting mensural patterns occur in the Missa L'homme armé, because of the many combinations used as initial and internal signs. Each movement begins with \( O \), either alone or combined with \( C \) or \( C \)-augmentation. In addition, each internal section involves \( \frac{3}{4} \), again either alone or combined simultaneously or successively with another sign. In the final section of each movement, some form of perfect tempus returns, except in the Sanctus, which repeats the "Osanna." Even here, the combination of \( \frac{3}{4} \) with \( C \) gives the latter mensuration.
the effect of being in perfect tempus.

\[
\begin{array}{cccccc}
 & A & B & C & D & E \\
Kyrie & \emptyset & \emptyset & \emptyset & \emptyset & \emptyset \\
Gloria & \emptyset & \emptyset & \emptyset & \emptyset & \emptyset \\
Credo & \emptyset & \emptyset & \emptyset & \emptyset & \emptyset \\
Sanctus & \emptyset & \emptyset & \emptyset & \emptyset & \emptyset \\
Agnus Dei & \emptyset & \emptyset & \emptyset & \emptyset & \emptyset \\
\end{array}
\]

Fig. 48.—Mensural Signs in the Missa L'homme armé

Several tendencies can be seen in Tinctoris' use of mensuration as a structural device in his Masses. First, and most apparent, is the appearance of the sign $\emptyset$ in the initial section of each movement; this is contrasted with tempus imperfectum diminutum in thirteen of the eighteen B sections. This succession of tempus perfectum by tempus imperfectum diminutum also occurs in many compositions of earlier composers, notably Dufay. Of the thirty-seven internal sections in Tinctoris' Masses, twenty-two begin with $\emptyset$ and eight with $\emptyset$, while only seven begin with $\emptyset$.

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6 See the tables included in Hamm, A Chronology of the Works of Guillaume Dufay, passim.
a basic mensuration—one in \( C \), six in \( O \). Tinctoris' tendency, then, is to use some accelerated mensuration for internal sections and for most final sections as well. Triple meter, still dominant in sacred works during this period, is found in forty-three of the seventy-one sections in the Masses, duple in the remaining twenty-eight. In this respect, Tinctoris' music looks backward rather than forward, for duple mensurations were to become the norm by the early sixteenth century.

Unity of General Style

Some measure of general stylistic unity is imparted to Tinctoris' Masses by his use of the same number and type of voices for all movements; he does not follow the practice of some composers of adding a voice for the Agnus Dei. He does, however, introduce contrast within movements by using fewer voices in some internal sections. Of his four Masses, two are scored for three voices and two for four voices. In the Masses \( \text{sine nomine} \) Nos. 1 and 2, both \( \text{À 3} \), certain sections are reduced to two parts. In the \( \text{Missa sine nomine} \) No. 3, for four voices, Tinctoris reduces some sections to two parts. In the \( \text{Missa L'homme armé} \), Tinctoris reduces the usual four-part texture to either two or three parts in some sections. Such a reduction of forces in certain sections had become traditional by Tinctoris' time, and occurred most typically in the "Christe," the "Benedictus," and the second
"Agnus Dei." Reductions were also a normal procedure in the Gloria and Credo, but the position of these passages was not as standardized. A comparison of Tinctoris' Masses reveals some irregularity in the position of passages with reduced scoring, not only in the Gloria and Credo, but in the other movements as well (see Appendix B).

Only the Missa sine nomine No. 2 and the L'homme armé Mass drop voices in the "Christe"; in the latter Mass, that section is scored for four voices, but only two are active at any given time. All the "Benedictus" sections are set for reduced forces except that of the Missa sine nomine No. 1; this is also the only Mass to use all voices for the second "Agnus," although the first fifteen measures involve only two voices at a time.

Passages for reduced voices in the Glorias of Tinctoris' Masses include "Domine Deus rex" in the Masses sine nomine No. 1 and 2, and "Domine Deus agnus" in all three sine nomine Masses. In his Credos, only the "Qui propter" of the Missa sine nomine No. 2 and the "Et incarnatus" of the Missa sine nomine No. 3 are set to reduced voices. In addition to the "Benedictus," the "Pleni sunt caeli" of the Sanctus of both the Missa sine nomine No. 3 and the L'homme armé Mass use fewer than four parts. In the Sanctus

7 These are the only sections in the Missa sine nomine No. 1 that do not use all voices.
movements in these two Masses, the alternation of full and re-
duced scoring assumes a kind of rondo pattern--i.e., full, re-
duced, full, reduced, full.

Although a reduction in the number of voices has little to
do with musical unity, parallel reductions in the "Christe" and
second "Agnus Dei" could at least provide some symmetry to the
opening and closing movements, just as the alternation imparts a
form to the Sanctus movements mentioned above. Such a reduction
in the middle sections of the outer movements does, in fact, oc-
cur in the Missa sine nomine No. 2 and the Missa L'homme armé.
Additionally, in the latter Mass, one section of each movement is
set to reduced voices. None of the other Masses shows traces of
such an attempt at symmetry.

The effect that a reduction of voices has on the range of
the remaining parts has already been briefly discussed; more often
than not, however, the voice ranges remain unchanged at such
points (see Appendix B). The other techniques of unification--
consistency in cadential formulas, dissonance treatment and other
aspects of melodic and rhythmic continuity--have been considered
earlier, and therefore need not be discussed further here.

Thematic Unity

In addition to the unifying devices discussed in the pre-
ceding pages, each of Tinctoris' Masses is given structural co-
herence by the use of a head-motive and, in the L'homme armé Mass, a cantus firmus as well. The head-motive, or motto, consists of "a brief characteristic motive in one or more voices, which recurs at the beginning of each movement in the same or only slightly varied form." This device represents one of the first attempts to relate paired movements and complete Masses by melodic means. During the Dufay period, the head-motive was combined with other melodic devices, particularly the cantus firmus, which gave a greater measure of thematic unity to multipartite works such as Masses.

The Head-Motive in Tinctoris' Masses

Although each of Tinctoris' Masses introduces some type of recurring motive at the beginning of each movement or section, each work is unique in the manner in which the device is used. As we shall see, Bukofzer's definition of the term is neither comprehensive nor specific enough to encompass all the ways in which Tinctoris uses head-motives, although none of the Masses can be called innovative in this respect.

The Missa sine nomine No. 1 presents its head-motive in a relatively simple form; the recurring motive consists of a three-part contrapuntal idea, which is the same at each restatement.

except for minor alterations. At the beginning of the Kyrie, the
motive appears as shown in Example 108. In its remaining state-
ments at the beginning of the first section of each movement, the
seventh and eighth notes of the Tenor are combined into a dotted
breve (on g). Additionally, in the Credo, Sanctus, and Agnus
Dei, the Contratenor rather than the Superius is interrupted by a
rest at the cadence point; and, in the Sanctus only, the phrase
closes on a deceptive cadence on E-flat. None of the internal
sections of the Mass bears the slightest trace of a recurring
motive.

Example 108

The Missa sine nomine No. 3, on the other hand, introduces
several head-motives at the beginning of internal as well as
initial sections. These motives are shorter than that of the
Missa sine nomine No. 1—each consists of about two measures of
counterpoint—and are somewhat more varied at successive statements.
The initial sections of each of the three movements of this Mass
begin with the following versions of the motive:
The final section of each movement introduces another idea, not altogether dissimilar from the introductory motive. It appears in almost the same form in the Gloria and Credo, but in the Sanctus it is disguised somewhat by the omission of one voice and by voice exchange—shown by dotted lines—between the two lower parts (see Example 110). However, the Altus, particularly in its first few notes, supplies key pitches from both the Superius and Altus of the original versions. Since the final section of this movement is a repeat of the "Osanna," this version of the motive first appears in the C section of the Sanctus; perhaps Tinctoris altered it here so that it would not be so easily recognized as the final motive at the first singing of the "Osanna," an internal section.
In addition to these initial and final motives, one internal section in each movement introduces a two-part idea, shown, in its three variations, in Example 111. At first glance, the upper parts of these motives appear to be unrelated, but the motives used in the Credo and Sanctus are progressively more simplified forms of the Gloria version.
Neither the C section of the Gloria nor the B section of the Sanctus contains a head-motive. The distribution of the three motives in the Mass, then, is as shown in Figure 49.

The absence of any motive in the C section of the Gloria is balanced by the Sanctus, which lacks a motive in its B section; the entire Mass centers on the Credo, of which each section begins with a head-motive.

The Missa sine nomine No. 2 occupies a place somewhere between the extremes demonstrated by the two Masses just discussed; in addition, this Mass involves an entirely different type of
head-motive—one that consists of a four-measure imitative exposition of a single melodic idea in all three parts. At its first statement, in the Kyrie, it appears as shown in Example 112. In each of the succeeding movements, the motive returns almost intact except for these variants:

Gloria: notes 11, 12, and 13 of the Altus are replaced by a single dotted half note on a';

Credo and Sanctus: the cadence is not ornamented in the Altus;

Agnus Dei: note 6 of the Superius is reduced by a quarter rest.

The internal sections of the Mass do not involve systematic use of this or any other head-motive, as did the Missa sine nomine No. 3, but the work is not completely devoid of suggestions of another motive. The fragments shown in Example 113 have been extracted from individual voices in the opening measures of the specified internal sections of the Mass. While all of these frag-
ments consist of basically the same melodic and rhythmic germ, their similarity may be only the unconscious products of composition by a single composer rather than a truly intentional attempt at unification. Whichever the case, they are conspicuous in their positions at the head of sections.

Example 113

\[
\begin{align*}
&\text{IIIB, Superius} & &\text{IIIB, Superius} & &\text{IIC, Superius} \\
&\text{IID, Contra} & &\text{IIIB, Superius} & &\text{IIID, Superius, Contra} \\
&\text{IVB, Tenor} & &\text{VB, Superius} \\
\end{align*}
\]

In addition to being based on a cantus firmus, the L'homme armé Mass makes use of what seems to be an extension and adaptation of the head-motive principle. Although there is no literal repetition of an opening motive as in the other Masses, each movement and many of the sections begin with motives drawn from the first phrase of the cantus firmus. In many cases, indeed, the entire first phrase is present, either in its original form or
embellished in varying degrees. Only two sections--IVB and VB--seem not to be clearly related to the cantus firmus in this way, and one of these begins with an ascending fourth, the opening interval of the L'homme armé tune. This derivation of material from the cantus firmus will be dealt with in more detail in the following pages.

Because of its brevity, the head-motive is one of the weakest devices for unifying the long and sectional movements of a Mass cycle. It is rarely, if ever, used alone, of course, and it does confirm the intended relationship of the individual movements. It is also important, because it constitutes one of the earliest attempts at thematic unification and because it appears in so many compositions of the fifteenth century.

_Tinctoris' L'homme armé Mass has been described as a work in which there is "a wilderness of effects," the total result being "rather jumbled." This situation undoubtedly results in part from Tinctoris' widely diversified treatment of the melody. In order to facilitate description of that treatment, it will be helpful to establish strict definitions of the terms "cantus firmus"

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and "paraphrase" that will be used in the following discussion. Since most definitions, whether strict or loose, introduce arbitrary boundaries at some point, the term "cantus firmus" will refer only to literal statements of the borrowed melody that serve as the structural basis of the polyphony. Any embellished or modified version of the melody will be considered a paraphrase. In general, the following considerations determine the existence of a paraphrase:

1) the notes of the melody occur in their original order, although notes may be repeated and repeated notes in the original may be omitted;

2) the paraphrase usually begins and ends on the same notes as the original melody;

3) the notes of the original melody usually appear in prominent positions in the paraphrase; and

4) the first few notes of the paraphrase generally outline the original melody more or less clearly, with more free tones being added later, especially near cadences.\textsuperscript{10}

Tinctoris, like most composers of this period, employs varying degrees of paraphrase in his \textit{L'homme armé} Mass. These degrees extend from only slight modification of the melody by a few added notes, through moderate to extreme paraphrase with many added and repeated notes (see Example 114).

\textsuperscript{10} After Sparks, \textit{op. cit.}, p. 73 f.
Example 114

L'homme arme melody

Slight paraphrase

Moderate paraphrase

Extreme paraphrase

Both paraphrase statements and cantus firmus statements may be preceded or followed by free counterpoint, i.e., they may evolve out of or into counterpoint unrelated to the melody; this, however, is more typical of paraphrase than of cantus firmus statements (see Example 115).

Example 115
The distinction being made here, then, is between treating a cantus prius factus (a previously-made melody) as a structured cantus firmus and using it to provide embellished melodies in the polyphonic texture. To observe this distinction, I believe, will eliminate the confusion caused by such statements as: "There are only two truly different ways of treating a cantus firmus—literally and paraphrased."\(^{11}\) Such a statement fails to recognize that cantus firmus and paraphrase imply different compositional techniques. It should read: there are only two different ways of treating a cantus prius factus—literally as a cantus firmus and paraphrased. As used here, then, "cantus firmus style" will refer to literal statements of the borrowed melody, usually in longer note values, around which the other voices of the polyphonic complex are woven. Paraphrase technique, on the other hand, involves the appearance of ornamented versions of the melody in any or all parts, with those parts being stylistically similar (See, for example, the "Christe"). Thus, the difference between the two techniques involves not only the treatment of the melody itself, but the relationship of the voices. These two techniques may also be combined; indeed, the fusion of the two procedures is perhaps the most interesting aspect of Tinctoris' Mass.

\(^{11}\)Sparks, op. cit., p. 2.
Example 116

A

\begin{align*}
\text{a} & \quad \text{b} \\
\text{(b')} & \quad \text{(b'')} \\
\end{align*}

B

\begin{align*}
\text{c} & \quad \text{d} \\
\text{(c')} & \quad \text{(c'')} \\
\end{align*}
The L’homme armé melody itself presents some problems, not the least of which is the fact that the original version is not known. The tune was used by many well-known composers, from the time of Dufay to the early Baroque, but their versions differ, not only in melodic and rhythmic details, but also in mode. The version used by Tinctoris in his Mass is in the transposed Dorian on G—his "first irregular tone"—rather than the Mixolydian version. Example 116 shows the tune as used by Tinctoris, as well as the variants most commonly encountered in his Mass. The motive in brackets—used in only one section of Tinctoris' Mass—is included in the Masses of Dufay, Busnois, Ockeghem and others; Caron and Regis omit it, as does the last of the six anonymous Masses in the Ms Naples VI E 40. Tinctoris notated the tune at different times in the ternary patterns of perfect prolation, tempus, and modus (see the first three passages in Example 117). In a few cases, phrases appear in longer imperfect values with the repeated notes omitted, or even in irregular values, as in the last excerpt in Example 117.

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12 Ockeghem's Mass may be earlier; see Reese, *op. cit.*, pp. 72 and 125.

13 See *ibid.*, p. 73 for a discussion of the mode of the tune.

Several structural aspects of the melody are worth noting, for they affect the structure of the various movements and sections of the Mass. The melody in A B A form can be further divided into phrases, shown as a, b, c, and d in Example 116.  

Although the tune divided quite logically into these sections, the Masses of the Naples manuscript divide it somewhat differently; see Cohen, op. cit., p. 25 ff.
In his cantus firmus statements of the tune, Tinctoris almost always separates phrases a and b, and usually keeps c and d as melodic units. Deviations from this pattern sometimes involve a further separation of phrase c into motives c' and c", which occurs in a significant manner in several movements, and a less frequent separation of phrase b into motives b' and b". Some portion of the melody appears as a cantus firmus in each section of the Mass save those scored for fewer than four parts—"Pleni sunt caeli" and "Benedictus" in the Sanctus, and the second "Agnus Dei."

The absence of the cantus firmus in these sections is typical of Masses by other composers of the period, just as is the reduction of voice parts. In the "Christe," where fewer than four voices are active at any time, the melody does not appear as a cantus firmus but is paraphrased. These statements may require qualification because the final phrase of the melody is present in short note values at the end of the "Christe" and of both Sanctus sections mentioned above. The same situation occurs at the end of section C of the Credo and of the Gloria "Amen," which otherwise lack a cantus firmus. It seems probable that Tinctoris has adapted a conventional cadence approach into a quotation from the cantus prius factus that is neither a paraphrase nor a true cantus firmus statement. 16

16 The same melodic figure appears in internal cadences, as in the Bassus in measures 7-8 of the Kyrie and in measures 19-22 of the Credo.
As a cantus firmus, the L'homme armo tune is not confined to
the Tenor or any other voice; in fact, it appears most frequently
in the Altus, less often in the Superius and Bassus. The extent
to which the cantus firmus is transferred from one voice to
another will become evident in the following discussion of its
use in the individual movements.

The melody appears in a variety of styles in each of the
three sections of the Kyrie; not only is the cantus firmus heard
at several different mensural levels, but there is also a great
deal of variation in the degree to which paraphrase appears in
the other voices. In the opening "Kyrie," the Altus presents the
entire melody in triple meter. Because the Altus begins in Ç-
augmentation, phrases a and b of the cantus firmus are actually
heard as perfect tempus instead of perfect prolation. The propor-
tional sign \( \frac{2}{1} \) in measure 15 renders the minim equal in all parts
and produces \( \frac{6}{4} \) meter in the cantus firmus against \( \frac{3}{2} \) in the other
parts. The opening measures of both the Superius and Bassus an-
ticipate the cantus firmus entrance with free rhythmic statements.
The Superius enters at the fifth with phrase a in shortened
values, while the Bassus links phrase a with motive b' at the
lower octave. The b' motive anticipates a brief imitation in
the Tenor, before the Altus continues with the cantus firmus. The
other three voices then proceed in free counterpoint with oc-
casional references to the opening or closing phrases of the
L'homme arnê throughout the rest of this section.

With one brief exception (see measures 41-43 of the Bassus), the "Christe" presents the entire melody in paraphrase style. Each of the first three phrases is paraphrased by the upper part of different voice pairs. Phrase d appears unornamented in the Bassus, while the Superius and Tenor share in a telescoped repeat of phrases a and b (measures 45-49).

In the final "Kyrie," the Tenor and Altus share in presenting the cantus firmus. The Tenor states the first two phrases with the a phrase anticipated at the fifth in the Altus and answered by a slightly ornamented and rhythmically displaced statement at the octave in the Superius. The b phrase is anticipated almost exactly by the Altus at the unison. The c' and d phrases, in the Altus, are heard against unrelated counterpoint in the other parts. The restatement of phrases a and b takes place in the Tenor, with anticipatory statements of the a phrase in the Superius and Bassus. The Bassus again links the a and b phrases in a manner almost exactly like that in measures 1-5 of the opening section, perhaps an intentional effort to unify sections of the Kyrie. The entire movement, then, presents the following scheme as regards the structural use of the L'homme arnê tune.
<table>
<thead>
<tr>
<th>Section Incipit</th>
<th>Phrases</th>
<th>Treatment</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Kyrie&quot;</td>
<td>abcdab</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td>&quot;Christe&quot;</td>
<td>abc</td>
<td>paraphrase</td>
<td>T, S, A</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c.f.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>paraphrase</td>
<td>S, T</td>
</tr>
<tr>
<td>&quot;Kyrie&quot;</td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>cd</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
</tbody>
</table>

Fig. 50. -- Treatment of the L'homme armé melody in the Kyrie

In contrast to the Kyrie, the Gloria does not introduce the melody in its entirety in each section. The "Et in terra" contains the complete melody but does not always treat the phrases in succession; only phrases a and b receive cantus firmus statements in the Tenor (measures 10-23), preceded by paraphrases in both the Superius and Altus, while the Bassus stresses the opening interval of the fourth. After an extended section containing motives based on c and d, the Tenor begins a slightly paraphrased version of phrases a and b (m. 49), which includes the motive bracketed in Example 116. The Altus overlaps these with paraphrases of c and d.

The "Qui tollis" is musically linked to the preceding section by virtue of the fact that it begins with the c and d phrases in cantus firmus style, as though continuing another ternary statement following the final a and b in the "Et in terra." The c and d phrases, however, are here in duple mensuration. The Superius and
Altus divide phrase c, after which phrase d is heard in the Superius. Against these cantus firmus statements, the Tenor and Bassus paraphrase the a phrase and hint at phrase b in measures 62 and 72 in the Tenor. A paraphrase of a begins in the Superius in measure 75 and is followed by a cantus firmus statement of the b phrase in the Tenor. Syncopations in this statement produce temporary shifts from the prevailing duple mensuration to triple metrical patterns (Example 118).

Example 118

Original meter

Gloria (mm. 77-80; Tenor)

The Tenor then repeats phrases a and b in rhythmically varied statements (Example 119), which lead immediately to phrase c' in the Altus and phrase c" in the Bassus, then the Superius (Example 120). All of these statements feature the same kinds of shifts between duple and triple patterns as seen in Example 118 above.

Example 119
The Tenor ends the section with a statement of phrase d, to which only one extra note is added. The voices in places other than those mentioned are unaffected by the borrowed melody.

The third section of the Gloria, the "Cum Sancto Spiritu," completes this final appearance of the cantus firmus by strongly emphasizing phrases a and b, both of which are stated in cantus firmus style in the Altus. Phrase a is anticipated by paraphrases in the Superius and Tenor and an almost exact statement in the Bassus. All three accompanying voices introduce motive b' in imitation. After a mensuration change, the polyphony of the "Amen" is almost completely free of influence of the L'homme arme tune.

The Gloria, then, is organized around three presentations of the melody as shown in Figure 51. The first two are linked by a common statement of the A section (see the braces in Figure 51). Additional structural coherence is produced by beginning each section of the movement in cantus firmus style with the successive
ternary divisions of the melody, i.e., the "Et in terra" with A, the "Qui tollis" with B, and the "Cum Sancto Spiritu" with the return of A.

<table>
<thead>
<tr>
<th>Section Incipit</th>
<th>Phrases</th>
<th>Treatment</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Et in terra&quot;</td>
<td>ab</td>
<td>paraphrase</td>
<td>S, A</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>cd + ab</td>
<td>paraphrase</td>
<td>All</td>
</tr>
<tr>
<td>&quot;Qui tollis&quot;</td>
<td>c'</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>c''</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>a</td>
<td>paraphrase</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>b</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>c'</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>c''</td>
<td>c.f.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c.f. (+ 1 note)</td>
<td>T</td>
</tr>
<tr>
<td>&quot;Cum Sancto&quot;</td>
<td>ab</td>
<td>c.f.</td>
<td>A</td>
</tr>
</tbody>
</table>

Fig. 51.—Treatment of the L'homme armé melody in the Gloria

In contrast to the Gloria, each of the four sections of the Credo presents the complete L'homme armé melody using both paraphrase and cantus firmus styles. The greater part of the "Patrem" is free counterpoint, but the section begins with a paraphrase of the a and b phrases in imitation and a Tenor statement of the b phrase in long note values with an ornamented approach to the cadence. In measures 11-50, suggestions of phrases c and d as well as motive b' occasionally appear at different pitch levels. Increased rhythmic complexity in the Superius and Altus in measures 51-53 effectively introduces an entrance of a cantus
firmus statement of phrases a and b in the Tenor at measure 54. This statement, which concludes the first section of the Credo, is accompanied in part by paraphrases in the Superius and Altus.

The "Et incarnatus" is the only section of the Mass with a canon throughout. The comes in the Superius is notated, rather than the dux in the Altus, which carries the canon "absque mora primum / ruit in dyatessaron ymm." A probable reason for this unorthodox situation is that the dux is in D Dorian, while the comes is notated in G Dorian, the mode of the Mass. The canonic parts consist of more or less conservative paraphrases of the complete ternary melody; perhaps most significant—and unusual during Tinctoris' period—is the fact that the two lower voices reflect the ternary division of the canonic melody, giving this section an A B A form. Measures 78-83 repeat almost exactly measures 67-72, except for the curious omission of notes equalling two semibreves from each part. (The notes in brackets in Example 121 are omitted at the repeat.) Because of the canonic imitation at the fourth below, this section involves the combination of modal centers on both G Dorian and D Dorian, as noted in Chapter III. The section as a whole remains in G Dorian, however.
The "Et resurrexit" opens with a cantus firmus statement of $a$ and $b'$, followed by a slight paraphrase of $b''$; all of these occur in the Bassus transposed to D Dorian. The Superius later paraphrases motive $c'$, but begins on the note $c''$ instead of the $d''$ that would be expected in the mode established in the preceding measures. The Altus follows with a paraphrase of $c''$ and $d$ in G Dorian; in measure 104, phrases $a$ and $b$, now in the Tenor,
return to D Dorian. These temporary changes of mode parallel the ternary structure of the melody, as shown in Figure 52, and they also provide a link to the previous section with its use of both the G and D Dorian modes.

mm. 84-95  mm. 96-(98)-103  mm. 104-112  mm. 113-118

A       B       A       (coda)
a + b   c' c'' + d   a + b   
D Dorian  G Dorian  D Dorian  G Dorian

Fig. 52.—Modal centers in the "Et resurrexit"

In the final section of the Credo the entire melody appears in cantus firmus style with the individual phrases migrating to all parts. The first two phrases, in the Altus, are stated in a sesquialtera proportion of tempus perfectum (\(\text{O}_3^\frac{3}{2}\)). Both are anticipated by paraphrases in tempus imperfectum diminutum (\(\text{D}\)) and phrase b is extended by repeated notes (Example 122).

Example 122

After two measures of free counterpoint, a rhythmic variant of the c' phrase in the Superius is imitated by an overlapping answer in the Altus. The d phrase, which then enters in the Bassus,
grows out of free counterpoint (see Example 123). Because of the application of coloration to the voices in $\gamma$ at this point, the whole middle part of this section (measures 130-133) is in a three-to-two proportion to the values of $\gamma$. (See Example 123 and also the transcription in Volume II.)

After the coloration ends, phrases a and b are heard in the Tenor, with phrase a again in tempus imperfectum diminutum. Thus, although this section is basically in $\gamma$, the cantus firmus always appears in triple meter, which is produced either by the sign $O_2^3$ or by coloration. Figure 53 shows the scheme of the entire Credo.

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17 The Tenor part is omitted from Example 123.
<table>
<thead>
<tr>
<th>Section Incipit</th>
<th>Phrases</th>
<th>Treatment</th>
<th>Voices</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Patrem&quot;</td>
<td>ab</td>
<td>paraphrase (motives)</td>
<td>S, T, B</td>
</tr>
<tr>
<td></td>
<td>cd</td>
<td>c.f.</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td></td>
<td>T</td>
</tr>
<tr>
<td>&quot;Et incarnatus&quot;</td>
<td>abcdab</td>
<td>canonic paraphrase</td>
<td>S, A</td>
</tr>
<tr>
<td>&quot;Et resurrexit&quot;</td>
<td>ab'</td>
<td>c.f.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>b''</td>
<td>paraphrase</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>c'</td>
<td>paraphrase</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>c'' d</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td>&quot;Confiteor&quot;</td>
<td>ab</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>c'</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>c''</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c.f.</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
</tbody>
</table>

Fig. 53.—Treatment of the *L'homme arme* melody in the Credo

In the A section of the Sanctus, the melody appears in *can­tus firmus* style in its entirety; all phrases except the d phrase are in C (\(\frac{6}{4}\) meter), and even this exception is rhythmically in \(\frac{6}{4}\), although it is notated in C. The a phrase, in the Tenor, is anticipated by paraphrases in the Altus and Bassus; the b and c' phrases are still in the Tenor, but do not influence the other voices. Phrases c' and c'' appear in the Superius and Altus, re­spectively, with the repeated notes omitted; these two voices change from C to C at these points. The Superius continues with the d phrase in smaller note values (m. 13), and, after several measures of free counterpoint, the a and b phrases are restated in the Tenor.
The "Pleni sunt caeli," which appears at first to be almost void of any influence of the melody, stresses the opening fourth of the tune to a significant degree not only at the beginning, but at many internal points as well (see, for example, measures 27, 31, 32, 33, 36, 37, 40, 41, 55-57, to cite the more obvious points). The b phrase, in its "cadential form," closes the section and leads effectively into the "Osanna."

The "Osanna" states the c, d, e, and b phrases, all in double augmentation and in the Altus throughout; presentation of the melody in long values is here the sole function of this voice. This treatment, accompanied by free counterpoint in the other three parts, constitutes the most conventional cantus firmus style found in the Mass.

The "Benedictus" shows some relation to the "Pleni," in that it too presents a paraphrase of the a phrase at the beginning and a statement of the "cadential" b phrase at the end; some internal points also are similar (compare mm. 37-42 of the "Pleni" with m. 110 f. of the "Benedictus"). Just as the "Pleni," closing with the b phrase, led to the "Osanna," which began with the c phrase, so does the "Benedictus" lead to the repeat of the "Osanna." In the Sanctus, then, we find that the L'homme armé melody is stated three times, according to the scheme shown in Figure 54.
<table>
<thead>
<tr>
<th>Section Incipit</th>
<th>Phrases</th>
<th>Treatment</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Sanctus&quot;</td>
<td>abc′</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>c′″ (c′)?</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>c″′</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>d</td>
<td>c.f.</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>ab</td>
<td>c.f.</td>
<td>T</td>
</tr>
<tr>
<td>&quot;Pleini&quot;</td>
<td>a (b)</td>
<td>paraphrase</td>
<td>A</td>
</tr>
<tr>
<td>&quot;Osanna&quot;</td>
<td>cdab</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td>&quot;Benedictus&quot;</td>
<td>a (b)</td>
<td>paraphrase</td>
<td>T</td>
</tr>
<tr>
<td>&quot;Osanna&quot;</td>
<td>cdab</td>
<td>c.f.</td>
<td>A</td>
</tr>
</tbody>
</table>

(ut supra)

Fig. 54.—Treatment of the L'homme armé tune in the Sanctus

The first "Agnus" presents phrases a, b, and c′ in what can best be described as rhythmically free augmentation, although the first two phrases are close to the original metric design. The other voices are not influenced by the melody, except for paraphrases of the a phrase by all parts preceding the entrance of the cantus firmus in measure 6 of the Altus. The second "Agnus" contains only one clear paraphrase statement of the melody's opening phrase in measures 25-28 of the Superius (see Example 124).

The final "Agnus" presents the melody in cantus firmus style
And also in its most complex proportional relationship—\( C^3 \) against \( O^3 \) in the other parts.\(^{18}\) Phrases \( c' \), \( d \), \( a \), and \( b \) of the melody are contained entirely in the Altus, with only minor deviations from its original rhythms, completing the statement begun in the first "Agnus." Paraphrases of each phrase or of important motives are scattered among all parts. The entire Agnus Dei presents the \textit{L'homme arnê} tune according to the following plan:

<table>
<thead>
<tr>
<th>Section Incipit</th>
<th>Phrases</th>
<th>Treatment</th>
<th>Voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Agnus Dei&quot; I</td>
<td>abc'</td>
<td>c.f.</td>
<td>A</td>
</tr>
<tr>
<td>&quot;Agnus Dei&quot; II</td>
<td>a</td>
<td>paraphrase</td>
<td>S</td>
</tr>
<tr>
<td>&quot;Agnus Dei&quot; III</td>
<td>c&quot;dab</td>
<td>c.f.</td>
<td>A</td>
</tr>
</tbody>
</table>

Fig. 55 --Treatment of the \textit{L'homme arnê} tune in the Agnus Dei

It is difficult to make any meaningful generalizations about a work such as Tinctoris' \textit{L'homme arnê} Mass, which apparently has as one of its ends the use of as many different styles of treating the \textit{cantus prius factus} as possible. Although the Mass seems, as Sparks says, to lack "a simple plan, . . . a dominant structural voice, or . . . any regular method" of treating the borrowed melody,\(^{19}\) the work is not altogether lacking in a plan.

\(^{18}\)See Chapter II.

\(^{19}\)Sparks, \textit{op. cit.}, p. 241.
Neither is it wise to assume only that Tinctoris was following "his own recommendation that a composer make use of all artifices in a large composition such as a Mass." One could hardly expect that Tinctoris—seemingly a person to whom codification and organization of material were important—would be satisfied only with diversity.

Diversity, or "varietas," does play a role in this work, however; this may be due not only to Tinctoris' opinions, but to the possibility that during the late fifteenth and early sixteenth centuries, the L'homme armé Mass as a genre became a composition in which a composer demonstrated his ability to handle the many devices of the period. The Masses of Tinctoris, as well as those of other composers of the period, tend to support such a theory. None of Tinctoris' other Masses approaches the Missa L'homme armé in technical complexity. Perhaps this is due to the fact that none of his other works uses a pre-existent melody, but an examination of the Masses of other composers reveals a similar situation. Of six cantus firmus Masses by Dufay, his L'homme armé Mass is the most complex; indeed, Tinctoris especially praises this work for its diversity. The many Masses cited by Reese for their complexities include Fauges' Missa L'homme armé, which may be the

20 Ibid.

earliest example of a canonic Mass, La Rue's two L'homme armé Masses, one of which involves complex mensuration canons, and Josquin's Missa L'homme armé super voces musicales, with its unusual treatment of the melody. Part of the reason for the variety in Tinctoris' Mass, then, must be due to his desire to show all the different ways he could treat the \textit{cantus prius factus}.

The diversified treatment of the \textit{L'homme armé} melody, however, should not be allowed to obscure those devices that create structure and unity in the work. Although the combination of paraphrase and cantus firmus techniques appears almost haphazard to Sparks, it should be noted that Tinctoris conforms to custom in that those sections where the number of voices is reduced--the "Christe," the "Pleni sunt caeli" and "Benedictus," and the second "Agnus"--also lack the melody in cantus firmus style. Although the cantus firmus migrates from one voice to another, the Altus is clearly the "dominant structural voice." It has the cantus firmus on no fewer than thirteen occasions, varying in length from one phrase to the complete tune as, significantly, in the opening "Kyrie" and the first and third "Agnus." There seems

\footnotesize
\begin{itemize}
\item \textsuperscript{22} Reese, \textit{op. cit.}, p. 111.
\item \textsuperscript{23} \textit{Ibid.}, p. 269.
\item \textsuperscript{24} \textit{Ibid.}, p. 236.
\end{itemize}
also to be a pattern of alternation between cantus firmus and paraphrase styles between sections; this can be seen most clearly in the Kyrie, Sanctus, and Agnus Dei, and to a lesser extent in the other movements. In both the opening "Kyrie" and the final "Agnus" the cantus firmus is stated in augmentation in the Altus. In addition, every movement ends with at least a partial statement of the tune in cantus firmus style, and all but the Gloria and Credo begin with the melody in cantus firmus style. The many devices that Tinctoris introduces to impart structural unity to individual sections have already been mentioned. Therefore, of Sparks' objections, perhaps the only valid one is his observation that the Mass lacks "a simple plan," for simple it is not. If the work seems "rather jumbled," perhaps it is because there are several "plans," and because the composition is founded on a concept of varietas. It seems highly unlikely that Tinctoris would intentionally create a work in which there is nothing but "a wilderness of effects," for in his Liber de arte contrapuncti, he says that:

Any composer or improvisor (concentor) of the greatest genius may achieve . . . diversity, [which/25

---25---
See above, p. 253.
provokes the souls of listeners into delight, . . . if he composes . . . now by one quantity, then by another, now by one perfection, then by another, now by one proportion, then by another, now by one conjunction, then by another, now with syncopations, then without syncopations, now with fugae /canons/, then without fugae, now with pauses, then without pauses, now diminished, then as written. Nevertheless, the highest reason must be adhered to in all these.  

Tinctoris' Use of Plainchant

Only three of Tinctoris' sacred compositions appear to be based in any way on an identifiable plainchant source. The two-part motets—Alleluia and Fecit potentiam—are found in the un-numbered manuscript in the Segovia Cathedral Library; the first is without a text incipit and both lack an ascription. The first is certainly by Tinctoris, for it appears in a slightly different version in his Liber de arte contrapuncti; the second is attributed to Tinctoris because it is surrounded by his works in the manuscript.

The source of the cantus firmus of the Alleluia is an Alleluia in the first mode, of which Tinctoris borrows the first fourteen notes. The Tenor then continues with what may be a different jubilus. Preceding the appearance of the Alleluia in

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26 Seay, The Art of Counterpoint, p. 139 (italics mine).
the counterpoint treatise, Tinctoris explains how "counterpoint is made on plainchant, when, through specific quantities, the notes of that plainchant are measured according to those forms /their forms/, which are those of longs, breves, and semibreves." The original notation, and the notation of Tinctoris' Tenor with a transcription are shown in Example 125.

Example 125

LU Notation  Tinctoris' Tenor

Transcription

The Fecit potentiam has only the incipit in the Segovia manuscript; the remainder of the probably text, the sixth verse of the Magnificat, can easily be supplied, as it has been in Volume II. This work, unlike the Alleluia, does not have a cantus firmus; instead, the opening imitation between its two paraphrases the initium of the Magnificat, Tone 2. The re-

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29 LU, p. 214.
mainder of the work seems not to be related to the chant.

Example 126

LU

Tinctoris

A similar situation obtains in the Lamentationes Jeremiae. Following "Aleph," the Tenor and Superius share in a statement of the first phrase of the formula for the recitation tone of the Lamentationes, transposed up a fourth (see Example 127).

Example 127

LU

Tinctoris

The remainder of the rather lengthy setting of the first three verses of the Lamentations text is freely composed.

Although these three works are the only compositions of Tinctoris for which a specific plainchant source could be located, it seems possible that certain sections of one or more of his Masses may be based in some way on a chant. Especially likely passages are those that contain series of long notes in cantus

30LU, p. 631.
firmus style, such as "Qui sedes" and "Benedictus" (IIE and IVC) in the Missa sine nomine No. 1, and "Pleni" and "Osanna" (IVB and IVC) in the Missa sine nomine No. 2 (See Volume II). In the Missa sine nomine No. 1, the longae in IIE are divided between the Superius, Tenor, and Contratenor, while in IVC the Superius repeats a prominent four-note motive in progressive diminution (See Example 128).

Example 128

IIE

IVC

The passages found in the Santus sections of the Missa sine nomine No. 2 are shown in Example 129.

Example 129

IVB

IVC
These passages suggest that both works are based on a pre-existent melody, perhaps one that is thoroughly disguised by paraphrase technique.

Borrowed Melodies in the Secular Works

Of the nine secular works attributed to Tinctoris in manuscript sources, at least six involve the use of a pre-existing melody in some fashion. Three of the vocal pieces seem to be entirely original—the Italian O invida fortuna, and two of the French chansons, Helas and Vostre regart. Many chansons, both monophonic and polyphonic, in several manuscripts of the period begin with the word "Helas," including an example in Tinctoris' Liber de arte contrapuncti. None of those available for checking bears any perceivable musical relationship to Tinctoris' three-part setting. Neither do there seem to be any works with textual or musical relationships to O invida fortuna or Vostre regart.

Tinctoris' four-part setting of Le souvenir borrows, for its Altus, the Superius of Morton's setting of the text. That a voice other than the Tenor could be borrowed and used in such a fashion is acknowledged by Tinctoris in his Liber de arte contrapuncti:

31 Helas may have been intended for instrumental performance.

32 Seay, The Art of Counterpoint, p. 130.
There are, also, others (although most rare) harmonizing not only on a tenor, but, indeed, also on any other part of composed music. This kind of counterpoint requires the highest degree of art and skill; hence, if it be made scientifically and sweetly, the more praiseworthy it is for being the more difficult.\footnote{Morton's setting is printed in K. Jeppesen, Der Kopenhagener Chansonnier (Copenhagen: Levin and Munksgaard, 1927), p. 37.}

Morton's melody, in F Lydian, is stated almost literally in the first eighteen measures of the Altus of Tinctoris' setting. Each of the first two phrases of the melody is stated twice--first by the Altus at the pitch of Morton's original, then by the Superius a fifth higher.\footnote{Printed in D. Plamenac, "A Reconstruction of the French Chansonner in the Biblioteca Colombina, Seville," The Musical Quarterly, XXXVII (1951), 530-531. The chanson is attributed to Frye in two sources, to Binchois in one.} The statements and their imitations overlap by about a semibreve (see Volume II).

Each of the four instrumental settings \& 2 consists of a literal, or very nearly literal, quotation of a borrowed Tenor, over which Tinctoris has paraphrased the Superius part of the source chanson. These upper parts are characterized by a high degree of figuration, complex proportions, and wide range. As illustration of this procedure, Tinctoris' two-part setting of Le souvenir is given with Morton's three-part setting in Example 130.\footnote{Ibid., p. 112.} Tout a par moy is based on Frye's (or Binchois') chanson,\footnote{The resulting modal ambiguity of the piece is discussed in Chapter III.}
De tous biens playne on Hayne's chanson, and D'ung aultre amer on Ockeghem's three-part setting. The surviving portion of the Superius of Tinctoris' setting of Comme femme fits the Tenor of several chansons with this title, although its Superius seems not to paraphrase any existing version.

Example 130

\[\text{Example 130}\]

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37 Printed in Droz, Thibault, and Rokseth, op. cit. No. 11.
38 Printed in ibid., No. 36.
Example 130 (cont.)
The wide ranges and extensive figuration, especially near cadence points, that typify these Superius parts suggest the probability that the duos were intended for instruments. Since the parts are not notated in score, however, it seems certain that two instruments were required, perhaps an instrument capable of sustaining the long values in the Tenor and an agile instrument, such as a lute or viol, for the figured upper part. In a recent article, Nino Pirrotta mentions performances by the lutenist Petro Bono accompanied by a tenorista. Apparently the tenorista played a lower part while Petro Bono played a highly figured upper part. Tinctoris was well acquainted with Petro Bono, whose playing he admired, and it is not unlikely, therefore, that he would have composed such pieces for the lute, perhaps even for Petro Bono himself. Neither should the possibility that these pieces are merely didactic exercises be overlooked; they may be no more than illustrations of the ways figuration may be added to a melody, since their Superius parts paraphrase existing parts in other works. It should be noted, however, that other pieces in this style by such composers as Agricola and Ockeghem are found in the Segovia manuscript.


In his use of borrowed material, whether the source be chant, monophonic song, or polyphonic settings of his contemporaries, Tinctoris shows himself to be truly representative of his period. Like many famous composers, he was quick to recognize the value in a good melody and was equally capable of handling it in many different ways. In his compositions, as well as in his treatises, he shows that he was well acquainted with the music of his contemporaries, certainly the mark of a progressive rather than a conservative musician.
CHAPTER VII

TEXTUAL CONSIDERATIONS

No study of a vocal style, of whatever period, can be considered complete unless it deals with textual matters, as distinct from purely musical considerations, for, in the last analysis, the music exists for the purpose of presenting the text. The foregoing chapters have dealt with those purely musical matters that were significant enough, or unusual enough, to warrant attention. This chapter will consider certain aspects of the texts and their relationship to Tinctoris' musical settings. Among these considerations are textual additions and deletions in the Mass movements, problems related to the texts of the secular works and their proper performance, and the perplexing problems connected with the underlaying of texts in sacred and secular works alike.

Tropes in the Missa L'homme armé

Tinctoris' L'homme armé Mass contains textual additions—tropes—in its Kyrie and Sanctus movements; indeed, the Mass has been referred to as the Missa Cunctorum plasmator, after the
opening words of the Kyrie trope. The practice of troping, so common in the Middle Ages, was much less prevalent in the polyphonic Masses of the Renaissance, although some tropes may have been regularly used in plainchant Masses. Nonetheless, scattered Masses of the fifteenth century, including some by such major composers as Dufay, Binchois, and Brumel as well as some by lesser-known English composers, do contain tropes. The comparative rarity of troped Masses during this period, suggests Reese, may be due to the fact that an extraneous text—especially one that is highly appropriate to a certain feast day—restricts the use of the Mass to that day.

The trope of the Kyrie in Tinctoris' L'homme armé Mass is as follows:

Kyrie cunctorum plasmator summus eleyson
Kyrie coligenum verus dominator eleyson
Kyrie terrarum sublimus rector eleyson

Christe coeterno sapiens patre natus eleyson
Christe carco Verbum fructus quoque ventris eleyson
Christe salus mundi noster mediator eleyson

Kyrie procedens ex hiis amobus eleyson
Kyrie vera docens sacram spiramen eleyson
Kyrie sanctus amor miserum patronus eleyson

3 The Ms has "caro."
O Lord, supreme creator of all, have mercy
O Lord, true ruler of the race of heaven, have mercy
O Lord, sublime guide of all the earth, have mercy

O Christ, all-wise son of the ever-eternal father, have mercy
O Christ, and, as well, the dear Word, fruit of the womb, have mercy
O Christ, saviour of the world, our mediator, have mercy

O Lord, proceeding from both of these, have mercy
O Lord, the sacred Spirit, teaching truth, have mercy
O Lord, Holy love, protector of the wretched, have mercy

This type of trope—an insertion between the two words of the normal Kyrie text—is frequently found in monophonic Kyries of the Middle Ages, for the words "Kyrie eleyson" invite the interpolation of such elaborations as "supreme creator of all." The obvious reference to the Trinity makes the trope particularly well-suited not only to the tripartite structure of the Kyrie, but also to the A B A form of the L'homme armé tune. Each section of the movement contains a complete ternary statement of the melody, with each phrase set to one line of the trope. A search for the origins of this trope proved fruitless; because the trope easily fits into the metric pattern of the L'homme armé melody, it may well have been written by Tinctoris himself. The trope is not confined to the voice presenting the cantus firmus, but is found

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4 Among the sources examined were Ulysse Chevalier, Repertorium Hymnologicum (Louvain: Lefever, 1892), Margarete Melnicki, Das einstimmige Kyrie des lateinischen Mittelalters (Regensburg, 1954), and C. Blume and H. M. Bannister, Tropen des Missale im Mittelalter, I: Tropen zum Ordinarium Missae, "Analecta hymnica," XXXVII (Leipzig, 1905).
in all active voices. It is worthy of note that just as the trope text permeates in all parts, so does the L'homme armé melody in some form find its way into all parts.

The Sanctus contains additional texts in three of its sections, the "Sanctus," the "Osanna," and the "Benedictus." The first two tropes are stated by a single voice, while the last one, like the tropes of the Kyrie, is stated by all voices active in the section.

In the "Sanctus," the Tenor only sings the trope to introduce the normal exclamations "Sanctus, Sanctus, Sanctus, Dominus Deus Sabaoth;" the remaining voices sing only the usual text. The trope text is set to the L'homme armé tune in cantus firmus style, save for the words "incessabili voce proclamant," which are set to free counterpoint. The text of this trope is a paraphrase of a passage in Isaiah 6:3. 5

Cherubim ac Seraphim ceterique spiritus angelici Deo in altissimis incessabili voce proclamant: "Sanctus . . ."

Cherubim and Seraphim and all the other angelic spirits raise their voices to God with the highest and unending voice, proclaiming: "Holy . . ."

The trope of the "Osanna" is similarly appropriate, for it too paraphrases a biblical introduction to the actual quotation that is a part of the Sanctus text. Its sources lie in the scrin-

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5See also the Hymn of Thanksgiving (Te Deum laudamus, LU, p. 1832 f.) and the Prefaces (LU, pp. 4 and 8-10), which are also based on this passage.
tural descriptions of Jesus' entry into Jerusalem on Palm Sunday. It is, as Reese points out, a "free mosaic" of two Palm Sunday antiphons that are also based on these passages of Scripture. The texts of the two antiphons, Tinctoris' trope, and a translation are given below.

Pueri Hebraeorum, portantes ramos olivarum, obviaverunt Domino, clamantes et dicentes: "Hosanna in excelsis."

Pueri Hebraeorum vestimenta prosternebant in via et clamabant dicentes: "Hosanna filio David; benedictus qui venit in nomine Domine."

Pueri Hebreorum sternentes vestimenta ramos\textsuperscript{que} palmarum Jesu filio David clamabant: "Osanna in excelsis."

The children of the Hebrews, throwing down their garments (and) branches of palms, cried out to Jesus, the son of David: "Glory to God on high."

The text is presented by the Altus only, and is sung to phrases c, d, a, and b of the L'homme ar\textsuperscript{me} tune, which are augmented and in cantus firmus style. In both this section and the "Sanctus," the trope is heard in one voice only, and the L'homme ar\textsuperscript{me} melody likewise appears only in a single part.

The trope of the "Benedictus" differs from the first two

\footnotesize

\begin{itemize}
    \item[7]Reese, op. cit., p. 149.
    \item[8]LU, pp. 581 and 582.
    \item[9]The Ms lacks the postpositive "que."
\end{itemize}
tropes in the Sanctus by being woven into the standard text, in­
stead of introducing the normal texts. This trope and a transla­
tion are given below:

Benedictus semper sit filius Altissimi qui de celis
huc venit in nomine Domini.

Blessed always be the son of the highest who comes
here from Heaven in the name of the Lord.

The text of this section is set to paraphrases of the a and b
phrases of the L'homme armé tune in all voices. As in the Kyrie,
both the borrowed melody and the trope find their way in some form
into all parts; this, too, represents a contrast to the other
troped sections of the Sanctus, in which both the extraneous text
and the cantus firmus are confined to a single voice part.

That Tinctoris included such extensive additional material
treated in diverse ways may be considered another indication of
the stature of the L'homme armé Mass as a genre--an "exercise"
in compositional ability. None of his other Masses is troped, and
the L'homme armé Mass is the only one in which the Credo text is
included in its entirety.

Truncations in the Mass Text

Although the Credo was rarely troped, it is now well known
that its text has not "entirely escaped the meddling fingers" of
those who altered many other parts of the liturgy. On the con-
trary, certain portions of the Credo text were the center of heated controversies during the fifteenth and sixteenth centuries and were often omitted therefore. Much earlier examples of Credo melodies with "pruned" texts in the Codex St. Gall 546 are discussed by both Wagner and Jungmann. More recently, the practice of truncating the Credo has been recognized in English Masses of the fifteenth century and has been shown to be a common occurrence in continental Masses as well. Whatever the reasons for such textual omissions, the practice remains a curious one, for one would assume that the Credo, "by virtue of the sanctity of its ipsissima verba," the very profession of faith in the fundamental beliefs of the Church, would not be subject to such editing.

Each of the three Masses sine nomine by Tinctoris omits different portions of the Credo text; thus, Tinctoris differs from the English composers and certain continental composers, who tend

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13 Hughes, op. cit., p. xxxiii.
to omit the same material consistently. For convenience in discussing textual omissions in Tinctoris' Masses, individual phrases of the Standard Roman Credo will be identified by the numbering system given below:

<table>
<thead>
<tr>
<th>Number</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credo in unum Deum</td>
</tr>
<tr>
<td>2 (a)</td>
<td>Patrem omnipotentem, factorem coeli et terrae, visibilium omnium</td>
</tr>
<tr>
<td>(b)</td>
<td>et invisibilium</td>
</tr>
<tr>
<td>3</td>
<td>Et in unum Dominum Jesum Christum, Filium Dei unigenitum</td>
</tr>
<tr>
<td>4 (a)</td>
<td>Et ex Patre natum</td>
</tr>
<tr>
<td>(b)</td>
<td>ante omnia saecula</td>
</tr>
<tr>
<td>5 (a)</td>
<td>Deum de Deo,</td>
</tr>
<tr>
<td>(b)</td>
<td>Lumen de lumine,</td>
</tr>
<tr>
<td>(c)</td>
<td>Deum verum de Deo vero</td>
</tr>
<tr>
<td>6 (a)</td>
<td>Genitum, non factum</td>
</tr>
<tr>
<td>(b)</td>
<td>consubstantialem Patri</td>
</tr>
<tr>
<td>(c)</td>
<td>per quem omnia facta sunt</td>
</tr>
<tr>
<td>7 (a)</td>
<td>Qui propter nos homines et</td>
</tr>
<tr>
<td>(b)</td>
<td>propter nostram salutem descendit de coelis</td>
</tr>
<tr>
<td>8 (a)</td>
<td>Et incarnatus est de Spiritu Sancto</td>
</tr>
<tr>
<td>(b)</td>
<td>ex Maria Virgine,</td>
</tr>
<tr>
<td>(c)</td>
<td>et homo factus est</td>
</tr>
<tr>
<td>9 (a)</td>
<td>Cru cifixus etiam pro nobis,</td>
</tr>
<tr>
<td>(b)</td>
<td>sub Pontio Pilate, passus et</td>
</tr>
<tr>
<td>(c)</td>
<td>sepultus est</td>
</tr>
<tr>
<td>10 (a)</td>
<td>Et resurrexit</td>
</tr>
<tr>
<td>(b)</td>
<td>tertia die,</td>
</tr>
<tr>
<td>(c)</td>
<td>secundum Scripturas</td>
</tr>
<tr>
<td>11 (a)</td>
<td>Et ascendit in coelum</td>
</tr>
<tr>
<td>(b)</td>
<td>sedet ad dexteram Patris</td>
</tr>
<tr>
<td>12 (a)</td>
<td>Et iterum venturus est cum gloria, judicare vivos et mortuos</td>
</tr>
<tr>
<td>(b)</td>
<td>cuius regni non erit finis</td>
</tr>
<tr>
<td>13 (a)</td>
<td>Et in Spiritum Sanctum, Dominum, et vivificantem</td>
</tr>
<tr>
<td>(b)</td>
<td>qui ex Patre Filioque procedit</td>
</tr>
</tbody>
</table>

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14 Ibid., p. xxxiv f. and Hannas, op. cit., p. 183 ff.

15 After Hannas, op. cit., Chart II, p. 180 ff; she compares the Standard Roman, the Nicene (A.D. 325), the Nicene-Constantinopolitan (A.D. 381), and the Mozarabic-Gallican versions.
14 (a) Qui cum Patre et Filio simul adoratur et conglorificatur
(b) qui locutus est per Prophetas
15 (a) Et unam sanctam, catholicam ecclesiam et
(b) apostolicam ecclesiam.
16 Confiteor unum baptisma in remissionen peccatorum
17 Et expecto resurrectionem mortuorum
18 Et vitam venturi saeculi. Amen.

The Missa sine nomine No. 1 of Tinctoris appears in its sole manuscript source with the following disposition of phrases of the Credo text:

<table>
<thead>
<tr>
<th>Section</th>
<th>Phrase and Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2 through 6, in all voices</td>
</tr>
<tr>
<td>B</td>
<td>7, in all voices</td>
</tr>
<tr>
<td>C</td>
<td>8 through 10, in Superius only</td>
</tr>
<tr>
<td>D</td>
<td>13 and 14, in Superius only</td>
</tr>
<tr>
<td>E</td>
<td>textless in all parts</td>
</tr>
</tbody>
</table>

Fig. 56.—Text Disposition in the Credo of the Missa sine nomine No. 1

Since the opening phrase—"Credo in unum Deum"—was chanted by the officiating priest, the missing text includes phrases 11, 12, and 15 through 18. The problem here involves not only the disposition of these missing phrases, but whether Tinctoris in fact intended that they all be sung. These portions of the Credo are not liturgically insignificant, yet Hannas indicates that phrases 11 and 12 are omitted from a number of Masses and that 15 through 18 are either partially or totally absent from many. 16

16 Hannas, op. cit., pp. 183-186.
Therefore, the possibility that Tinctoris intentionally omitted some of these passages cannot be discounted.

No folios are missing from the manuscript between the C and D sections of this movement; the possibility that phrases 11 and 12 were to have been set to a section now missing can therefore be eliminated. One must, then, look at the music of the C and D sections for any solutions suggested therein. Placement of the existing text in the Superius only in these two sections suggests that a "telescoping" of the text may have been intended, i.e., that the missing "Et ascendit" should be combined with either the "Et incarnatus" in the C section or the "Et in Spiritum" in the D section. That such a telescoping of phrases is not without precedent in the fifteenth century is shown by its occurrence in Ockeghem's Caput Mass (and possibly Dufay's too\(^{17}\)) as well as in several English settings.\(^{18}\) The fact that the Superius and Tenor alternate, in hocket style, in singing the final phrase in the C section, and the delayed entrance of the Contratenor at the beginning of the section, suggest that perhaps the Contra should sing the missing phrase. However, since such telescoping can only be a matter of conjecture, phrases 11 and 12 have been omitted from the transcription in Volume II.

\(^{17}\)Bukofzer, *op. cit.*, p. 258.

\(^{18}\)Hughes, *op. cit.*, p. xxxiv.
Since the final section of the Credo is completely without text in the manuscript, it appears that some or all of phrases 15 through 18 were intended to be sung here. The complete text can be accommodated only with some difficulty, however, so perhaps a textual omission was intended here; if so, phrase 15 would be the best choice, for, according to Hannas' chart, it is the portion most often deleted.19

The Missa sine nomine No. 2 presents a more complex situation, because truncations occur in three of the four sections of the Credo. In the manuscript source, phrases are set to the voices as shown in Figure 57.

<table>
<thead>
<tr>
<th>Section</th>
<th>Phrases and Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2, 3, 4, and 6, in Superius only</td>
</tr>
<tr>
<td>B</td>
<td>7 in both parts (duo)</td>
</tr>
<tr>
<td>C</td>
<td>8, 9, and 12 in Superius</td>
</tr>
<tr>
<td></td>
<td>8a in Tenor</td>
</tr>
<tr>
<td></td>
<td>8 and 9 in Contratenor</td>
</tr>
<tr>
<td>D</td>
<td>13 and 18 in Superius</td>
</tr>
<tr>
<td></td>
<td>incipit of 18 at beginning of Tenor</td>
</tr>
<tr>
<td></td>
<td>incipit of 7 at beginning of Contratenor</td>
</tr>
</tbody>
</table>

Fig. 57.—Text Disposition in the Credo of the Missa sine nomine No. 2

The A section lacks all of phrase 5, "Deum de Deo . . . ;" however, at the point where these words would appear if their inclusion were intended, the Superius rests for four measures. It

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is possible, therefore, that Tinctoris intended that phrase 5 be sung here by one or both of the lower voices; it has been supplied in Volume II.

The C section lacks phrases 10 and 11; once again, however, the Superius is resting at the point where the first of these phrases should appear, entering five measures later with "Et iterum" (phrase 12). Since both lower parts are singing in these measures, Tinctoris may have intended that phrases 10 and 11 appear simultaneously, i.e., telescoped, in these voices. They begin this passage with imitation of an ascending motive that constitutes an appropriate reflection of the initial words of both phrases (see Example 131).

Example 131

The D section presents the most enigmatic situation of all, for it seems to involve some carelessness on the scribe's part, in addition to the textual lacunae. The Superius begins with the words "Et in Spiritum;" the next passage in this voice (mm. 99-102)
is textless in the manuscript, and the final passage carries the words "Et vitam." The Tenor enters in measure 94 (the fourth measure of the section) and is set to the words "Et vitam" in the manuscript; it is textless thereafter. The Contratenor enters at the beginning of the section with "Qui propter." There are, it would seem, at least two scribal errors here. Since "Qui propter" is the incipit of the B section, the manuscript is obviously in error here; perhaps this is the result of the visual similarity between the incipits for phrases 7a ("Qui propter") and 14a ("Qui cum Patre"), which is probably the intended text. The second likely error concerns the wide separation between the appearances of the words "Et vitam" in the Tenor (m. 94) and the Superius (m. 104); such a wide distance between text entries is not common. The placement of "Et vitam" in the Tenor, seemingly an error, may also be the result of the similarity between this and phrase 15a ("Et unam"), which may have been intended here. Perhaps both of these visual errors occurred because only the incipits were present in the source copied by the scribe, or even because these incipits were not clear in the original. The incipit "Et vitam" could also be an abbreviation for "et vivificantem," intended, perhaps, as a cue to the text the Superius is about to sing. Whatever the intended text may have been, the modern editor is left with the task of reconstructing this section, which, in the manuscript, is texted as shown in Figure 58.20
Several solutions are possible, but, before making any decisions, one must examine certain characteristics of the music itself. First, it should be noted that because of alternation between the two lower voices, a portion of this movement is composed, in effect, for two parts, although all three voices are eventually used together. Therefore, the Tenor and Contratenor could either alternate in presenting a single phrase of the text, or they could present different phrases. Additionally, imitation occurs between the Superius and Tenor (mm. 94-96), between the Contratenor and Superius (mm. 99-100), and later in all parts (mm. 107-108), suggesting textual parallels at these points also. It must be noted, however, that such musical-textual parallels are not frequent in Tinctoris' music, so one need not assume that imitative phrases must be sung to the same text.

If one assumes that the "visual" errors described above did occur, then either phrases 14 through 18 must be fitted into the...
remaining musical phrases, or one or another of the phrases must be omitted. Since all three parts are active and imitative in the closing measures, it seems plausible that phrase 14 should be divided between the Contratenor and Tenor in their opening phrases, since they alternate here (see Figure 59). It remains to supply the text for the Superius in measures 99-102. The only one of phrases 15, 16, and 17 that can be accommodated easily to the existing number of notes is 17, "Et expecto." This results in the omission of phrases 15 and 16, which are, as Hannas notes, two of the most controversial parts of the Credo text. These choices are admittedly somewhat arbitrary and comprise only one possible solution to the disposition of the text in this section. However, this solution does take into account some likely errors, and the results are not unsatisfactory or insupportable from either a musical or a liturgical standpoint.

<table>
<thead>
<tr>
<th>Superius</th>
<th>13</th>
<th>17</th>
<th>(1)</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenor</td>
<td>(3)</td>
<td>14a&quot;</td>
<td>(4)</td>
<td>18</td>
</tr>
<tr>
<td>Contratenor</td>
<td>14a'</td>
<td>(4)</td>
<td>14b</td>
<td>18</td>
</tr>
</tbody>
</table>

Fig. 59.—Text Disposition in the Transcription of Section IIID of the Missa sine nomine No. 2

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21 Hannas, *op. cit.*, p. 177.
The Credo of the Missa sine nomine No. 3 is also truncated; as this Mass appears in the manuscript source, it lacks phrases 9 through 15, from "Crucifixus etiam . . ." through "apostolicam Eccelsiam." Since the B section, a duo, ends with "homo factus est" (8c) in both parts and the C section begins with "Confiteor unum baptisma" (16a) in all parts, there can be no question of telescoping here. Whether Tinctoris intended that these parts of the Mass be omitted, however, is quite another matter. It must be noted, in this respect, that no Mass mentioned by Hannas omits all of these phrases of the text, although several omit either 8 through 14 or 10 through 15. Although no folios are missing from the manuscript here, it is possible that an entire section is missing. In its present state, this is the only movement in the Mass that consists of only three sections; indeed, it is the only Credo in all of Tinctoris' Masses to have fewer than four sections. The addition of a section in between the present B and C sections would also bring to this Mass a greater consistency in the mensural organization of individual movements (see Figure 47 on page 220). In his article describing the Gafori Codices, one of which contains this Mass, Jeppesen indicates that many of the Masses are complete five-movement works in other sources, even

22 Ms Milan, Archivio del Duomo, Codex 2268.
though they contain only the Gloria, Credo, and Sanctus in these codices. Because Tinctoris' Mass does not appear in any other sources, it cannot be established that the Mass exists here in its original form. Since the compiler—possibly Gafurius himself—took liberties in the exclusion of the outer movements of some of these works, it may be that he or the scribe, and not Tinctoris, omitted a large section of the Credo. The possibility still exists, too, that Tinctoris fully intended the omission of these phrases of the Credo. In any case, until the discovery of further evidence, the possibility that a section is missing must remain just a possibility.

In addition to the Credo excisions, Tinctoris also omits the words "Glorificamus te" from the Gloria of his Missa sine nomine No. 3. Because this exclamation is absent from all four parts, the truncation appears to be intentional, rather than the result of scribal error.

The problem presented by the textual deletions in Tinctoris' Masses is one of determining which phrases Tinctoris deliberately omitted and which are missing either because of scribal carelessness or as a result of the documented scribal habit of changing fully texted polyphony to "chanson-style" settings, with text only

Because of the great diversity in the practices of other composers with regard to which phrases were omitted or how and whether they were telescoped, it is not possible to base any solutions on the Masses of Tinctoris' contemporaries. The serious investigation called for by Hannas is still desperately needed and can be achieved only by going back to the original sources in an attempt to discover what the composers intentions were.

**Textual Divisions in the Mass Movements**

Because the individual movements of Tinctoris' Masses are not always divided into the same number of sections, different textual divisions are found. In the three Masses containing a Kyrie, that movement is always separated into three sections, according to the conventional divisions of the text—"Kyrie" I, "Christe," and "Kyrie" II. In all four Masses, the Sanctus is divided into five sections, "Sanctus," "Pleni," "Osanna," "Benedictus," and the repeat of the "Osanna." These two movements, then, present no problems in this respect. The remaining three movements, however, differ in varying degrees in the manner in which the text is divided.

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25 Margaret and Ian Bent, *op. cit.*, p. 413 f.
26 Hannas, *op. cit.*, p. 178.
The Agnus Dei is generally divided, according to custom, into three separate statements, each beginning with the words "Agnus Dei"; this conventional division is followed by Tinctoris in the Missa sine nomine No. 2 and the L'homme armé Mass. In the manuscript source, the Agnus Dei of the Missa sine nomine No. 1 lacks any text whatever; the manuscript source, however, does contain the indication "Agnus 2dus" at the beginning of the C section and the subscript indication "Agnus I1Super supra" following this section. Because the A section ends on a half cadence and the B section ends on an authentic cadence on the final, these two sections together undoubtedly comprise the first "Agnus." This structure is paralleled by the C section, which has a half cadence about two-thirds of the way through. These facts suggest that the text be distributed as shown in Figure 60.

"Agnus" I  A (ends on half cadence) .. "Agnus Dei, qui tollis peccata mundi . . ."

B (ends on final)............ "miserere nobis."

"Agnus" II  C (ends on final)............ "Agnus Dei, qui tollis peccata mundi, miserere nobis."

A (repeated).............. "Agnus Dei, qui tollis peccata mundi . . ."

"Agnus" III

B (repeated).............. "dona nobis pacem."

Fig. 60.--Text Disposition in the Agnus Dei of the Missa sine nomine No. 1

27 The Missa sine nomine No. 3, it will be remembered, lacks an Agnus Dei.
The Glorias of Tinctoris' Masses vary more than any other movement as regards the number of textual divisions; these range from three sections in the Gloria of the L'homme armé Mass to seven sections in the Missa sine nomine No. 1 (see Figure 6.). The only uniformity in these Glorias lies in the fact that all of them begin a new section on the words "Qui tollis," as well as, naturally, on "Et in terra pax." Just as the first phrase of the Credo was chanted in polyphonic Masses, so is "Gloria in excelsis Deo" intoned by the celebrant. The textual divisions of the Gloria as established by Wagner are shown below:

1 Gloria in excelsis Deo
2 Et in terra pax hominibus bonae voluntatis
3 Laudamus te,
4 benedicimus te,
5 adoramus te,
6 glorificamus te
7 Gratias agimus tibi propter magnam gloriam tuam
8 Domine Deus rex coelestis
9 Domine Fili unigenite Jesu Christe
10 Domine Deus Agnus Dei Filius Patris
11 Qui tollis peccata mundi miserere nobis
12 Qui tollis peccata mundi suscipe deprecationem nostram
13 Qui sedes ad dexteram Patris, miserere nobis.
14 Quoniam to solus Sanctus,
15 tu solus Dominus
16 tu solus altissimus, Jesu Christe.
17 Cum Sancto Spiritu in gloria Dei Patris. Amen.

The distribution of these divisions among the sections of the Glorias in Tinctoris' Masses is shown in Figure 61.

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<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missa sine nomine No. 1</td>
<td>2-7</td>
<td>8-9</td>
<td>10</td>
<td>11-12</td>
<td>13</td>
<td>14-16</td>
<td>17</td>
</tr>
<tr>
<td>Missa sine nomine No. 2</td>
<td>2-7</td>
<td>8-10</td>
<td>11-13</td>
<td>14-17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missa sine nomine No. 3</td>
<td>2-9</td>
<td>10</td>
<td>9-16</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missa L'homme armé</td>
<td>2-10</td>
<td>11-16</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig. 61.—Disposition of Gloria Phrases in Tinctoris' Masses

Due, in part, to the telescoping and omission of certain portions of the Credo text, the Masses are even less regular in this movement than in the Glorias as regards the distribution of the text within musical divisions. The Credo text, longest of the five parts of the Ordinary, is divided between three, four, or five sections in Tinctoris' Masses. The position of some of these phrases is the result of editorial decisions and may not necessarily be that intended by Tinctoris (see Figure 62).  

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missa sine nomine No. 1</td>
<td>2-6</td>
<td>7</td>
<td>8-10</td>
<td>13-14</td>
<td>15-18</td>
</tr>
<tr>
<td>Missa sine nomine No. 2</td>
<td>2-4</td>
<td>5</td>
<td>6</td>
<td>8-9</td>
<td>13+18</td>
</tr>
<tr>
<td>Missa sine nomine No. 3</td>
<td>2-7</td>
<td>8</td>
<td>16-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missa L'homme armé</td>
<td>2-7</td>
<td>8-9</td>
<td>10-12</td>
<td>13-18</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 62.—Text Disposition in the Credos of Tinctoris' Masses

29 Hannas' numbering is used; the phrases included in brackets are not included in the manuscript sources, but are editorial additions.
"The last quarter of the fifteenth century," notes Apel, "marked the beginning of a new development" in the secular form known as the chanson. The typical chanson of earlier fifteenth-century composers was written for three "voices," of which the upper was sung, while the two lower parts were usually textless and presumably instrumental. One of the developments Apel refers to involves a change from the earlier three-part texture, in which the voices were stylistically more differentiated, to a four- or five-part texture in which imitation played an increasingly more important role, resulting in a greater similarity of the parts. These later chansons also typically include the text in all voices, but, like their earlier counterpart, undoubtedly could also be performed by instruments alone or by some combination of instruments and voices. To these variable practices one must add the complications caused by the different ways these chansons appear in different sources, sometimes even with a completely different text. In addition, scribes were careless, and, despite the sumptuousness of some of these collections, the texts are often poorly underlaid, appear only as incipits, or are even missing from one or more parts.

So it is with Tinctoris' chansons—at least four of them; the five instrumental arrangements naturally present no such problems. The chanson Helas offers, perhaps, the most perplexing situation. His setting appears in no fewer than six manuscripts and one print, of which no two sources preserve the music in exactly the same form. As would be expected, the text is not the same either. In four sources, the incipit only—"Helas" or "Hellas"—appears in one or more parts; the Superius of the chanson is underlaid in the Segovia manuscript with the incipit "Elaes Abraham" only, in the Glogauer Liederbuch with "Helas le bon temps," and in the Seville Chansonnier with "Helas le bon tempo que i'avoie." No source carries a complete text, and in none is it clear whether all, only some, or none of the voices are to be sung. In her study of the Harmonice Musices Odhecaton A, Helen Hewitt proposes that the work may have been intended for instrumental performance. Apparently the editors of the Glogauer Liederbuch edition felt the same way, for they omitted even the incipit. In its lack of imitation, the chanson is closer to earlier Burgundian chansons in style; therefore, it might be more appropriate to set a text to the Superius only. Whatever the case, the question is academic

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31 See Volume II, SOURCES, p. xxvii ff.


for the time being, since the complete text is not known.

*Vostre regart*, on the other hand, appears in two sources with the complete text set to the Superius in both. Of these two manuscripts, the *Dijon Chansonnier* adds the incipit only in the Tenor and Contra, while the *Seville Chansonnier* gives the complete first line, "Vostre regart si gres fort m'a feru," below both the Tenor and Contra. In the transcription in Volume II, the text is set to the Superius only.

The four-part setting of *Le souvenir*, found only in the Segovia manuscript, has the incipit in all parts. Tinctoris' Altus part consists of the Superius from Morton's three-part setting, which is fully texted in the *Dijon Chansonnier*; the reconstruction of the text, therefore, presents no problem. The major concern here involves the number of voices that should be texted. Since the Superius of Tinctoris' setting repeats phrases previously sung by the Altus, one might set both these parts to the same text; the other two parts are melodically independent and are probably instrumental. The possibility that the Superius is also instrumental should not be excluded, however; performed in this way, with the instrumental Superius imitating the texted Altus, the chanson is musically very satisfying. Some chansons by Dufay, notably his setting of *He compagnons!*, feature similar instrumental interludes between sung phrases. Since the final phrase of the Altus does not draw on Morton's melody and briefly imitates the Superius, it too may have been intended for instru-
mental performance. One must also consider the possibility that the Altus was doubled by an instrument throughout.

The Italian piece, O invida fortuna, is found only in the Ms Florence, Biblioteca Nazionale, Magl. XIX 176, where the complete text is underlaid only in the Superius, and the incipit "O invida" appears at the beginning of the other two parts. In the transcription in Volume II, the text has been set only to the Superius.

In view of the fact that the texts of these chansons are not consistently presented by the various sources, it would seem too restrictive to propose that only one method of performance would be proper, or even that the composer had only one method in mind. More probably, these songs were performed with whatever vocal or instrumental resources were at hand. As Charles Warren Fox proposed, these chansons might also have been reduced to two parts. This certainly seems to have been a possibility with pieces in non-quartal style. Although none of Tinctoris' chansons is entirely in non-quartal harmony, other factors also point to the probability that the performance of chansons varied even more than we might expect, and that the disposition of the text--or even its omission--was not always a matter of great concern.

Problems of Text Underlay in Tinctoris' Music

One of the most perplexing problems encountered in editing the music of fifteenth-century composers results from an apparent lack of concern on the part of the scribes, or possibly the composers themselves, for the exact placement of syllables or even whole words of the text. The problem is many-faceted and must be considered not only from the standpoint of the modern editor, but from the standpoint of performers of the time; indeed, to understand the practice of the latter is to solve the problems of the former. It is unfortunate that Tinctoris did not discuss text underlay in any of his treatises, for a knowledge of the composer's own views would be invaluable to the modern editor. It is even more unfortunate that no treatises before Zarlino's Istitutione Harmoniche of 1559 mention text underlay, for this work, concerned largely with the practice of Willaert, cannot have been based on any first-hand knowledge of the works of Tinctoris' era. Although Gafurius does mention the need for a proper relationship between text and music, he is referring not to the underlay of the text, but to the faithful representation of the mood of the text—a concept similar to the Greek doctrine of ethos and the practice of later madrigalists. A recently discovered treatise, Gasparis
Stoqueri Germani de Musica verballi Libri Duo, which can probably be dated between circa 1559 and circa 1580, goes beyond Zarlino's work in that it contains a discussion of text underlay as practiced not only by his contemporaries, but by the "older composers" of the Josquin period as well. The rules presented therein and the practicality of their application to the music of Tinctoris' generation will be discussed shortly.

Text underlay in many manuscripts of the period often displays disturbing and confusing characteristics. Words are only rarely divided into syllables; more typically, a whole word is begun under what, presumably, should be the first note sung to that word. In some instances, only an incipit or no text at all appears under a part. In short, the underlay of texts is such that the intended placement of syllables and sometimes of words is often difficult to determine. Most of these characteristics can be seen in an excerpt from Feininger's edition of Tinctoris' Missa L'homme armé, in which an attempt was made to duplicate the position of whole


words as found in the manuscript (Example 132). 37

Example 132

The modern editor must decide for himself how to distribute the text, and, not infrequently, how and whether to supply missing texts as well. Lacking any known contemporaneous rules for text underlay, however, he must choose from among several methods, none of which is based on a very secure position: (1) he may elect, as did Feininger, to place words and syllables as they are found in the manuscript; (2) he may apply the rules of Stocker or Zarlino; or (3) he may attempt to arrive at some system that he hopes will approximate the practice of the time.

To elect the first is to offer no solution at all. While such editions are not totally without value, they offer little help to the modern performer. The second method, based on treatises

written some seventy-five years after Tinctoris' time by men who established rules for a practice in which the words were of paramount importance, hardly seems a logical choice. Too, as humanists, these writers would be somewhat biased. The extent of Stocker's bias is adequately demonstrated by his comments to the effect that the rules of text underlay (his rules) existed before the compositions of even Tinctoris' time, much as the Ten Commandments predated the formulation of the laws and precepts of morality. He further suggests that, just as God punishes those who violate the Commandments whether they lived before or after their formulation, so will the violators of the rules of text underlay "be subjected to eternal damnation." Whatever the source of Stocker's authority, his rules simply cannot be applied consistently to Tinctoris' music; nor can those of Zarlino, which are even stricter. Setting the texts in these works can often be accomplished only by violating one or another of the later rules. Left with the third choice, the modern editor is faced with a perplexing situation—that of somehow determining, from an examination of the music itself, what the practice of the time was.

It has been argued that a set of unwritten rules, known to composer and performer alike, governed the placement of syllables.

38 Lowinsky, op. cit., p. 235.
39 Ibid.
Both Wagner and Reese point out, however, that such a set of rules, if it ever existed, would accommodate only music intended for solo performance. Application to choral music with several performers to each part would result in chaos, unless these rules were so exact as to preclude any difference in interpretation. That such rules would not have been included in treatises before 1559--treatises that were often aimed at the training of singers--does not seem likely, especially considering the pedantry with which lesser matters were often treated. Additionally, the assumption attributes a higher degree of proficiency to singers than most theorists would be willing to allow them.

Another possibility often mentioned by present-day historians is that all the performers of any voice part would have arrived at the position of each word and syllable by prior agreement; however, none of the manuscripts of Tinctoris' compositions contains indications that would substantiate this practice, e.g., lines connecting notes with their accompanying syllables, such as are occasionally found in the Ms Oxford 213. Nor is it likely that the position of each syllable could have been committed to memory. Yet, the appearance of other indications, such as corrections of note values and "verte cito" (turn quickly), suggests that these manuscripts were not just library copies but were intended for performance.

40 Peter Wagner, Geschichte der Messe, p. 77, and Reese, op. cit., p. 75.
One must conclude, therefore, that neither composers nor scribes during Tinctoris' generation were greatly concerned about the exact placement of the text. It seems almost as if the composers concentrated on the musical structure and then added the words as best they could. Clearly, the text was not considered as important by Tinctoris' contemporaries as by later composers, many of whom felt that the rhythm of the words and phrases, and the expressive content of the text were important—indeed, that the very reason for the existence of the music was the expression of the text.

In the music of Tinctoris, the editor faces different kinds of problems with regard to text underlay in syllabic and melismatic writing. Syllabic writing is rare; in some of Tinctoris' compositions, it is confined to a few passages in simultaneous, or nearly-simultaneous style, or to passages where repeated notes are found. In the Missa L'homme armé, it is also found in connection with tropes set to the cantus firmus. The passages in simultaneous style and those with repeated notes present no real problems, for the number of syllables of text is either the same as the number of notes provided, or else the probably division is obvious (see Example 133).
The tropes set syllabically to the *L'homme armé* melody, which is unusually regular in its metric pattern, sometimes present problems. In many passages, correlation between the musical and
textual accent patterns is close (see Example 134).

Example 134

Text Accent: Ky-ri-e ce-li-ge-num/ ve-rus do-mi-na-tor
Musical Accent: — u — u — — — —

In other instances, however, the correlation is negative (see Example 135).

Example 135

Text Accent: Pu-e-ri He-bre-o-rum/ ster-nen-tes ves-ti-men-ta
Musical Accent: — u — u — — — — —

Passages such as that quoted in Example 135 would seem to indicate that the exact correspondence of textual and musical accent was of no concern to Tinctoris; it should be noted, however, that the conflict in this case is unavoidable, for Tinctoris could change neither the trope text nor the melody.

In a few instances, phrases of the cantus firmus in the Missa L’homme armé have one or more notes than the number of text syllables. As in more melismatic writing, the performer is presented with a choice (see Example 136).
Example 136

Since choices must be made, whether by the fifteenth-century performer or by the modern editor, it would be well to set forth some principles that will lead to a solution that is logical, musical, and, it is hoped, close to the practice of the time. One consideration, it would seem, should be the position of the syllables in the manuscript source, for, while their position is often haphazard, such is not always the case. Secondly, it would seem appropriate to adhere to the later rules of text underlay whenever possible, since many of them are based on sound musical and textual logic. Finally, if neither of these methods proves satisfactory, it would perhaps be appropriate to seek the closest possible correspondence of musical and textual accent. Even though Tinctoris often disregarded this last principle, it appears that many such infractions were unavoidable.

Syllables of the text may be accented by several musical means, both melodic and rhythmic: (1) they may be sung to either the highest or lowest notes in the melodic curve; (2) they may be sung to a greater number of notes than their surrounding syllables; (3) they may be placed beneath the first note following a rest; (4) they may occupy stronger rhythmic positions on mensural units, on syncopations, or on longer notes; or (5) they may be sung to distinctive melodic and rhythmic motives. Each of these principles
of accent is sometimes evident in the manuscripts, and some are suggested or covered by later rules. For example, Stocker's statement that "as the accent demands more time in pronunciation, so does it allow the reception of more than one note in singing" refers to melismatic accent, as suggested in (2) above. His indication that syllables should be given "not to particles but to complete entities" suggests the setting of syllables to mensural units (see the fourth category above).

To return to the excerpts cited in Example 136 above, it may be seen that some element of choice is present even after all these principles have been considered, for both of the settings in Example 137 result in an accent on the first syllable of "Sancto." The first produces the accent by coincidence with the metric accent of the melody, the second by placing two notes to the syllable. Although the first setting violates the later rule requiring that repeated notes each receive a syllable, it may be that Tinctoris would have allowed this situation. Stocker allows certain exceptions to this rule, but the example he used to illustrate the allowable departures is not included in the treatise.

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41 Lowinsky, op. cit., p. 238.
42 Ibid., p. 239.
43 Stocker's Rule 4; Zarlino includes no parallel rule.
44 Lowinsky, op. cit., p. 237.
Example 137

The second passage in Example 136 involves no such conflict, and the third syllable of "angelici" should almost certainly take two notes; this has been done in the transcription in Volume II.

Passages in which the text demands a melismatic setting cause different problems for the editor and performer; once again, the later rules offer some help but fall short of providing undisputable solutions to text underlay. Of the many instances that could be cited, perhaps the following excerpts will suffice to demonstrate the problems.

Example 138
In the first excerpt above, the problems include not only the position of the last syllable of "Christe," but also whether "coeterno" is intended to begin under the d as shown in the manuscript. Placed so, the initial syllable of "coeterno" would fall on the note immediately following a minim that begins a mensural unit, rather than directly on that minim. The closest point at which the word can logically be started is on the first minim following the semibreve d; this has been done in the transcription. According to the rules, the final syllable of "Christe" could be placed at any one of several points. The repeated notes at the beginning strongly suggest that the placement found in the manuscript is intended, although the results are musically satisfactory if it is placed under the semibreve d. Similarly, it could be sung beginning on the highest note of the phrase. Since the position of syllables in the manuscript is one of the factors being
considered, the syllable change on the repeated note has been retained in transcription.

The problems presented by the second excerpt are more complex. The syllabic placement shown in the manuscript clearly must be altered if musical results are desired, but the text cannot be accommodated without violating at least one of Stocker's rules. According to those rules, only the six notes marked with a + in the example may receive syllables. While these are sufficient to accommodate the six syllables in "verus dominator," they produce a situation where the accented syllable in "dominator" is sung for the shortest time, even though it occurs on the longest note of the passage. In addition, this setting violates Stocker's rule that states that "the first syllable goes to the first note, the last syllable to the last note." The underlay selected in transcription is shown in Example 139.

Example 139

The problem of the placement of the final syllable of a phrase in the music of Tinctoris is a perplexing one; in some

\[^{45}\text{Ibid., p. 236.}\]
instances, the scribe separated the final syllable from the remainder of the word, placing it either below the final note of the phrase or below an interior note, as in the passage just discussed. Apparently there was no consistent practice, and there seems to be no underlying principle governing such cases. Stocker's very inclusion of a rule forbidding melismas on the final syllables of phrases may confirm the probability that they were common in the music of Tinctoris' time. Perhaps Stocker is trying here to prune these "barbarisms" from fifteenth-century polyphony, much as his contemporaries did with plainchant.  

The last excerpt in Example 138 illustrates another problem encountered in melismatic passages—the question of repetition of words. This passage contains eight phrases, separated by seven rests, above only five syllables of text. The positions of the initial syllables of "Pleni" and "celi" and the position of "sunt" are clear; the final syllable of "celi" is missing from the manuscript, as is the following word, "et." The only way to meet Zarlino's requirements that "a syllable must be given to a note, whatever its value, . . . after a rest" would be to repeat individual words of the text; however, the manuscript contains no indications that such repeats are intended here. Nor are such


textual repeats commonly indicated in other manuscripts of Tinctoris' music, although the practice may have been common with some composers. In only one instance is textual repetition indicated in manuscript sources for Tinctoris' music; this occurs in the C section of the Gloria of the Missa sine nomine No. 1, where the words "Domine Deus Agnus Dei" appear twice in the Superius. This may be a scribal addition rather than Tinctoris' intention, however. One might also consider repeating the word "Benedictus" in the Superius of the Sanctus of this Mass also, because the progressive halving of note values in the repeated pattern of four notes lends itself well to such repetition (see Volume II).

The Kyrie of the Missa sine nomine No. 2 presents a related problem, in that the statements "Kyrie eleison," "Christe eleison," and "Kyrie eleison" appear only once in their respective sections. There is nothing in the manuscript that would indicate either that each section was to be sung three times or that internal repetition was intended. However, since the Kyrie movements in Tinctoris' other Masses both present threefold statements in each section, the remaining two have been supplied in the transcription.

On rare occasions, situations occur in Tinctoris' music that require a note to receive more than one syllable of the text.

48 Lowinsky, op. cit., p. 239.
Stocker's first rule forbids this, but he later qualifies his objections, saying that "it may occur . . . that in the end more syllables than notes remain, so that either syllables must be left out, or notes must be divided, or syllables must be given to notes not capable of receiving them conveniently."^49 Perhaps the lack of any parallel rule in Zarlino's discussion indicates that the practice was acceptable even as late as Zarlino's time.

Similarly, a ligature is sometimes required to take two syllables of the text (see, for example, the Superius in measure 83 in the Gloria of the Missa sine nomine No. 3 and the accompanying note in the preliminaries of Volume II). Additional

^49Ibid., p. 236.
problems regarding text underlay, such as the addition of missing texts, were discussed in the previous section of this chapter; they should require no further mention here, therefore.

The apparent carelessness with which the texts were copied into the manuscripts of the fifteenth century, the lack of any theoretical discussions of the practice of text setting by theorists of the period, and the fact that no consistent system can be extracted from the music itself all point to the probability that both composers and scribes were unconcerned about the underlay of texts. Also supporting this conclusion is the fact that no printer before Pierre Attaignant, whose work dates from the second quarter of the next century, insisted upon accurate text placement. It seems unlikely that a printer such as Petrucci, whose work is obviously of high quality, would be careless in such matters if they had been regarded as significant. In addition, the very fact that Stocker criticizes earlier composers for setting texts according to their fancy rather than according to reason indicates that rules—written or unwritten—were almost certainly nonexistent.\footnote{Reese, \textit{op. cit.}, p. 289.} If the modern editor, left to his own devices as it were, cannot counter arguments that present-day tastes may not coincide with those of the performers \footnote{Lowinsky, \textit{op. cit.}, p. 235.}
of the time, he can at least take some comfort in the fact that no other workable solution is presently to be found.
CONCLUDING REMARKS

The foregoing chapters have dealt individually and in some detail with the significant aspects of the compositional style of Johannes Tinctoris, relating these to his theoretical discussions when possible. While conclusions have been drawn in these separate discussions, it would perhaps be well to review these with some general observations here.

Tinctoris presents, both as a theorist and as a composer, an interesting combination of conservative and progressive traits. In his treatises, he is not content merely to describe current practice, as so many theorists during this or any other period are; he also examines it and judges it, rejecting those aspects that he feels are unmusical or "without all reason." He is especially adamant about the proper and accurate indication of proportion, for example, and admonishes several of his better-known contemporaries for their apparent ignorance of reason and the rules. He demonstrates also, however, his awareness of the shortcomings of "pure theory." As evidence of this, one should recall, among other things, his attitude regarding the fourth and its use, his recognition of the inability of modal theory to encompass all the characteristics of modal polyphony, and his frequent reliance on "the judgment of the ear."
If this project was begun with the assumption that the theoretical discussions in the treatises could provide solutions to some of the problems encountered in Tinctoris' compositions, it seems that the compositions have also served, on occasion, to illustrate and illuminate certain rather poorly-stated theoretical positions. In most cases, the compositions and the treatises provided to be mutually supportive, and in some cases, some light has been shed on significant problems of the period, such as, for example, the enigma surrounding the interpretation of the sign $\Phi$. It is unfortunate, however, that the two most perplexing problems of the age—the manner in which *musica ficta* was applied and the composers' views about text underlay—could not be illuminated by this study.

In many ways, Tinctoris shows himself to be, as Reese notes, "very much a man of his own time,"¹ both in his treatises and in his compositions. Just as his theoretical writings reveal an interest in and knowledge about the music of his contemporaries and predecessors alike, as well as a sensitivity to his musical surroundings, so do his compositions reflect these attitudes. Indeed, some of them may even have been attempts to imitate the styles of some of the best composers of his time. He demonstrates a feeling for the present and even, at times, for the future, as well as a respect for the medieval concept of *auctoritas*. Although

¹Reese, *op. cit.*, p. 141.
Trithemius was perhaps generous in referring to Tinctoris as the "summus musicus" of his time, for the period could boast of such talented and extraordinary composers as Agricola, Busnois, Ockeghem, Isaac, Obrecht, and Josquin Des Prez, it is nonetheless indisputable that he is among the finest and historically most significant musicians of the early Renaissance. This is demonstrated not only by the esteem in which he was held by his contemporaries, but also by the widespread dissemination of his treatises and compositions, and the printing of some of these by such men as Petrucci. Though few in number and, perhaps not as important as his theoretical writings, his compositions are significant products of the period and deserve to have, once again, the same recognition and respect that the treatises now enjoy.
APPENDIX A

This Appendix consists of an annotated list of the twelve treatises attributed to Tinctoris, in the order that Heinrich Huschen feels they were written. Included also are references to specific pages in Coussemaker's edition of 1876. Since discussion of the contents of these works can be found in several readily available sources, no such descriptions will be attempted here. Nor will a list of translations be included, for these, too, can be found elsewhere. A list of manuscripts and the treatises contained therein will follow the chronology of the treatises themselves.


2 Charles Edmond de Coussemaker, Scriptorum de Musica medii aevi nova series (Hildesheim: Georg Olms Verlagsbuchhandlung, 1931).

Theoretical Writings of Johannes Tinctoris

1. *Terminorum diffinitionum musicae* (ca. 1472-73, first printed ca. 1494-95), CS IV, 177-191.


5. *Tractatus de regulari valore notarum* (ca. 1474-75), CS IV, 46-53.


7. *Liber de natura et proprietate tonorum* (Nov. 6, 1476), CS IV, 16-41.


10. *Scriptum super punctis musicalibus* (after 1477), CS IV, 70-76.


12. *De inventione et usu musicae* (incomplete) (1487?), not in CS IV, exists in early print only.  

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5See Karl Weinmann, Johannes Tinctoris (1445‒1511) und sein unbekannter Traktat "De inventione et usu musicae"; historisch-kritische Untersuchung (Tutzing: H. Schneider, 1917?), which contains a modern edition of the text.
Sources

Manuscripts:

Bologna, Biblioteca Universitaria, Ms 2231 (2573), contains No. 3-11

Bologna, Civico Museo Bibliografico Musicale, Ms B/1, contains Nos. 4-11

Brussels, Bibliothèque Royale, Ms II 4147 (Fétis 5274), contains Nos. 1-11

Brussels, Bibliothèque Royale, Ms II 4148 (Fétis 5275), a copy of Ms II 4147, contains Nos. 1-11

Brussels, Bibliothèque Royale, Ms II 4149 (Fétis 5276), contains Nos. 1 and 3

Brussels, Bibliothèque Royale, Ms II 5482-5483, a copy of Ms II 4147, contains Nos. 1-11

Ghent, Bibliothèque de l'Université, Ms 70, contains Nos. 2, 3, 4, 6, 9, and 10

Valencia, Biblioteca de la Universidad, Ms 528, contains Nos. 1-11

Early Prints:

London, British Museum, No. 1

Munich, Bayerische Staatsbibliothek (Herzogliche Gothaische Bibliothek), No. 1

Regensburg, Proske'schen Musikbibliothek, No. 12

Vienna, Gesellschaft der Musikfreunde, No. 1
APPENDIX B

This Appendix presents the total range, finals, and cadence notes (when different from the final) of each voice part in each major division of Tinctoris' works. The Contratenor, somewhat unconventionally, is shown first, followed, from left to right, by the Tenor, Altus, and Superius; this was done so that the total range of all the voices could be seen more readily, merely by looking at the first and last notes of each line. The modal finalis of each voice part is shown as a white note; the extremes of range are given in black notes; if the lowest extreme is also the modal final, it is shown in a white value. When a voice part cadences on a note other than its modal final, this cadence note is indicated by a black note in parentheses. Certain cases of modal ambiguity, as in Le souvenir (à 4), are designated by two white notes representing the two finals. In each instance, the modal characteristics of a particular part can be deduced from the position of the final with respect to the total range—for example, a voice whose range is from a to d" and has d' as its final would be tonus mixtus, or the first and second modes combined; a voice whose range is from d to a' and has d as its final would be categorized as first mode, perfect in descent, and more than perfect in ascent, and so forth. This is discussed in Chapter II.
Missa sine nomine No. 1

IA

IB

IC

IIA

IIB

IIC

IID

IIE

IIF

IIG
Missa sine nomine No. 1 (cont.)

Contratenor is silent at cadence.

Superius is silent at cadence.
Missa sine nomine No. 2

IA

IB

IC

IIA

IIB

IIC

IID

IIIA

IIIB

IIIC

IIID
Missa sine nomine No. 2 (cont.)

IVA

IVB

IVC

IVD

VA

VB
Missa sine nomine No. 3

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1Tenor and Contratenor silent at cadence.
Missa L'homme armé

Altus is a canon at the fourth below the Superius; normal final of this part (g) appears only once, as a lowered seventh leading to a cadence on a.
Missa L'homme arme (cont.)

![Musical notation graph]

Lamentationes Jeramiae

![Musical notation graph]
O Virgo Miserere mei

Virgo Dei throno digna

Alleluya

Fecit potentiam
Helas

Vostre regard

O invida fortuna

Le souvenir (à 4)
Le souvenir (à 2)

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&\text{\underline{\hline}} \\
&\text{\underline{\hline}} \\
\end{align*}

S \( b \)  
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&\text{\underline{\hline}} \\
\end{align*}

Tout a par moy

T  
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De tous biens playne

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S \( b \)  
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Comme femme

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D'ung aultre amer

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APPENDIX C

The tables included in this Appendix present the number of each type of interval (seconds, thirds, fourths, etc.) found in a representative portion of each voice part. Only "live" intervals—intervals not separated by rests of any duration—are included in the statistics. Below the number of each interval type, the percentage of the total number of intervals in that voice is given. For example, the Superius in the Missa sine nomine No. 1 contains 143 seconds, both major and minor, ascending and descending; this figure represents 84.12% of the total number of intervals in that voice (170). All percentages have been rounded off to the nearest one-half per cent; no number was allowed to be represented as zero per cent. For example, only one skip of a sixth appeared in the 760 intervals in the Superius of the Missa L'homme armé; this figure represents .13% of the 760 intervals in that part, but is shown in the Table as $\frac{1}{2}$%. 

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## TABULATION OF MELODIC INTERVALS

**Missa sine nomine No. 1**

*(Movements IA and IID)*

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>Unis</th>
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<td>143</td>
<td>11</td>
<td>3</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>2</td>
<td>170</td>
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<td></td>
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<td>4%</td>
<td>-</td>
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<td>2%</td>
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<tr>
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<td>3</td>
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<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>189</td>
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<td></td>
<td>81.5%</td>
<td>12%</td>
<td>2%</td>
<td>3%</td>
<td>-</td>
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<tr>
<td><strong>Contra</strong></td>
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<td>15</td>
<td>14</td>
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<td>8</td>
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<td>7.5%</td>
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(Movement IIB)

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<td><strong>Tenor</strong></td>
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<td></td>
<td>75.5%</td>
<td>13.5%</td>
<td>1.5%</td>
<td>4%</td>
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(Movement IIC)

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<td><strong>Tenor</strong></td>
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<td>16%</td>
<td>5%</td>
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<td>2</td>
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<td>1</td>
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<td></td>
<td>74.5%</td>
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(Movements IA and IID)

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(Movements IA, IIA, and IIIA)

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b) contains C.F. in IIA
### Lamentationes Jeremiae

(Sections A and B)

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a) measure 4 contains an upward leap of a minor tenth

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<td>17 1/2%</td>
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<td>1 1/2%</td>
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<td></td>
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<tr>
<td><strong>Contra</strong></td>
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<td>8</td>
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<td>3</td>
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<td>2 1/2%</td>
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<th>2</th>
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<td></td>
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<td>10%</td>
<td>1%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3½%</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>89</td>
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<td>13½%</td>
<td>10%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6½%</td>
<td></td>
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<td><strong>Tenor</strong></td>
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<td>16</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td>123</td>
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<tr>
<td></td>
<td>74%</td>
<td>13%</td>
<td>7½%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Contra</strong></td>
<td>87</td>
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<td>16</td>
<td>10</td>
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<td>1</td>
<td>4</td>
<td>2</td>
<td>140</td>
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<td>11½%</td>
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<td>-</td>
<td>½%</td>
<td>3%</td>
<td>1½%</td>
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APPENDIX D

The graphs in this Appendix represent the melodic contours of the voice parts in selected movements of Tinctoris' four Masses. These graphs indicate the range of each part, the frequency with which each voice cadences (represented by circles on the voice line), and the resulting phrase lengths. The heavy horizontal line represents the modal final of the voice part; the two lines below represent the dominant and octave below the final, while the two lines above the heavy line show the dominant and octave above the final. The heavier vertical lines mark the measures in the transcription. These graphs are not intended to show every note of the melodic line, but only the general contours which the melody follows.
GRAPH I

Missa sine nomine No. 1; IA, IB
Missa sine nomine No. 2: IA, IB

GRAPH II
Missa sine nomine No. 3: IIA, IIB

GRAPH III
GRAPH III (cont.)

[Graph showing various lines and markers over a grid, with labels S, A, T, and CT.]
Missa L'homme arnè, IA

GRAPH IV

CANTUS FIRMUS
APPENDIX E

This Appendix shows the number of each type of dissonance encountered in the individual voices of a representative portion of Tinctoris' works in two-, three-, and four-parts. Each of the dissonance types is discussed in Chapter IV.
### Dissonances in Two-Part Counterpoint

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<td>50</td>
<td>18</td>
<td>68</td>
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<td>Auxiliaries</td>
<td>9</td>
<td>6</td>
<td>15</td>
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<tr>
<td>Échappées</td>
<td>5</td>
<td>6</td>
<td>11</td>
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<tr>
<td>Cambiatas</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Anticipations</td>
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</tr>
<tr>
<td>Other</td>
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<td><strong>Total</strong></td>
<td><strong>190</strong></td>
<td><strong>105</strong></td>
<td><strong>295</strong></td>
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### Dissonances in Three-Part Counterpoint

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<td>Suspensions</td>
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<td>36</td>
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<td>Other</td>
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<td>2</td>
<td>-</td>
<td>4</td>
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<td><strong>Total</strong></td>
<td><strong>369</strong></td>
<td><strong>262</strong></td>
<td><strong>233</strong></td>
<td><strong>864</strong></td>
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### DISSONANCES IN FOUR-PART COUNTERPOINT

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<td>18</td>
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a) Movements containing a cantus firmus are not included in the table.
# Dissonances in the Superius Parts of the Two-Part Instrumental Chansons

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<th>De tous biens</th>
<th>Comme femme</th>
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<td>9</td>
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<td>-</td>
<td>1</td>
<td>1</td>
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<td>4</td>
<td>3</td>
<td>26</td>
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BIBLIOGRAPHY

Books


Spataro, Giovanni. A Letter to Giovanno del Lago in Ms Rome, Biblioteca Apostolica Vaticana lat. 5318 (folios 150V ff.).


**Articles**


THE MUSIC OF JOHANNES TINCTORIS (ca. 1435-1511)

A COMPARATIVE STUDY OF

THEORY AND PRACTICE

Volume II

DISSERTATION

Presented in Partial Fulfillment of the Requirements for

the Degree Doctor of Philosophy in the Graduate

School of The Ohio State University

By

William Eugene Melin, Mus. B., Mus. M.

* * * * *

The Ohio State University

1973

Reading Committee:

Prof. Alexander Main
Prof. Norman Phelps
Prof. Richard Hoppin, Adviser

Approved by

Prof. Richard Hoppin, Adviser

Department of Music History
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METHOD OF TRANSCRIPTION

The transcriptions contained herein are attempts to present the works of Johannes Tinctoris in a modern edition which will be useful to the performer and scholar alike. The rendition of the original notation into modern notation requires that certain symbols be replaced by others, and also that some additional symbols be used. The methods by which this was accomplished are listed here.

Abbreviations

Ms indicates whatever source is under discussion
S indicates the uppermost part, or Superius
A indicates the Altus part, sometimes given in the manuscripts as "Contratenor Altus"
T indicates the Tenor part
CT indicates the Contratenor (Bassus), sometimes given in the manuscripts as "Bassus"
B indicates Bassus (Contratenor Bassus)

The abbreviations for the individual manuscript sources are given in the preliminaries to this Volume under the heading "SOURCES."

Clefs

The usual clefs that appear in the manuscript sources include the C clef, which may appear on any of the five staff lines,
the F clef, which appears on either the third or fourth lines (from the bottom), and the Gamma clef ($\Gamma$), which appears in the manuscript source for the Missa sine nomine No. 1 only on the third line. These clefs are replaced in the transcription by the modern treble, octave-treble ($\breath$), and bass clefs, in keeping with the concept of a performing edition. The musical incipits given at the beginning of each major division of a composition show the clefs used in the manuscript source on which the transcription is based.

**Equivalents**

A reduction of two to one ($\breath = \breath$) will be assumed, unless other equivalents are noted, except in the case of the mensuration $\breath$, tempus imperfectum diminutum, in which a four-to-one reduction ($\breath = \breath$) is used. The scale of reduction is given at the beginning of each major division of a composition, whether 2:1 or 4:1. Since, in $\breath$, the measure is defined not by the semibreve, but by the breve, a measure of $\breath$ is equal to two full breves.

**Bar Lines**

In order to allow full melodic and rhythmic freedom, the

---

1See Volume I, Chapter II for a full discussion of mensuration and proportional signs.

xv
Bar lines appear between the staves rather than through the staff itself, except at sectional or other major divisions, and at points where a double bar appears in the manuscript source. In this way, the original notational character of the parts can be more exactly duplicated without the use of ties over the bar line. In some cases, as, for example, when the different voice parts are not in the same mensuration, dotted lines have been used to separate mensural units instead of full bar lines.

**Time Signatures**

Changes in time signature for the purpose of accommodating shifts from simple to compound divisions, or vice versa, have been avoided except in those cases where an unusually complex notation would result if a change were not made. The signatures for the different mensurations are shown below:

\[
\begin{align*}
\text{O, } \phi &= \frac{3}{2} \\
\text{C} &= \frac{6}{4} \\
\text{O} &= \frac{9}{4} \\
\text{C, } \psi &= \frac{2}{2}
\end{align*}
\]

**Ligatures**

Ligatures, as they are found in the source manuscript only, are indicated in the transcription by a square bracket (\[\square\]).

**Coloration**

Blackened notes are indicated, as they are found in the source manuscript only, by angle brackets (\[\langle\rangle\]).
Proportions

Because the use of proportion occupies such a significant place in Tinctoris' music, all proportional signs that appear in the source will be included in the transcription. They will be enclosed within a diamond and placed above the part to which they refer (\[\frac{3}{4}\]).

Accidentals

In addition to those accidentals often found at the beginning of staves in the manuscripts, sharps and flats are sometimes found at other points. These accidentals are placed directly on the staff in the transcriptions, exactly as they are found in the manuscript source. Editorial accidentals—*musica ficta*—are written above the staff in the transcription. Those which are doubtful, or optional, are enclosed within parentheses.

Text Underlay

Text phrases, or individual words of the text that are underlined in the transcription are those which have been supplied by this editor, either because they have been moved from their positions in the source or because they were absent from the manuscript. For a complete discussion of manuscript practices regarding text underlay see Chapter VII.
**SOURCES**

I. Manuscripts

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Mil  Milan, Archivio del Duomo, Cod. 2268
   "Missa sine nomine No. 3"

Mun  Munich, Bibl. Univ., Cod. 322-325
   "Virgo Dei throno digna"

Pix  Paris, Bibl. Nat., fonds français 15123 (Pixérecourt Chansonnier)
   "Vostre regart"

Rome Rome, Vatican City, Capp. Sist., Cod. 35
   "Missa L'homme arme"

SG  St. Gallen, Stiftsbibliothek, Ms 463 (Tschudi Liederbuch)
   "Virgo Dei throno digna"

Seg  Segovia, Catedral bibl., unnumbered Ms
   "Le souvenir" (a 2)
   "Le souvenir" (a 4)
   "Helas"
   "De tous biens playne"
   "D'ung aultre amer"
   "Tout a par moy"
   "Comme femme"
   "Alleluya"
   "Fecit potentiam"

Sev  Sevilla, Bibl. Colombina, Ms 5-I-48 (Together with the Ms Paris B.N., nouv. acq. fr. 4739, forms the Seville Chansonnier)
   "Helas"
   "Vostre regart"

Ver<sup>1</sup> Verona, Bibl. Capitolare, Ms DCCLV
   "Missa sine nomine No. 1"

Ver<sup>2</sup> Verona, Bibl. Capitolare, Ms DCCLIX
   "Missa sine nomine No. 2"
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II. Early Prints

Lam Petrucci, O. Lamentationes Jeremiae Prophe, Libro I. Venice, 1506.
"Lamentationes Jeremiae"

"Virgo Dei throno digna"

"Helas"
CRITICAL NOTES

The following index consists of a list of concordances, errata and critical notes for the source, variants in the concordant manuscripts, and a list of modern editions for each of Tinctoris' compositions. In those instances where more than one Ms version exists, the first Ms listed is that on which the transcription in this Volume is based, followed by errata, if any, in that Ms. The remaining sources are listed in alphabetical order, followed by all variants from the transcription source, excluding differences in ligature grouping and in minor color. The following system is used to refer to specific points in the transcription: the Movement (in multiple-movement works) is indicated by a Roman numeral (I = Kyrie, etc.) followed by a comma; the sectional division of the movement is indicated by a capital letter followed by a colon; the voice part referred to is indicated by a capital letter (S = Superius, etc.) followed by a semicolon; the measure is indicated by an Arabic numeral followed by a comma; the last numbers refer to specific notes within that measure. For example, II, A: T; 23, 5-7 refers to the fifth, sixth, and seventh notes in measure 23 of the Tenor part in Section A of the Gloria of the Mass in question. Asterisks appear in the transcription at points referred to in the Notes for the source Ms only.

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Missa sine nomine No. 1

Source: Ver¹, folios 17v-26 (unica)

Errata and Critical Notes:

I, A: CT; 12, 5: Ms has minim.
II, A: CT; 7, 4-5: Ms has dotted black minim followed by an undotted black minim.
F: S; 118, 3: Ms has B-flat.
G: T; 142, 1: Ms has C.
III, A: S; 38, 3: This note appears to be a semiminim in the Ms.
A: CT; 34, 3: Ms has C.
A: CT; 44: This entire measure is unreadable in the Ms. In view of the hocket that occurs in this passage, it seems almost certain that rests were intended as shown, and that some note—probably a C—was intended on the first beat.
IV, A: S; 23, 2: This note is lacking in the Ms.
A: CT; 17, 1: Ms has B-flat.
V, A: S; 16, 7: Ms has fusa.
C: S; 35: Ms lacks rests to the value of one breve.

Modern Edition:


Missa sine nomine No. 2

Source: Ver², folios 25v-31 (unica)

Errata and Critical Notes:

II, A: S; 13, 2: Ms has breve.
C: T; 55, 2: The Ms is unclear as to whether this is a minim rest or an f'. The latter was chosen because it provides a better melodic sense.
C: T; 56, 2-3: Ms has minims.
D: CT; 78, 1: Ms has semibreve.
III, A: T; 13, 5: Beginning with this note, four notes appear to have been changed in the Ms.
C: CT; 60, 5: Ms has g.
IV, B: T; 48, 4-6: Ms has "\[\text{JJ- }\].
C: CT; 67, 1-2: Ms has \[\text{JJ- }\].
C: CT; 68, 2: Ms has minim.
V, A: T; 20, 2: Ms has d'.

Missa sine nomine No. 3

Source: Mil, folios 37v-43 (unica)

Errata and Critical Notes: (Note: In accordance with the Milan tradition, this Mass lacks both the Kyrie and Agnus Dei. In the following list, II still refers to the Gloria, however, and, likewise, III to the Credo, IV to the Sanctus.)

II, C: S; 83, 1-2: Ms has \[\text{JJ- }\]: This may be a later addition to the Ms to indicate that the ligature is to receive not one but two syllables of the text; this is clearly necessary if the text is to be accommodated to the existing number of notes.
C: T; 80-end: These rests are lacking in the Ms.
D: S; 99, 4: Ms has f'.
III, A: S; 38, 1: Ms has a'.
B: T: This part, although written in the Ms with an F clef, is not the Contra but the Tenor part, as indicated. The Tenor in this Ms uses either the C or F clef.
IV, D: T; 71-73: These notes are lacking in the Ms. Because of the sequential treatment at this point, however, the missing notes can be supplied as shown with almost complete certainty.

Modern Edition:

Josquin des Pres et vari: Messe, Magnificat, Motette

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Missa L'homme armé

Source: Rome, folios 84v-103 (unica)

Errata and Critical Notes:

I, A: S; 9, 3: This note has been added to the Ms in a different hand.

II, A: S; 36: In the interest of harmony, the following rhythm may be preferable: \( \begin{array}{cccc}
1 & 2 & 3 & 4 \\
\hline
\cdot & \cdot & \cdot & \cdot
\end{array} \)

A: T; 48: Rests to the value of one perfect breve are lacking in the Ms.

III, A: T; 20: Ms has semiminim rest (equal to eighth rest).

D: S; 124, 6: Ms has minim corrected to semibreve (\( \frac{3}{4} \)).

IV, A: S; 25, 4-5: Ms has dotted minim followed by semiminim.

C: T; 90: Ms has \( \frac{1}{8} \).

D: T; 111: Beginning with the last two notes of this measure, five notes seem to have been added to the Ms (in a different hand?).

Modern Editions:


**Lamentationes Jeromiae**

Source: Lam, folios 2v-6 (unica)

Errata and Critical Notes:

A: S; 14: In the interest of better imitation, the following may be preferable: \[ \text{[MUSIC NOTATION]} \]

C₁: S; 126: The print has a dotted white breve instead of the proper dotted blackened breve.

C₁: A; 128: The print has a breve rest.

**O virgo miserere mei**

Source: Mel, folios 46-47 (unica)

Errata: None

**Virgo Dei throno digna**

Source: Mel, folios 154-155

Errata: None

Concordances and Variants:

Bol, folios 1v-2r

S; 10-11, 4ff: Ms has following equivalent: \[ \text{[MUSIC NOTATION]} \]

T; 19, 1-2: Ms has dotted breve instead of breve followed by semibreve.

CT: Ms has only one flat in signature.

F 59, folios 19v-20

S; 20, 1-4: Ms has instead: \[ \text{[MUSIC NOTATION]} \]
T; 16, 5: This note is lacking in the Ms.
T; 23-24: Beginning with the fifth note of m. 23, four notes are lacking in the Ms.

CT; 12-13: Ms has instead: \[ \text{music notation} \]

Text incipit only in T and CT; complete in S.

Glo, No. 259

All voices have $\text{C^2}$ instead of $\text{C}$. 

S: This part has a C clef with a "g" above throughout.
S; 17-18: Ms has instead: \[ \text{music notation} \]

S; 24-25: Ms has instead: \[ \text{music notation} \]

T: This part has C clef and "g" below throughout.
T; 19, 4: Ms has semiminim.
CT: No flat in signature.
Text is complete in S; incipit only in T and CT.

Mun, No. 7

S; 7, 1: Ms has breve followed by semibreve.
S; 11-13, 4ff: Ms has breve-long-long instead of maxima-breve.
T; 1: Ms has two breves.
T; 7: Ms has two breves.
T; 15, 1: Ms has semibreve followed by minim rest.
T: Marginal note: "Hypodorius."
CT; 2, 4: Ms has B-flat.
CT; 18, 1: Ms has semibreve followed by minim.
Incipit only in all parts.

SG, No. 14 (Incomplete--Superius only)

S; 7, 1: Ms has breve followed by semibreve.
S; 11-13, 4ff: Ms has breve-long-long.
S; 21, 6-9: Ms has two fusae, 2 semiminimae.
Text incipit only in all parts.
Ms has superscript: "Hypodorius."

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Mot, folio 50: Not examined.

Modern Edition:

Sing- und Spielmusik aus alterer Zeit, E., J. Wolf
(American Reprint: Music of Earlier Times: Vocal
and Instrumental Examples; 13th Century to Bach, New
York: Broude Bros.) No. 15, pp. 42-44. Transcrip-
tion based on Bol.

Alleluya

Source: Seg, folio 204

Errata and Critical Notes:

S; 21, 3: Ms has blackened minim.

Concordances and Variants:

This duo appears also in Tinctoris' Liber de arte
contrapuncti (See Seay, The Art of Counterpoint,
pp. 111-112) where it carries the incipit "Alleluya,"
in both parts, and with the following variant: In the
Liber, the following replaces the first three measures
of the version in Seg:

\begin{music}
\begin{notation}
\g clef=bass \\
\f = \text{tempo}\end{notation}
\begin{notation}
\g clef=treble \\
\f = \text{tempo}\end{notation}
\end{music}

The version in Seg is textless.

Fecit Potentiam

Source: Seg, folio 205 (No ascription in the Ms) (unica)
Errata and Critical Notes:

T; 4, 4: This note appears to be a later addition to the Ms.

Hellas

Source: Odh, folios 57v-58

Errata: None

Concordances and Variants:

F 59, folios 214v-215

S; 1, 2-3: Ms has dotted minim-semiminim.

S; 13, 2-4: Ms has instead:

S; 17, 6: No flat in Ms.
S; 17, 7: Ms has minim.
S; 21: Ms has minim f' instead of rest.

S; 22, 4-5: Ms has instead:

S; 26: No flat in Ms.
S; 26-27, 8f: These two notes replaced by semibreve e'.

T: Ms has flat throughout.
T; 13, 2-5: Ms has instead:

T; 19, 1: Ms has breve d' followed by semibreve d'.

CT; 26, 1-2: Ms has instead:

Text incipit only in all parts.

FP, folios 47v-48

S; 4,1: Ms has semibreve-minim rest.
S; 23, 3: Ms has semibreve a' followed by minim a'.

Glo, No. 269

S; 1, 2-3: See F 59 supra.
S; 13, 2-4: See F 59 supra.
S; 14, 45: Ms has semibreve a.
S; 17, 6: No flat in Ms.
S; 26: No flat in Ms.
S; 26-27: See F 59 supra.
T: Ms has flat throughout.
T; 19, 1: See F 59 supra.

Seg, folio 184 (Ascribed to Compere)

S; 1, 2-3: See F 59, supra.
S; 11, 1: Ms has semibreve b-minim b.
S; 13, 2-4: Ms has instead:

\[ \text{\textfrac{3}{4}} \]

S; 17, 6: No flat in Ms.
S; 26: No flat in Ms.
S; 26-27: See F 59 supra.
T: Ms has flat throughout.
CT; 8: Ms has flat.
CT; 8, 5-7: Ms has three minims, with erasure of stem of second minim. (probable error)
CT; 10: Ms has flat.
CT; 11, 1: Ms has instead two semibreves, both g.
S has incipit "Elaes abraham;" T and CT "Elaes."

Sev, folios 44v-45

S; 24, 1: Ms has semibreve rest followed by minim rest, omitting the semibreve d'.
S; 26: No flat in Ms.
S: Ms has flat in signature from m. 29 to end.
T; 21, 2: This note (semibreve g) lacking in Ms.
T: Ms has flat in signature from m. 7 to m. 15.
S carries partial text: "Helas le bon temps que j'avoie."
T has "Helas le bon tempo."
CT has "Helas."

Z, No. 21

CT; 7, 1: Ms has two minims, both B-flat.

Modern Editions:


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Vostre regart

Source: Lab, folios 79v-80

Errata: None

Concordances and Variants:

Dij, folios 20v-21

S; 6: No flat in Ms.
S; 14, 1: Ms has semibreve-minim.
S; 27: No flat in Ms.
CT; 12, 4: Ms has following:

Text complete in S; incipit only in T and CT.

F 176, folios 3v-4

T: Tenor has flat in signature.
CT; 7: Ms has B-flat.
CT; 20: Ms has instead:

CT; 27: Ms has instead:

Text incipit only in S and T; no incipit in CT.

Pix, folios 120v-121

T and CT have flats in signature.

S; 4-5: Ms has instead:

S; 9-10: Ms has instead:

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S; 15: Ms has instead:

S; 20-21: Ms has instead:

CT; 6-7: Ms has instead:

CT; 24: Ms has B-flat.
Text complete in S; incipit only in T and CT.

Sev, folios 85v-86

S; 4-5: See Pix, supra.
S; 9-10: " "
S; 15: " "
S; 20-21: " "
S: This part has flat throughout.
T: " " " " "
CT: " " " " "
CT; 24, 1: Ms has B-flat.
CT; 27, 1-2: Ms has breve.
Text complete in S; T and CT have Vostre . . . feru."

Modern Editions:


O invida fortuna

Source: F 176, folios 86v-87 (unica)

Errata and Critical Notes:

T; 14: Ms has only one semibreve rest.
Text is nearly complete in S; incipit only in T and CT.

xxx
Le souvenir (à 4)

Source: Seg, folios 116v-117 (unica)

Errata and Critical Notes:

S; 5, 7: Ms has b'.
S; 14, 4: Ms has dotted semibreve.
Text incipit only in all parts.

Le souvenir (à 2)

Source: Seg, folio 203v (unica)

Errata and Critical Notes:

S; 12, 7: Ms has breve followed by breve rest; should be either a long followed by a breve rest, or a breve followed by a long rest.
S; 13, 10-19: These notes are double the proper values in the Ms. The longs have been transcribed as breves, i.e., \( \text{ diligentia} = \text{ breves} \).
S; 14, 17: This note (e') should probably be read as a d'.
Text incipit only in all parts.

Tout a par moy

Source: Seg, folios 204v-205 (unica)

Errata and Critical Notes:

S; 18, 3rd beat: Ms has one extra minim: \[ \text{ } \]
T; 22: The Tenor part lacks one measure. Satisfactory results are obtained by adding a breve rest at this point. Frye's chanson, on which this arrangement is clearly based, contains a full breve rest at this point. See the transcription in Plamenac, pp. 530-531 (See below).
Text incipit only in all parts.

Modern Edition:


De tous biens playne

Source: Seg, folio 202 (unica)

(De tous biens playne)

Errata and Critical Notes:

T; 11, 2: Ms has minim.
Text incipit only in all parts.

Comme femme

Source: Seg, folio 205v (unica)

Errata and Critical Notes:

The Ms contains the Superius part only. The folio which would presumably have contained the Tenor part and the remainder of the Superius (which is incomplete) is missing from the Ms. In view of Tinctoris' other two-part arrangements, it seems likely that the Tenor can be supplied as shown in the transcription.
S; 50, 3: Ms has fusa.
Text incipit only.
D'ung aultre amer

Source: Seg, folio 204 (unica)

Errata and Critical Notes:

S; 9, 7-9: The Ms is not clear at this point.
S; 21, 2-4: The Ms is not clear at this point. There appears to be a ligature c.o.p., followed by what may be a semibreve (which has been corrected to a breve).

Text incipit only in both parts.
Missa: Sine nomine № 1

Kyrie
(1) Hs has "emfolla"
(1) As has "Domine Deus rex silet"
(2) As has "Domine Agnus Dei silet"
(1) The text from "Et ascendit" to "non erit finis" is lacking in the Ms.
Sanctus
Agnus Dei

(1) Hs has "Agnus Iesus"
III. Credo

Flos beatae matris terræ

Ex aeternis poenis

Lorum ce.
Et incarnatus est de Spiritu Sancto et de Mariâ Virgine et homō factus est
(1) Hs has "Qui proxe... nos" at this point.
(2) Hs has "Et vita... venturi" at this point.
IV. Sanctus

 Sanctus

 Sanctus

 Sanctus

 Sanctus

 Sanctus

 Sanctus

 Sanctus

 Sanctus
Osanna ut supra

V. Agnus Dei
(1) No mensuration sign in the Ms
Cum Sancto Spiritu
Credo
The text from 'Crucifixus etiam' to 'apostolam Ecclesiam' is lacking in the Ms.
Sanctus
(1) Hs has "Pleni tacet / yte folium"
(2) Hs has "YTE folium / pleni tacet"
Osanna ut supra
MISSA: L'homme armé

I. Kyrie

(1) Canon: "Crescit in dulcisum"
II. Gloria

Et terra remotarum

Pax hominibus bene voluntatis

Lauda

Benedictum te Deum

Laudamus te
Et incarnatus est de Spiritu Sancto ex Maria Virgine et homo factus

(1) Canon: "absque meru praem / rue in dytessaron ymum"
Et resurrexit

Surrexit

dicete

Sed cum domum scripsi

diceste

cum domum scripsi
II. Sanctus
(1) Canon: "Crescit in duplum"
Osanna

[Osanna ut supra]
V. Agnus Dei

(1) Canon: "Crescit in duplum"
(1) Subscript: "Non est tacet"
In the Petrucci print no double bars are founds. This division is the editor's, and is based on the textual divisions of the Lamentations.
These notes may be added to accommodate the text contained in the print.
(1) Subscript:"Verte"
(1) Verses "Galeth" and "He" are omitted from the print.
O virgo miserere mei
Foot poteniam

Fe·cit po·
ten-

ti·am in br·
chi-

o dis· pas· sit su-

chi· o dis· pas· sit su-

per·to·e men· to·e cor·

per·to·e men· to·e cor·
Vostre regart

Don del pesquant bien cur fort

Jusques au coeur

que ne sa joy joue jexee si la piété de vous ou vos...
The following rhythm, found in the Florence Ms XIX, 176, is preferable: \[\text{\textbullet\textbullet\textbullet\textbullet}\]
O invida fortuna.
Le souvenir (à 4)
Le souvenir (32)
De tous biens playn.
Comme femme