ADAM VON FULDA ON MUSICA PLANA AND COMPOSITIO.
DE MUSICA, BOOK II: A TRANSLATION AND COMMENTARY

by

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We accept this thesis as conforming
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ABSTRACT

Adam von Fulda, German musician, composer and teacher, completed his important treatise on music in 1490. While representing a conservative, northern tradition in late-medieval music theory, it also shows some evidence of humanist influence.

The treatise is divided into four books which discuss the origins and uses of music, the theory of plainchant, mensuration and notation of rhythm, and proportions, respectively. Thus, throughout this informative work, Adam mixes the practical with the speculative. Although his style of explaining technical matters is clear and succinct, he also engages the reader’s interest with his polemical and rhetorical digressions.

This dissertation presents a detailed commentary upon Book II of the treatise, on musica plana (plainchant), accompanied by a translation from the Latin. The first two chapters of the dissertation are concerned with the biographical information available on Adam von Fulda, as well as with the format and transmission of the treatise.

Three chapters of the dissertation serve as the commentary. Chapter III discusses Adam’s treatment of the practical aspects of singing plainchant, including his
discussions of the Guidonian hand, the gamut, the naming of pitches, hexachords and mutation (material covered in Chapters 1 to 6 of the treatise's second book).

Chapter IV of the dissertation considers the subject of musical intervals as covered by Adam, and the ten rules of composition provided in his Chapters 7 to 12. These rules are perhaps the most interesting and unusual part of Book II, as they go beyond the stated subject of plainchant. Written composition, not just improvised counterpoint, is treated in a manner that anticipates later humanist regard for music as an art.

Finally, Chapter V examines Adam's treatment of the modes of plainchant (discussed in his Chapters 13 to 17). A conclusion summarizes Adam's impact on later theorists and the importance of the treatise.
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LIST OF ABBREVIATIONS

Frequently cited titles are abbreviated as follows:

<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>Babb</td>
<td>Guido, Hucbald and John on Music.</td>
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<td>CS</td>
<td>Coussemaker, C. E. H. de. Scriptorum de Musica medii aevi nova series.</td>
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<tr>
<td>CSM</td>
<td>Corpus Scriptorum de Musica.</td>
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<tr>
<td>GS</td>
<td>Gerbert, Martin. Scriptorum Ecclesiastici de Music Sacra Potissimum.</td>
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<tr>
<td>TML</td>
<td>Thesaurus Musicarum Latinarum.</td>
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Since no symbol is available for square B (B-natural), "#" will be used. The entire gamut of Guido is thus shown as follows: T A B C D E F G a b/# c d e f g aa bb/## cc dd.

Citations from the Latin text of Book II from Appendix B will be indicated by Book/Chapter/Line numbers, for example, II/3/45-48.
ACKNOWLEDGEMENTS

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DEDICATION

To the memories of
DONALD MACKEY and BELLE MULHOLLAND,
sine quibus, nihil.
When Adam von Fulda penned his music treatise in 1490, Europe was in the midst of profound change. Spanish and Portuguese explorers were venturing further and further away on the seas, and were poised to discover and exploit a whole new world. Italian painters were creating a radically new approach to art, one using the science of perspective to give an illusion of reality and unified space. Authors, critics and philosophers were probing the works of ancient Greece and Rome, in the process changing not only literary forms and themes, but their most basic ideas about life. Religious thinkers were questioning many traditional practices and long-held concepts, and were about to perpetrate the great explosion of the Protestant Reformation upon the Western world. Books were flowing forth from the new printing presses. Science, trade, industry, politics, urban development—everything was in upheaval.

Nor was music immune from this pervasive spirit of change. The northern composers, culminating with Josquin des Pres, were forging a new style of composition which would become the central language of Renaissance music. Interest in the secular was beginning to displace that in the sacred, and the writing of instrumental music was on the rise. Printing was about to change forever the
accessibility of music-making to the populace. Finally, theoretical writing about music, especially in Italy, was at a most prolific and confrontational stage.\(^1\)

Thus, a consideration of the music treatise of Adam von Fulda would be interesting just as a reflection of these tumultuous times. In fact, this work has other importance as well, for the treatise can be seen as something of a watershed in several ways. While Adam follows in the well-trodden, conservative path of the writers of late medieval treatises, he also looks ahead to the establishment of humanist ideas in Germany. Again, while it remains one of the last significant northern treatises to appear only in manuscript, it anticipates in its form and contents the printed books about music which had a considerable efflorescence in sixteenth-century Germany.

It has been noted by Howard Mayer Brown that "Studies of the Renaissance...have rightly centered on artistic, intellectual, and philosophical events in Italy. Music in

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the Renaissance, on the other hand, is a northern art..."² Unlike musical composition, however, the writing of theoretical treatises on music was more of an Italian preoccupation. While there exist a number of treatises from the north in this period, they have been little studied and have been overshadowed by works of Italian writers such as Ugolino, Gafurius, and Zarlino. It is important, then, to examine theorists from the north, such as Adam von Fulda, in order to give due recognition to that concurrent tradition, its importance and its influences.

Since this significant music treatise of Adam von Fulda has never been translated, that was undertaken as the first step in this study. It is always useful to have historical treatises available to scholars in an accessible form, and Adam’s has much of interest. In particular, the second of the four books is valuable for its unique rules of composition, and also for the extended sections of vivid polemics in which Adam speaks his mind about musical conditions in his day. Because of these intriguing aspects, it was decided to provide a detailed commentary to Book II, rather than a more general treatment of the entire treatise. However, the translation of the work has been completed,

leaving open the possibility for future publication of an annotated version; the whole treatise is summarized below.

This dissertation, then, considers Book II of the four books of Adam's treatise. The annotated translation of Book II is presented as Appendix B. Detailed treatment begins in Chapter I with a look at Adam's life and its documentation. The second chapter examines the manuscript and printed sources for the treatise itself, as well as influences on Adam's work, and includes a general summary of its contents. The subsequent three chapters probe the material presented in the treatise, following Adam's division of subject matter. A conclusion briefly discusses Adam's impact on future music-theoretic writing in Germany and the importance of his treatise.
CHAPTER I

THE LIFE OF ADAM VON FULDA

(c. 1450 - 1505)

Although the works of Adam von Fulda were seldom familiar in European cathedrals and courts, the composer’s name has not often been absent from the attention of musicians since the Renaissance. Circulating initially in manuscripts, Adam’s music was soon issued in printed form and continued to be published until the end of the seventeenth century. Soon after, with the writing of the early music lexicons of the eighteenth century, his name and contributions began to be duly noted. Gerbert’s publication of Adam’s treatise in 1784¹ rekindled interest in the man, although by then little was known of his compositions. By the end of the nineteenth century, detailed research was seeking to bring to light new data about both his music and his life. This chapter will summarize the available information about Adam von Fulda and present background material on his life and works.

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Biographical Sources

Biographical information has rarely been as meagre or confused as has that for Adam von Fulda. One of the first writers to comment upon him was the Swiss university professor, Heinrich Glarean. In his monumental treatise, the *Dodecachordon*\(^2\), he quotes Adam's *lied*, *Ach hülf mich Leid*, as a Latin *contrafactum* with the text *O vera lux*, and states that it is "most elegantly composed and much sung throughout Germany."\(^3\) This was in fact the only work of Adam von Fulda to be known in the eighteenth and nineteenth centuries, and even it might have rested in oblivion were it not for Glarean's observation.

Surprisingly, Glarean's citation of 1547 provides us with the last mention of Adam's name, aside from sporadic editions of his compositions, until 1732. In that year, Walther included a short entry in his *Musikalisches Lexikon*,\(^4\) repeating the information from Glarean and also noting the inclusion of *Ach hülf mich Leid* in the 1673 Magdeburg publication of sacred songs and psalms,

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Enchiridion.\textsuperscript{5} This appears to have been the last edition of a work of Adam before the revival of scholarly interest in him in the 1890’s.

Gerbert’s publication of De Musica of Adam von Fulda in 1784 included little new information in its introduction. Later discussion of Adam, beginning with Gerber in 1790,\textsuperscript{6} focused more exclusively on the treatise; with Forkel’s publication of 1792,\textsuperscript{7} a summary of the contents became a frequent inclusion in biographical entries. Few commentators, however, seem to have read the treatise carefully, for the few details it gives about Adam’s life are not included in their writings. False information was unfortunately presented by Gerber in 1812,\textsuperscript{8} resulting from his confusing the younger musician, Adam Krafft von Fulda, with the older master. This mistake, like so many that were printed in those early works, remained unchallenged and was to persist through the presentations of several subsequent

\begin{itemize}
\item \textsuperscript{5} No mention of this publication, aside from Walther’s, has been found.
\end{itemize}
writers, such as Schilling, Mendel, and Paul;\textsuperscript{9} it was not corrected until the time of Kümmerle's remarks,\textsuperscript{10} some seven decades later. Throughout the nineteenth century, brief reports on Adam are to be found in works by Choron and Fayolle, Fétis, Dommer, Ambros, and Reissmann.\textsuperscript{11}

Articles by Eitner, Riemann, and Niemann\textsuperscript{12} around the turn of the twentieth century finally began to provide a more scholarly consideration of the life and works of Adam von Fulda. New music was found, edited, and discussed. An article by Moser,\textsuperscript{13} growing out of his work on Paul

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Hofhaimer,14 brought together all the known information and documents concerning Adam's life. Gurlitt15 dealt with the confusion surrounding the Adams: Adam von Fulda, Adam Rener, Adam von Lütich (though the last two may be the same person), Adam Singer, and Adam componist (the last two names could refer to any of the previous three). Later articles by Gurlitt16 and Ehmann17 uncovered additional documentation concerning the musician's life, while a brief consideration is given by Riemann in his Handbuch.18 Further encyclopedia entries by Eitner, Riemann, Moser, Hüschen, Ehmann, Engel, and Niemöller summarized and occasionally added new information.19 The most complete work on Adam von Fulda,

that by Ehmann,\textsuperscript{20} deals almost exclusively with his music; it mentions little about his life or treatise. Two recent German studies of related topics offer no new data.\textsuperscript{21}

\textbf{The Life of Adam von Fulda}

The established facts about Adam's life are remarkably few, almost forcing writers into the perils of conjecture. For instance, estimates about the year of his birth have ranged from 1440 to 1460\textsuperscript{22} simply from his own statement in \textit{De Musica} that he is a contemporary of Dufay and Busnois.\textsuperscript{23} Although the exact place of birth is unknown, it is probable that he was born in or near the North German city of Fulda, an important religious and educational centre since the eighth century. He refers to himself as "Adam de Fulda,"\textsuperscript{24} but this may merely indicate where he was educated. That Adam may also have taught there is suggested (perhaps

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\textsuperscript{20} Wilhelm Ehmann, \textit{Adam von Fulda als Vertreter der ersten deutschen Komponistengeneration} (Berlin: Junker & Dunnhaupt, 1936).


\textsuperscript{22} For instance, Riemann gives c. 1440 and Mendel c. 1460 as possible birthdates. Gurlitt, Moser and Ehmann suggest c. 1445, Fétis and Reissmann c. 1450.

\textsuperscript{23} GS III, p. 341.

\textsuperscript{24} GS III, p. 329.
conjecturally) by Gerbert, who says his name was "celebrated by the people of Fulda."\textsuperscript{25} Glarean states that he is "Franci Germani", which is translated by Miller as "German French."\textsuperscript{26} It is more likely, however, that the "Franci" refers to the old German province of Franconia in which Fulda was situated. Adam was possibly educated as a Benedictine monk, since he spent some time in a monastery of that order, Wormbach, near Passau in southern Germany, while writing the treatise.\textsuperscript{27} It is also speculated that some of his education took place in Basel (and possibly some early professional positions as well), since he mentions the name of Andrechin, a musician from there, in the treatise.\textsuperscript{28} Moser finds no collaborative documentary support for any of these hypotheses in the archives of either Fulda or Basel.\textsuperscript{29} It may be that Adam spent part of his younger life in central Germany, since some of his music is included in the songbook of Arnt von Aich, published in Cologne in 1510.\textsuperscript{30} Other works are found in the Nikolaus Apel codex,\textsuperscript{31} compiled in Leipzig in 1504, which lends support to this. Moser\textsuperscript{32}

\begin{enumerate}
\item \textsuperscript{25} "Celebratum etiamnum est apud Fuldenses Adami nomen," GS III, p. 329.
\item \textsuperscript{26} Miller, Dodecachordon, p. 253.
\item \textsuperscript{27} Stated by Adam in De musica, GS III, p. 330.
\item \textsuperscript{28} II/6/57.
\item \textsuperscript{29} Moser, "Leben und Lieder," p. 8.
\item \textsuperscript{30} More recent information suggests that the songbook was assembled in Augsburg; see New Grove Dictionary of Music and Musicians, s.v. "Arnt von Aich," by Marie Louise Göllner.
\item \textsuperscript{32} Moser, "Leben und Lieder," p. 10.
\end{enumerate}
refutes a traditional idea that Adam was a teacher of the younger theorists, Wollick and Glarean, which would also have implied a connection with Cologne.

The first reliable information about Adam von Fulda comes from his treatise, *De Musica*, finished on 5 November 1490 (as stated by the author in the conclusion\(^{33}\)) and dedicated to Joachim Luntaler. The Thuringian Luntaler (also called Tainhaimer) was an advocate of the Ecclesiastical Court (possibly at Passau in southern Germany) and a friend of Angelus Rumpler, Abbott of the Benedictine monastery at Wormbach, not far from Passau. Adam speaks highly of his dedicatee as a long-standing friend; indeed, Luntaler recommended him for his later position with Frederick the Wise of Saxony.

The lengthy dedication\(^{34}\) provides some information about the writing of the treatise, although the language is occasionally ambiguous. Adam relates that his work had long been half-finished and often promised to Luntaler. He travelled from Passau to Wormbach in order to complete it. Possibly this sojourn was arranged by Luntaler through Abbott Rumpler. Two or three booklets of his work were stolen there and had to be recopied. Business from his princes prevented Adam from correcting his writing at the

\(^{33}\) GS III, p. 381.
\(^{34}\) GS III, pp. 329-331.
monastery, and he took his work to the court (unfortunately, he does not state which court, although it was probably the Saxon court in Torgau). He gives an amusing description of court life with its "envy, detractions, rivalries, insults, and almost infinite injuries, such that he who lives away from the tumult of the court can be called happy and be contented with his fortune."35 The cottage where he worked (perhaps at Wormbach) with many others "as ants crowded in an anthill" had such silence around it that "you think you hear the jays and crows in the dirt, or the frogs in the swamp."36

In the treatise Adam calls himself a "ducal musician."37 Riemann speculates that he served the Bishop of Wurzburg, but also suggests the possibility of a connection with a Bavarian court because of the time spent in Passau and Wormbach.38 Adam may refer to his later position in Saxony, implying that the manuscript was actually finished there. Support for this possibility comes from Gurlitt's finding of a mention of him in Saxon records of March 1489 (before the completion of the treatise).39 Moser uncovered no archival documentation in Wurzburg or Wormbach.40

39. Gurlitt, "Ein Lütticher Beitrag," p. 126; as Gurlitt notes, however, this may refer to Adam Rener.
Niemöller implies that Adam was at the monastery at Wormbach for some time and left in 1490 because of his marriage. He travelled to Torgau to enter the service of Frederick the Wise of Saxony, with whose electoral court he probably remained for the rest of his life. Adam began there as a singer, became also a court historiographer in 1492, and was elevated to Kapellmeister by 1498. He matriculated at Frederick's new University of Wittenberg in 1502, where he probably taught music. Moser records that at a feast at Torgau in 1500, two masses were performed by the Kantorei under Adam von Fulda. At various times he had as colleagues at court Paul Hofhaimer and Heinrich Isaac. In 1503-04 Adam worked on a chronicle of Saxon history, now missing, which was later completed by Johannes Trithemius, Abbott of St. Jacob's in Wurzburg. A court document of 1503 records a special payment for the care of Adam while he was sick. Pietzsch notes that Adam was part of a circle of humanists involved in an exchange of "sharp epigrams" between Erasmus of Rotterdam and Edward Lee.

41. *New Grove Dictionary*, s.v. "Adam von Fulda." This is probably speculation; the only documentary reference to Adam's wife is as a widow. See notes 40, 42.
42. For documentation, see Gurlitt, "Johannes Walter," pp. 10-11. Adam died before the famous reformer and lover of music, Martin Luther, came to Wittenberg in 1508.
44. Both of these famous Renaissance musicians served at the court of Emperor Maximilian, with whom Frederick the Wise had a friendly relationship.
Most commentators put Adam’s death (from the plague) in the year 1505. Ehmann supports this, reporting that his widow, soon after that date, bought a house in Wittenberg. Moser, however, disputes the date, placing Adam’s demise after 1517, the momentous year of Martin Luther’s posting of his 95 theses on the door of Wittenberg’s Schlosskirche. Part of his reason is the publication in 1512 of the poem, *Ein ser andechtig Christenlich Buchlein aus hailigen schriften und Lerern von Adam von Fulda in deutsch reymen gesetzt*, which was illustrated with woodcuts by the renowned Lucas Cranach the Elder. Riemann ascribes the poem to the younger Adam Krafft von Fulda, but Moser refutes this. He also points to a 1517 mention of an "Adam componist" in court records. Gurlitt thinks this refers to Adam Rener (von Lüttich) and supplies two documents which support the theory that Adam von Fulda died in 1505.

Adam’s treatise suggests some avenues for further searches for biographical documentation. Like writers before him, Adam relied especially on the work of Boethius. However, he also used extensively the ideas of John (Cotton)

47. *Die Musik in Geschichte und Gegenwart*, s.v. "Adam von Fulda."
50. Gurlitt, "Johannes Walter," p. 10. The documents comprise a letter to Trithemius requesting that he continue the Saxon chronicle begun by Adam but left unfinished by his death, and the reply of Trithemius, both from 1506.
Affligemensis, and mentions no theorist later than Jehan des Murs. This could give some clues to his place of education. Another writer whom Adam quotes extensively is Jean Gerson. 51 This late-medieval Chancellor of Paris was not only an astute politician, dealing with the complex problems of the Schism at councils in Pisa and Constance, but he was also an influential thinker, preacher, and writer. Morrall states that "In the century after his death [1429] he is constantly quoted by the Conciliar rebels of the period of the Council of Basel." 52 This could lend support to the idea of an association of Adam with the Swiss city.


Figure 1. Map of Northern Europe

(including locations significant in Adam’s life)
**Compositions of Adam von Fulda**

The music of Adam has been explored in various recent articles as well as in Ehmann's *Adam von Fulda als Vertreter der ersten Deutschen Komponistengeneration*. The main sources for his works are the so-called "Nikolaus Apel Codex" at Leipzig University (*LeipU 1494*) and a manuscript at Berlin's Staatsbibliothek Preussischer Kulturbesitz (*BerLS 40021*). Adam's surviving pieces include a *Missa* (based on a secular tenor which has not been identified), a *Magnificat Quinti Toni*, seven hymns, two antiphons, one respond, and three four-voice secular songs. Some of his melodies (especially *Ach hülf mich leid*) became popular with other composers as a basis for both liturgical compositions and instrumental works.

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54. Edited by Gerber; see n. 31 above.

55. Organ tablatures, for example; for a partial listing, see Eitner, "Das alte deutsche mehrstimmige Lied," p. 19.
The existing musical compositions of Adam are predominantly polyphonic in three or four voices (two exceptions are in five voices). Almost all are structured on a cantus firmus which most often occurs in the tenor part, but which may also appear in the superius, or may sometimes migrate. Imitation is present but is not pervasive. Imbedded canons are employed as structural devices in several instances. These qualities link Adam stylistically (as noted by several commentators) with the second generation of Netherlandish composers, which included Ockeghem and Busnoys. The latter he praises in his treatise along with Dufay.\(^\text{56}\) Ehmann places Adam in the first generation of German composers, along with Finck, Agricola and Stolzer, and thus considers him one of the founders of German music.\(^\text{57}\)

\(^{56}\) GS III, p. 341. Ehmann devotes a chapter to the possible influence of Busnoys on Adam (pp. 145-157).

\(^{57}\) Ehmann, \textit{Adam von Fulda}, p. 16. Ehmann considers the second generation to comprise Isaac, Hofhaimer and Senfl; see p. 18.
CHAPTER II

THE MUSIC TREATISE OF ADAM VONFULDA

Text Sources

De Musica by Adam von Fulda seems to have survived for centuries as but a single manuscript. It was first catalogued in 1514 at the former Cistercian abbey of Altzelle (at Nossen, between Leipzig and Dresden), which was secularized in 1540. By about 1760 a manuscript of the treatise resided in the library of the University of Strasbourg, where it was destroyed in the fire of 1870. Since no other early copies have been located, it is fortunate that Martin Gerbert had already published it in his series of musical writings, Scriptores Ecclesiastici de Musica Sacra Potissimum. Gerbert included few editorial corrections or notes in the text. Generally, there has been little scholarly criticism of his printed edition, although Dommer comments on the "unreliable musical examples"¹ and Serwer suggests that generally "the texts as rendered in his [Gerbert's] Scriptores are faulty by modern standards."² Praetorius found Gerbert's edition so bad, especially the

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¹ "...leider mit unzuverlässigen Notenbeispielen," Dommer in Allgemeine deutsche Biographie, vol. 1, p. 44.
examples, that he was unable to use it for his study.\textsuperscript{3} It should also be noted that Gerbert himself admits to omitting examples from the manuscripts in his editions.\textsuperscript{4}

An existing manuscript copy in Bologna (first noted by Eitner\textsuperscript{5}) is listed in Gaspari's catalogue of the library of the Liceo Musicale\textsuperscript{6} as "Adami de Wulda Opusculum musicale", but with no identifying number.\textsuperscript{7} A lengthy correspondence between Martin Gerbert and Padre Giovanni Battista Martini from 1761 until at least 1784\textsuperscript{8} reveals that both writers were embarking on written histories of music and wished to exchange information. A letter of Gerbert of 19 December

\begin{itemize}
\item[4.] See, for example, GS III, p. 363, where he has eliminated some examples from Adam's Book III on mensuration. Gerbert's note on p. 364 says that some examples do not appear because they could "scarcely be expressed in print" ("typis exprimi haud possunt").
\item[5.] Eitner, \textit{Quellen-Lexikon}, vol. 1, p. 37.
\item[6.] Gaetano Gaspari, \textit{Catalogo della biblioteca del Liceo musicale di Bologna}, vol. 1 (Bologna: Libreria Romagnolli dall'Acqua, 1890), p. 188.
\item[7.] In supplying a microfilm of the manuscript, the Civico Museo Bibliografico Musicale di Bologna listed it as MS A.43. The treatise is also catalogued with this number by Kristeller; see \textit{Iter Italicum} (London: Warburg Institute, 1963), p. 29.
\end{itemize}
1761 asks Martini for further information about a number of medieval authors (whom he later published), including a "Joannis de Fulda." A letter from Martini to Trombelli (undated) talks about the friendship with Gerbert and mentions "Gio di Fulda" among other names of writers. A further letter of Gerbert (30 October 1762) says "he is bringing some manuscripts of ancient church music to Bologna in order to exchange ideas with M. and talk at length face to face."\(^9\) Thus, it is possible that Gerbert brought with him the manuscript of Adam von Fulda, which was then copied for Martini in Bologna. The Bologna manuscript is written on paper in several different hands (Martini had notorious problems with his copyists). Prof. Giorgio Piombini, the librarian of the Civico Museo, confirms that the copying appears to have been arranged by Martini.\(^{10}\)

The manuscript of Adam’s treatise is bound with a number of other copied medieval works mentioned by Gerbert and Martini, some of which are in the hand of Martini himself (as noted by Gaspari\(^{11}\)). The contents of the volume, as listed at its conclusion, are shown in Table 1. below. Adam’s work in the Bologna manuscript occupies pages 231 to 318 of the bound set (the pages are also numbered starting from 1). A comparison with Gerbert’s published

\(^{9}\) Schnoebelen, p. 276.
\(^{10}\) I wish to thank Prof. Giorgio Piombini, Civico Museo Bibliografico Musicale, Bologna, for kindly supplying this information to me.
\(^{11}\) See, for instance, Gaspari, pp. 183 and 190.
edition shows many differences, although most of them are of minor importance. Perhaps the most significant difference between the two sources becomes evident in comparing their charts and diagrams. Some sections which appear as charts in the hand-written copy are incorporated into the printed version of Gerbert as continuous text, perhaps as a convenience for the typesetter (also a possible reason for Gerbert's omission of some examples). Furthermore, some charts and diagrams either differ markedly or do not appear at all in Gerbert's text. For example, the Guidonian hand which appears in a roughly drawn sketch in the Bologna manuscript is omitted entirely in Gerbert's edition; instead, the reader is referred to another treatise in which the hand is rendered schematically.

Less important differences between the two sources for the treatise include variants in spelling and punctuation, changes which do not alter the meaning of the text. The lack of division into paragraphs in the Bologna copy suggests that Gerbert's divisions were his own. Some corrections in the Bologna manuscript seem to have been made after consulting the (probably later) published work. Some marginal notes have been made in the Bologna version, usually in a different hand from that on the page itself.

12. The Bologna version of Books III and IV of the treatise has some short sections of text that are omitted by Gerbert as well.
13. II/1/100-103.
These consist mainly of proper names appearing in the text. Other differences will be noted in the following discussion of Book II of the treatise. The text used for the translation in Appendix B is Gerbert's; the Bologna manuscript has been useful, however, in illuminating some of the difficulties of the printed edition.
Table 1. Contents of Bologna Manuscript.

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<td>Musica Bernonis ab. Augiensis--pag. 11</td>
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<td>Keck Joannis, Introductorium musicae (Floruit an. 1442)--pag. 319</td>
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<td>Theogeri Metensis Episcopi Musica (floruit an. 1118)--pag. 409</td>
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<td>Willhelmus abbas Hirsauqiensis, de musica et tonis (obiit an. 1091)--pag. 429</td>
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<td>Aribio Scholasticus--pag. 207 e 211.</td>
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<td>(GS II, pp. 197-230?)</td>
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Contents and Classification of Adam's Treatise

The contents of the music treatise of Adam von Fulda are summarized in Appendix A of this study. Generally, each of the four books deals with an important aspect of traditional music theory. Book I covers the origins and uses of music as described in both Classical and Biblical writings. Book II discusses aspects of pitch, mostly with respect to plainsong but also briefly relating to counterpoint. Book III treats the complexities of mensuration, and Book IV details the important mathematical proportions and their application to mensuration and intervals in music. This division into separate books marks an intermediate stage between one undivided treatise, typical of some of Adam's northern contemporaries (Person, Keck, Conrad), and entirely separate treatises for the various topics, such as with the fifteenth-century works of Tinctoris or Prosdocimo. Adam's topics and order of treatment are traditional, reflecting the late medieval curriculum in music as one of the seven liberal arts.

The four books of Adam's treatise vary considerably in style. Book I is largely an historical exposition with some rhetorical flourishes and a large number of quotations from classical authors. On the other hand, Books III and IV concisely delineate complex technical matters, almost completely eschewing expressive writing or quotations. In
contrast to the other three books, the second is more eclectic in style, one might even say choppy and inconsistent. It mixes elements of the other books' styles with several extended sections of dramatic polemics. The variety of approach is paralleled in the different lengths of the chapters, from the 17 lines of Chapter 14 to 269 for Chapter 6. This diversity in the character of Adam's writing may reflect the problems that he experienced in putting his ideas to paper, problems vividly described in his introduction to the treatise.

Gushee has eloquently discussed the problems of classifying medieval music treatises and of determining their audiences. The same problems apply to the late medieval tradition represented by Adam's treatise. The most common distinction is that between practical and speculative/theoretical works, a distinction found across most of the liberal arts in the Middle Ages. Adam's work reflects a mixture of these types, as did treatises of many

14. The polemics occupy almost all of Chapter 6, the longest of the book, as well substantial sections of Chapters 9, 10 and 12. This amounts to approximately 27% of the total number of lines.
of his contemporaries, with Books II and III leaning towards the practical, and Books I and IV being more theoretical. Another difference often expostulated is that between works following an earlier Carolingian tradition, written for monastic and cathedral schools, and those taking a more "scientific" approach initiated by the Scholastics for university use, inspired by the Aristotelian revival of the twelfth century. This trend reached its musical culmination in the rigorously logical and densely technical *Speculum musicae* of Jacques de Liège. Adam's treatise shows little of the scholastic discipline, and falls more into the earlier Carolingian practice.

A further categorization has been made by some scholars which depends upon the assumed audience for the various treatises. The most detailed and intellectualized works would seem to be directed towards the students of the universities pursuing liberal arts studies, or may even be notes from their lectures. Simpler treatises might be intended for monastic schools; an example close to Adam's time is the 1442 *Introductorium musiceae* by Johannes Keck.


who several times addresses his "brothers" at the Benedictine abbey of Tegernsee.\textsuperscript{18} The most basic treatises were intended for entirely practical use for teaching boys in the church choir schools. Finally, a work could be intended for the use of, and commissioned by, a private patron. A number of the writings of Tinctoris fall into this category. We know from Adam's dedication that his treatise also was written for a patron, Luntaler. However, in its mixture of styles and approaches, \textit{De Musica} reflects as well the other categories mentioned above. Books I and IV are complex and learned, clearly directed at the university student. Book III on rhythmic matters, while also complex, is intended more for the advanced musician wishing to understand the intricacies of mensural notation. The simpler thrust of Book II may reflect a monastic background, and it is certainly well informed by the experience of a practising performer.

Recent comments on the contents of Adam's \textit{De Musica} have been limited. Perhaps the fullest have been Riemann's,\textsuperscript{19} although Moser finds that Riemann's treatment is only partially convincing and goes astray in places.\textsuperscript{20}

\begin{flushleft}
\textsuperscript{18} GS III, pp. 319-29.
\textsuperscript{20} Moser, "Leben und Lieder," p. 7; Moser refers to the treatment in Riemann's \textit{Handbuch für Musikwissenschaft}.
\end{flushleft}
Short discussions are provided by Apfel, Engel and Feldman. The monograph by Ehmann presents some consideration of Adam’s theoretical ideas in relation to his music, but that study contains little detailed coverage of the treatise.

**Sources Influential for De Musica**

The most important sources for Adam’s exposition of music theory were surprisingly old: sixth-century Boethius, eleventh-century Guido, and twelfth-century (?) Johannes Affligemensis. Wingell has suggested that, for the writers of the group of treatises attributed to Anonymous XI, these sources were transmitted through the *Tractatus* of Jerome of Moravia. This is probably not the case for Adam, however, since there are also borrowings which do not appear in Jerome. However, in Book II he does show particular affinity with Johannes, whose treatise he must have known well. In fact, Adam may have taken some of his quotations of earlier authors from Johannes rather than directly from the sources themselves. Adam’s reliance on Johannes

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Affligemensis and Boethius is clearly shown in the table of parallel passages given in Appendix D below. Of the 238 lines from Adam listed as borrowed, 109 are taken from Johannes Affligemensis and 106 from Boethius. The influence of Guido seems to have been transmitted through Johannes. For many of the borrowed passages, and direct quotations as well, Adam may have relied on his memory rather on available manuscripts, since the correspondences are not exact.23

There appears to be no influence on Adam's treatise from the prominent Italian works of the fifteenth century (especially those by Prosdocimo, Ugolino,24 Tinctoris or Gafurius). When Adam was writing, treatises still circulated mostly in severely limited numbers of manuscript copies. The first treatises published in Italy were probably the Theoricum opus armonice discipline by Gafurius (Naples, 1480) and the Musica practica of Ramos (Bologna, 1480).25 Printing was still an expensive process and only a limited number of copies could be made. Thus, it is

23. See the selected examples of parallel passages provided in Appendix D. These indicate that Adam was recalling key words rather than copying from the sources.
doubtful that Adam would have seen these works, and he certainly gives no indication of familiarity with them in his treatise. That he may have heard some rumblings from the debate that erupted over Ramos's ideas is shown in his frequent defense of the traditionalist view that music is rooted in reason, not in the senses, a view that Ramos was challenging.  

In contrast to the lack of influence from contemporary Italian theorists, there are often resemblances in Adam's work to north European treatises of his time. Unfortunately, there has been little examination to date of many of these works (a number still lie unedited in manuscripts in European libraries and are difficult to view) and their interrelationships, in spite of the pronounced activity in music theory in the north in both the preceding and following centuries. In considering briefly the relationships of Adam's treatise with other northern fifteenth-century works, it is clear that, although a detailed examination of all four books of Adam would yield more fruit for comparison, we can already identify some of these influences. For example, some writers follow a common fourteenth-century practice of dealing largely with mensuration in one detailed treatise. These works include:

26. See Chapter III below for details of the debate which erupted after publication of the treatise of Ramos.
These treatises may well show new connections with Adam’s Book III, which deals exclusively with rhythmic matters. Similarly, Adam’s Book IV, dealing with proportions, may demonstrate some significant relationships with other treatises, although there are fewer northern fifteenth-century works that explore this speculative topic.

Several fifteenth-century treatises cover matters quite distinct from any of Adam’s, and thus cannot be shown to relate to his. Such works include:

- Egidius Carlerius, *Tractatus de duplici ritu cantus*, and *Tractatus de laude et utilitate musicae*, c. 1450
- Paulus Paulirinus de Praga, *Liber viginti artium*, c. 1460
- Jean Le Munerat, *De moderatione et concordia grammatic et musice*, 1490

A number of contemporary theorists cover some or all of the topics that Adam treats, in a roughly similar plan, but

27. Source information for these and following treatises may be found in the first section, *Primary Sources*, of the bibliography.
without showing much resemblance textually. Among these are:

Anonymous, *Libellus musicae* (CSM 9)
Anonymous XII, *Compendium cantus figurati* (CS III), c. 1471
Johannes Keck, *Introductorium musicae* (GS III), 1442

Finally, there is a small group of fifteenth-century northern treatises which have shown some distinct relationships with Adam's in both overall plan and specific phraseology. These may indicate either a direct influence on him, or derivation from common sources:

Gobelinus Person, *Tractatus musicae scientiae*, 1417
Anonymous XI, *Tractatus de musica plana et mensurabili* (CS III), c. 1450
Amon's Anonymous, *Tractatus de musica cum glossis*, c. 1450
Bartha's Anonymous (Szalkai Manuscript), 1490

Further investigation of these works may yield fresh insights into Adam's life and work. Of course, there are many unedited treatises which may also reveal closeness to Adam's ideas. In particular, the *Utilissime musicales regule* of Guillaume Guerson, which ran to some eight editions (the first, Paris, c. 1495; the last, Paris, 1550), and a treatise in the manuscript Gent, Universiteitsbibliotheek 70(71) may be of much interest for comparison.

Adam cites numerous writers in his treatise, reflecting the penetration of humanistic trends into the thinking of
intellectuals in Germany at the end of the fifteenth century.  

Most prominent of the Classical authors are Aristotle, Cicero, Horace, Ovid, Pythagoras and Virgil. Augustine, Jerome, and Gerson represent the medieval Christian authors, while Boethius, Guido, and Johannes (Cotton) Affligemensis are the most frequently cited musical commentators of the Middle Ages. Other medieval theorists mentioned are Macrobius, Cassiodorus, Isidor, Berno, Hermannus, Odo, Regino, and Jehan des Murs. The breadth of Adam’s reading gives a fascinating indication of the scope of his educational background. However, the list of musical writers is equally interesting for its omissions, for, as Clement Miller suggests, many writers of Adam’s time do not credit all their sources. It is possible as well that Adam obtained some of his citations from other authors rather than from the source, since he sometimes cites them incorrectly. While the number of references to other writers in Adam’s treatise is impressive, it should be noted that often the quotations are sparked by a key-word in his

28. All proper names mentioned in De musica are indexed at the end of this study.


30. A curious work which may illustrate the kind of source available to late medieval writers is the thirteenth-century (?) Polythecon. This seeming pastiche of quotations from a large number of classical and medieval authors duplicates two of Adam’s quotations from Horace, and six from Ovid. Edited by A. P. Orban Corpus Christianorum Continuatio Medievalis XCIII (Turnholti: Brepols, 1990). An example of a wrong citation is that of Berno, probably borrowed directly from Affligemensis, II/10/58.
text and seem inserted more for effect than for relevance or enlightenment. Adam’s treatise may remain within the late medieval tradition in spite of its humanist clothing.

The Thesaurus Musicarum Latinarum

Musicologists have recently been provided with a new research tool which has been an invaluable asset for work on this study. It is the Thesaurus Musicarum Latinarum, a database of music treatises in Latin, centred at Indiana University in Bloomington under the directorship of Thomas Mathiesen. The treatises in the database are available to scholars free through electronic mail and can be downloaded onto personal computers or manipulated through networks. Increasingly sophisticated search and comparison programs will allow complex operations to be performed which would have been impossible before now.

By 1994, the complete Gerbert and Coussemaker editions (GS and CS) were on line, as well as all available CSM editions to that date. Many other works have been added as permission has been granted, and the project will continue with the goal of eventually making available every edited

31. A remark of Claude Palisca regarding Tinctoris shows a similar approach with Adam’s contemporary theorist: "If he was fond of quoting the ancient Greek theorists and even Boethius, the citations were more rhetorical ornaments than underpinning for his theories.... Thus his citation of authorities is rendered pointless...." See New Grove Dictionary, s. v. "Theory, theorists."
version of a music treatise in Latin. In addition, unedited manuscripts have begun to be transcribed and entered into the database. The TML encompasses works from the fourth century to the seventeenth, and at this writing includes over four hundred treatises and more than three million words.

The TML has been very useful for this study in determining some the the precedents to and influences on Adam in the writing of his treatise. As will be seen in the following commentary, Adam often seems to be the first author to use certain terms or phrases, and to quote certain authors' words. As the database becomes more complete, it should be possible to determine even more clear lines of tradition in music theory treatises.

* * *

The following commentary will discuss the contents of Book II of the music treatise of Adam von Fulda. Adam's proposal for the second book of his treatise is for a review of the principles of plainsong, based on the works of Boethius and Guido. He names seven basic terms by which "the way to art is better made clear,"\textsuperscript{32} and those terms then serve as an outline for his book.\textsuperscript{33} After dealing with

\begin{footnotes}
\item[32.] GS III, p. 342.
\item[33.] A similar approach is used for Book III.
\end{footnotes}
the first six, however, the author digresses, first into some polemics against contemporary musicians, and then into his ten rules of composition (Chapter 11). The final term (tonus) is dealt with in detailed fashion in the last five chapters.

For this discussion, Adam's Book II will be divided into three sections:  

1. Basic Aspects of Pitch, covering the first five terms (Chapters 1-6 of Book II)  
2. Intervals and Composition, covering the sixth term and the rules of composition (Chapters 7-12)  
3. Mode, covering the seventh term (Chapters 13-17).

34. Please note that further detailed commentary appears as annotations and citations to the translation in Appendix B.
CHAPTER III

ADAM ON BASIC ASPECTS OF PITCH:
BOOK II, CHAPTERS 1 TO 6

The first six chapters of Book II of Adam's treatise define and discuss five terms that are basic to the understanding of musical practice and notation of his time. These terms are manus, cantus, vox, clavis and mutatio. The treatment of the terms is reasonably concise, but there are several digressions, the long polemic in Chapter 6 being particularly notable. Adam's discussion of these terms tends to be brief, even superficial, and lacking in examples, although the charts supplied enhance the exposition and provide valuable additional information to the reader. Adam's treatment in this section thus recalls the training manuals for singers of the time rather than the more complex speculative works for university study. Perhaps this section then can be seen as an important precursor of the many primers published for apprentice choristers in sixteenth-century Germany.

Like the other three books of his treatise, Adam's Book II begins with a Prologue.1 (Book I is preceded by a

1. Adam's prologues are rather unusual in their number and lengths. Johannes Affligemensis, for example, has only two paragraphs of prologue following his dedicatory letter. In it he criticizes singers of his day in a style similar to that of Adam's later polemics. Guido includes only a dedication. Adam's contemporary,
Dedication and Incipit as well.) The prologues all tend to be lengthy and expressive. That of Book I introduces the first of many of Adam’s criticisms of modern musicians, the third enlarges on the invention and uses of music already treated in Book I, and the fourth prologue outlines the mathematical bases of music, along with yet another urging of the primacy of reason over the senses. In the prologue to Book II, Adam first justifies his use of older writers, both poets and philosophers, as sources. He then discusses some precepts of good teaching: the need to show the value of the topic, the usefulness of giving examples, and the necessity of following true authorities (all of which Adam does in his treatise). This topic gives him the opportunity to mention or quote several classical authors, including Cicero, Varro (actually an anonymous Pseudo-Varro), Isocrates, Ovid, and Seneca. Adam narrows his focus to the teaching of music, also citing here Guido, who advocates learning more from the senses than from masters. This seems a curious contradiction to Adam’s continual urging to trust authorities and his constant promotion of reason over sensory experience.

The importance of brevity and suitability in the training of an expert is stated. Adam returns to this theme several times in the treatise. Indeed, his presentation of Conrad von Zabern has no separate prologue; indeed, his treatise is not even divided into sections or chapters.
musical materials is concise; however, he tends to negate his objective of brevity with the long sections of polemic in Book II. He ends the Prologue by stating his intention to "stick close to the rudiments of Boethius and Guido," preferring to imitate their "learned negligence...rather than the useless diligence of others."²

Manus: The Hand and Gamut (Chapter 1)

Chapter 1 begins directly with Adam's list of the seven basic terms that he will treat in Book II. They are manus, cantus, vox, clavis, mutatio, modus and tonus. (A similar scheme is used in the organization of Book III on mensural music.) Since most of these terms are ambiguous or have a multiplicity of possible meanings, Adam often mentions other interpretations of them, both ancient and contemporary.³ What cannot always be ascertained, however, is the source or sources from which Adam obtained these particular meanings.

². GS III, p. 342. A comment of Palisca'a is noteworthy here: "Before [the late Renaissance translations], much of Boethius was an embarrassment to music theorists, because they could not understand large parts of it, and many parts they could understand disagreed with what they believed." See his "Boethius in the Renaissance" in Music Theory and Its Sources: Antiquity and the Middle Ages, ed. by André Barbera as Vol. 1 of Notre Dame Conferences in Medieval Studies (Notre Dame, Indiana: University of Notre Dame Press, 1990), p. 280.

Often, as will be noted below, similarities (usually uncited) to earlier treatises or to those of some of Adam's contemporaries in Germany are evident.

While the remainder of Chapter 1 is ostensibly about the Guidonian hand, in fact it soon becomes a rather diffuse discussion of the gamut. The hand itself is given only a rather odd definition at the very end of the chapter (see below). A diagram of the hand was included in the original manuscript but Gerbert in his edition chose to refer the reader to an earlier version in his publication of the treatise of Elias Salomonis; the Bologna copy has a rough sketch only (Appendix C, No. 1), though it contains some information not included by Gerbert. Above the hand is written *Ee la extra Manum ponitur*, meaning that the top note of the gamut, ee la, is placed outside the hand. Berger explains that this, in fact, was because that note appeared on the reverse of the hand, behind the note dd lasol on the top of the middle finger. There is also a sentence written across the bottom of the hand. It is difficult to read in the script of the Bologna copy, but fortunately the statement shows up also in an anonymous treatise published

4. GS III, pp. 16-64; the diagram appears on p. 22 and is reproduced in Appendix C, No. 2.

by Coussemaker\textsuperscript{6} and in a close copy of it in a manuscript edited by Bartha.\textsuperscript{7} It appears to be a traditional verse or epigram associated with the hand. The Latin reads

\begin{center}
\textit{Disce manum tantum qui vis, discere cantum}
\textit{absque manu frustra disces per plurima lustra.}
\end{center}

with the word "\textit{bene}" added above the first line in a different hand, probably a later correction. It may be translated "Learn the hand well if you wish to learn song, for without the hand you will learn in vain for many years."\textsuperscript{8}

After the brief introduction of the topic of Guido and the hand, Adam proceeds to discuss the gradual enlargement of the gamut over the centuries. He begins with the traditional fifteen-note range, A to aa, without mentioning Boethius as the source.\textsuperscript{9} He then covers Guido’s expansion

\begin{itemize}
\item \textsuperscript{6} Anonymous XI, CS III, p. 417.
\item \textsuperscript{7} Dénes von Bartha, \textit{Das Musiklehrbuch einer ungarischen Klosterschule in der Handschrift von Fürstprimas Szalkai (1490)} (Budapest: Az Orsz. Széchényi Könyvtár Kiadása, 1934), p. 69 and facs. III. Bartha’s text is slightly different for the first line: "Disce manum tantum, bene si vis scire cantum," and the poem continues for several more lines. The verse also appears in the as yet unedited \textit{Utilissime musicales} by Guillaume Guerson (c. 1495).
\item \textsuperscript{8} This verse may also form an interesting connection between Adam’s treatise and a group of fifteenth-century manuscripts from Germany discussed by Bartha. At least one of these, Munich Bayerische Staatsbibliothek Clm 4387 (the only one available for examination), has the verse with a sketch of the hand. See Bartha, "Studien zum musikalischen Schrifttum des 15. Jahrhunderts," \textit{Archiv für Musikforschung} I (1936), pp. 59-82, 176-99.
\item \textsuperscript{9} Adam returns to this topic in Chapter 9 and gives due credit to Boethius there.
\end{itemize}
of the range downwards by one note to Γ and upwards by four notes; he ends, however, with a different gamut (twenty notes, Γ to ee, considering b and #, bb and ## as one note) from Guido's (twenty-one notes, Γ to dd, including # and ## separately). Finally, Adam mentions further expansions by "more modern music teachers" of three more notes above and three (really two, since one is, in fact, Γ) below, creating a gamut of about 3 1/2 octaves. This he credits to Guillaume Dufay, "quite unjustifiably" according to Fallows.10 The reasons given for Dufay's extensions are measured music (perhaps requiring wider ranges) and the transpositions necessary for instrumental performance and

teaching (possibly of hexachord mutations). Adam returns to this concept in more detail in the final chapter of Book II.

The reference to Guillaume Dufay is most intriguing. Adam's statement that Dufay's compositions gave a "great beginning"\textsuperscript{11} to the techniques of his contemporaries recalls a famous comment by Tinctoris in 1477:

In addition, it is a matter of great surprise that there is no composition written over forty years ago which is thought by the learned as worthy of performance. At this very time, whether it be due to the virtue of some heavenly influence or to a zeal of constant application I do not know, there flourish, in addition to many singers who perform most beautifully, an infinite number of composers such as Johannes Okeghem, Johannes Regis, Anthonius Busnois, Firminus Caron and Guillermus Faugues, who glory that they had as teachers in this divine art Johannes Dunstable, Egidius Binchois and Guillermus Dufay.\textsuperscript{12}

Thus, Adam seems to propose Dufay as a new authority and master and to accept the rules and limits set by the Burgundian. Adam then equivocates by saying that he will still accept the rules of antiquity as well as of the moderns, "although we are more adept at discrimination."\textsuperscript{13}

This forms an interesting contradiction to his usual harping on the need to accept ancient authority and his denigration of many current musical practices and practitioners. The contradiction recurs throughout the treatise\textsuperscript{14} and reveals

\begin{itemize}
  \item \textsuperscript{11} II/1/42-43.
  \item \textsuperscript{13} II/1/56-57.
  \item \textsuperscript{14} See especially II/8/51-57, another passage mentioning Dufay, which is discussed below in Chapter IV.
\end{itemize}
that the practical and creative sides of Adam von Fulda were often at war with the academic and theoretical. This tension may reveal the onset of Humanist concepts in this late-medieval theorist.

Adam treats the monochord briefly—more briefly than most theorists—mentioning controversies over various divisions but crediting that of Boethius as the most imitated. Rather than present a detailed division himself, he simply refers the reader to the treatise of Johannes Affligemensis.\textsuperscript{15} The chapter ends with a short and somewhat puzzling description of the hand as a monochord or instrument.\textsuperscript{16} This may simply indicate the generalized meaning that the hand held by this time. Berger mentions that common synonyms of manus were scala and gamma, showing that "the hand is the direct ancestor of such modern theoretical concepts as the gamut or scale."\textsuperscript{17} Adam’s definition is amplified, however, by the above-mentioned

\textsuperscript{15} GS II, pp. 230-265; the discussion of the monochord appears on p. 236; see also Affl., pp. 63-64; Babb, p. 109.

\textsuperscript{16} A somewhat similar definition is found in the 1274 treatise of Elias Salomonis: "Palma est clavis, figura, sive instrumentum continens omnimodam notitiam artis musicae;" see GS III, p. 23. Bartha, p. 70-71, and Anonymous XI, CS III, p. 417, give "manus est organum distinctis clavibus et vocibus registraturn."

\textsuperscript{17} Berger, \textit{Musica Ficta}, p. 3. The author also mentions the relationship of the hand with the system of classical rhetoric and cites his article, "The Hand and the Art of Memory," \textit{Musica Disciplina} XXXV (1981): 87-120. Bent draws some interesting parallels between the hand and the cyclical church calendar. See "Diatonic Ficta," p. 9.
diagram (Appendix C, no. 1). It is interesting that the hand is said to apply to singers, implying that the foregoing discussion of the monochord related more to the use of instruments. Berger has noted a seeming shift in the conception of the gamut in the fifteenth century from a basis in the hand to one in terms of the monochord or organ.18

Cantus: the Hexachord (Chapter 2)

Chapter 2 of Adam's Book II discusses the concept of cantus. The author gives first a generalized definition related to the root meaning of "song" and mentions a Greek example (ode) and a contemporary use (praise). A brief digression talks about the inappropriateness of using the word cantus applied to musical sounds produced by instruments. This may reflect the three types of musician derived from Boethius, discussed by Adam in Chapter 6 of Book II, or perhaps his somewhat derogatory attitude towards instrumental players. Adam then gets to the crux of the matter--the more specific use of cantus to mean "hexachord." He does not supply a definition, but his discussion makes this intended meaning clear. In fact, it is not certain when this particular use of the word became current. Neither of Adam's two main sources, Guido or Johannes Affligemensis, touches upon the concept. Jerome of Moravia, 18. See, for example, Berger, Musica Ficta, p. 33.
writing almost two centuries after Johannes, uses the word in the sense of "hexachord" but also does not supply a definition.\textsuperscript{19} Palisca cites Engelbert of Admont as one of the first to discuss the hexachord system, but this early fourteenth-century theorist does not use \textit{cantus} in that context.\textsuperscript{20} Another early writer on the hand, Elias Salomonis, is cited by Ellsworth,\textsuperscript{21} but, like Engelbert, Elias does not use the word to refer to hexachords. A concise definition, penned by a contemporary of Adam, is provided by Conrad von Zabern: "\textit{Cantus} is the modulation of the voice proportional to six notes."\textsuperscript{22}

After the introduction to \textit{cantus}, Adam presents his classifications. He divides the matter "generally" into the three types of the ancients, that is, natural, hard and soft. Adam also "specifically" divides the gamut into the seven hexachords present in the hand without naming them.


\textsuperscript{21} The Berkeley Manuscript, p. 33. Ellsworth provides an extensive note on the Guidonian hand and its treatment by theorists. See also Ellsworth's "Origin of the Coniuncta." Berger, p. 5, and n. 16, p. 191, also cites Jerome, Elias and Engelbert as among the first to describe the "fully mature system."

\textsuperscript{22} "\textit{Cantus est modulatio vocis sex notis proportionata}" treatise dated c. 1460. See Karl-Werner Gumpel, \textit{Die Musiktraktate Conrads von Zabern}, Vol. 4 of \textit{Akademie der Wissenschaften und der Literatur: Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse 1956} (Mainz: Verlag der Akademie der Wissenschaften und der Literatur, and Wiesbaden: Franz Steiner, 1956), p. 188.
This distinction of general and specific classifications is frequent in treatises of the time, but some theorists give names to the two divisions. Most commonly, proprietas refers to the general types, while deductio is used for the seven specific occurrences. For example, the anonymous Quatuor Principalia,\textsuperscript{23} Libellus musice\textsuperscript{24} and Berkeley manuscript\textsuperscript{25} all utilize both terms. Tinctoris\textsuperscript{26} provides definitions for both. Jacques de Liège, in his vast and comprehensive Speculum Musicae of c. 1325, equates proprietas or modus cantandi with differentia.\textsuperscript{27} This topic is discussed by Conrad but no terms are given to the two classifications by him.\textsuperscript{28}

After Adam's classifications of hexachords, a rather puzzling concept is presented which has not been noted in earlier treatises. It is stated that some theorists relate pairs of syllables to the three hexachord types: ut and fa to the soft hexachord, re and sol to the natural, and mi and

\begin{enumerate}
\item \textit{Quatuor principalia musices}, CS IV, p. 222; c. 1350. Attributed (probably incorrectly) by Coussemaker to Tunstede.
\item Ellsworth, p. 38-39. The manuscript also uses the unusual term simplicitas for deductio. See Ellsworth's extensive notes, pp. 39 and 45.
\item CSM 3, v. VI, pp. 175-176.
\item Gümpel, pp. 190-91.
\end{enumerate}
la to the hard. The correspondences between the syllables might be understood in the identity of the surrounding intervals. Mi and la, for instance, both have a tone below and a semitone above, while re and sol have a tone above and below.\textsuperscript{29} The case of ut and fa is problematic, although in some places on the scala ut has a semitone below, as fa always would. Other slightly later treatises which express a similar idea include Michael Keinspeck's \textit{Lilium Musicae Planae} of 1496, the Leipzig Anonymous \textit{Introductorium Musicae} of c. 1500, and Wollick's \textit{Opus Aureum} of 1501 and \textit{Enchiridion musices} of 1509.\textsuperscript{30} None of these works explains

\textsuperscript{29} This correspondence brings to mind the concept of "affinities," which, however, is expressed in terms of pitches rather than syllables. A complete and detailed discussion is found in Dolores Pesce, \textit{The Affinities and Medieval Transposition}, part of \textit{Music: Scholarship and Performance}, ed. by Thomas Binkley (Bloomington, Indiana: Indiana University Press, 1987).

how the pairs of syllables characterize the three types of hexachord, however. Riemann attempts to clarify this puzzle but his exposition is confusing.\textsuperscript{31} Citing also Glareanus, he states that all songs must end in \textit{ut}, \textit{re}, or \textit{mi}, and that this shows the composition closing in major, minor, or Phrygian respectively. This seems rather far removed from Adam's proposition, and uses ideas anachronistic to it. Further, the Glareanus passage mentioned by Riemann does not refer to the pairs of syllables or to hexachords. Another section of the Glareanus treatise sheds some light on the matter, although the later theorist also admits some puzzlement. He says:

\ldots tones similar by nature are placed in the same key, as our musicians say, among whom it is generally acknowledged that there is a natural resemblance of each fourth tone in this way: \textit{ut} with \textit{fa}, \textit{re} with \textit{sol}, \textit{mi} with \textit{la}, although I think that the reason for this division was that there would also be a semitone at the third position, between \textit{mi} and \textit{fa}, in accordance with the form of the diatonic species, which subject we shall discuss afterwards. For I do not know according to which writer it is taught that \textit{ut} \textit{fa} are soft, \textit{re} \textit{sol} are natural, and \textit{mi} \textit{la} are hard tones, unless we prefer to observe the practical usage rather than the theory\ldots Yet perhaps our musicians have taken these

\begin{flushright}
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things from the nature of the modes. For in the Lydian mode, soft, as it seemed to some, and in the softer Ionian mode, ut fa dominate in the upper fourth; and in the Dorian mode, grave and serious, re sol dominate, and in the Phrygian mode, religious and severe, mi la dominate.\footnote{Glareanus, Dodecachordon, p. 42.}

A further explanation is offered by Glarean which is "given better to beginners. Among these six tones, three are lower, ut, re, mi. Also three are above, fa, sol, la. And in the ascent, the lower are taken, but in the descent the upper are taken."

Adam summarizes his information in a chart at the end of Chapter 2 (Appendix C, nos. 3 and 4).\footnote{The hand-written Bologna version shows no difference from Gerbert's chart.} He gives characteristics of the three general and seven specific types of hexachord, including beginning and ending syllables, and restates the idea of paired syllables discussed above.

It is noteworthy that the Bologna version of another chart, the one at the end of Chapter 4 (Appendix C, nos. 7 and 8), showing the gamut and the seven hexachords, contains the words Reformationes and Proprietates, which do not appear on Gerbert's printed version. Unfortunately, it is not clear exactly to what the terms refer on the chart, although it appears that the former term refers to the seven specific types of hexachord. A somewhat similar chart in the anonymous Tractatus de Musica Figurata et de
Contrapuncto\textsuperscript{34} (probably second half of fifteenth century) makes the meanings of the two terms clear: \textit{Reformationes} refers to the specific types, and \textit{Proprietates} to the general.

The chapter on \textit{cantus} is completed with a short and general history of singing in the church. Most of the passage, which mentions Ignatius, Ambrose and Gregory, seems to be derived directly from Johannes Affligemensis,\textsuperscript{35} and shows similarities to part of the earlier \textit{Musica disciplina} by Aurelian.\textsuperscript{36}

\textbf{Vox: Syllable (Chapter 3)}

Adam's Chapter III discusses another term with a multiplicity of possible meanings—\textit{vox}. The author first provides a detailed and colourful description of the physical process of singing in order to define the term in a general sense.\textsuperscript{37} This is "sound of voice" but there are

\textsuperscript{34} CS IV, p. 434.
\textsuperscript{35} Affl., p. 115; Babb, p. 136. These figures are treated in richer detail in Book I of the treatise; see GS III, p. 339.
\textsuperscript{36} See GS I, p. 59-61. This resemblance is noted in \textit{Répertoire International des Sources Musicales}, B/III, vol. 1, edited by Joseph Smits van Waesberghe (München-Duisberg: G. Henle, 1961), p. 89, which also mentions a similarity to Paris BN lat. 776, containing fragments of Aurelian.
\textsuperscript{37} This description is somewhat similar to others given by Burtius and Marchetto. See Nicolaus Burtius, \textit{Musices Opusculum}, translated by Clement A. Miller, \textit{Musicological Studies and Documents} 37 (Neuhausen-Stuttgart: Hanssler-Verlag, 1983), pp.36, 40, and Jan
also the possibilities of "sound and voice" and "sound not of voice." An alternate terminology for this threefold classification of sounds is given: *harmonica* (from the singing voice), *organica* (from blowing on an instrument), *rhythmica* (from striking strings). This classification ultimately derives from Isidore but is quoted by other theorists. Adam also makes a division of sounds into "discrete" (consonant) and "indiscrete" (dissonant) types, a division which differs somewhat from Johannes's use of the words to imply separate (that is, having musical intervals) and continuous (non-musical) sounds.

The mention of consonance leads to a definition of *symphonia* which, although originally deriving from Cassiodorus, is closer to Isidore's: "Symphonia is the right proportion of modulation by concordant sounds." Babb notes that this term is the standard one for the consonances (diatessaron or perfect fourth, diapente or perfect fifth,

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38. GS I, p. 21.
40. Affl., pp. 57-58; Babb, p. 107. This distinction may derive from Boethius; see Boeth., p.199; Bower, p. 20.
41. GS I, p. 16.
42. GS I, p. 21; II/3/27-29. Along with consonantia, this is one of the more ambiguous terms used by medieval theorists. The history of their various meanings has not yet been explored.
and diapason or octave) up to Guido’s time.\textsuperscript{43} Hucbald\textsuperscript{44} used \textit{consonantia} for a harmonic interval and \textit{intervallum} or \textit{spatia} for a melodic one. In contrast, Guido uses the term \textit{symphonia} specifically for the simultaneous intervals of organum, and \textit{consonantia} for the melodic intervals of chant.\textsuperscript{45} Adam implies here that he uses \textit{symphonia} to refer to melodic intervals in "song guided through mutations."\textsuperscript{46} He returns to the subjects of intervals in Chapter 7 and of \textit{symphonia} in Chapter 10. These topics will be discussed further in Chapter IV below.

Only at the end of Chapter 3 does Adam present the specific sense of \textit{vox} that he uses most frequently, that is, in reference to the six solmization syllables. (The word is sometimes translated as "vocable" for this sense.) Johannes\textsuperscript{47} and the author of \textit{Summa Musicae}\textsuperscript{48} use the word \textit{syllabas}, while Elias Salomonis\textsuperscript{49} writes \textit{puncti}. Jerome of Moravia\textsuperscript{50} and Jacques de Liège\textsuperscript{51} turn to \textit{vox}. Conrad\textsuperscript{52} and Person\textsuperscript{53} also use this last term in treatises

\textsuperscript{43} Babb, p. 63, note 1.
\textsuperscript{44} GS I, p. 107; c. 900.
\textsuperscript{45} Guido, p. 105.
\textsuperscript{46} II/3/36-37.
\textsuperscript{47} Affl., p. 49.
\textsuperscript{48} Attributed by Gerbert to Jehan des Murs; GS III, p. 203.
\textsuperscript{49} GS III, p. 19.
\textsuperscript{50} Cserba, p. 49.
\textsuperscript{51} CSM 3, V. 6, p. 165.
\textsuperscript{52} Gümpel, p. 188. The treatise is dated c. 1460-70.
\textsuperscript{53} H. Müller, "Der Tractatus musicæ Scientiae des Gobelinus Person (1358-1421)," \textit{Kirchenmusikalishes Jahrbuch XX} (1907):182. The treatise is dated 1417.
chronologically closer to Adam's. Chapter 3 ends with mention of the derivation of the syllables from the hymn of St. John the Baptist, *Ut queant laxis*, with no credit given to Guido as the originator, but acknowledging Johannes as the source for this information.

**Clavis: Pitch (Chapter 4)**

Another ambiguous term is *clavis*, discussed by Adam in a short Chapter 4. This word, which can also mean "clef" or "key", is used by Adam in the sense of a specific pitch identified by both letter and solmization syllables. Adam is unusual in employing this meaning, following only Jerome of Moravia\(^4\) and Jacques de Liège.\(^5\) Most theorists use *clavis* either to refer to the seven letters designating pitch classes, or to mean "clef". Adam mentions the idea of clef as a specific "locating" of notes but without applying a term to the concept. He includes the three common clefs (C, F and G) on his chart (Appendix C, nos. 7 and 8). The various definitions and uses of *clavis* are treated fairly exhaustively in Eggebrecht's useful lexicon,\(^6\) which gives a number of citations of the term's use.

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5. CSM 3, V. 6, p. 29.
Chapter 4 ends with the naming of the species or types of *clavis*, a grouping into divisions by pitch level: Γ. ut. to D. sol. re. are Graves, D. sol. re. to G. sol. re. ut. are *Finales* (that is, the finals of the modes), a. la. mi. re. to d. la. sol. re. are *Acutae*, d. la. sol. re. to g. sol. re. ut. are *Excellentes*, and aa. la. mi. re. to ee. la. are *Superexcellentes*. The system is illustrated by a chart (Appendix C, nos. 7 and 8). Adam’s classification, while loosely based on the traditional early medieval tetrachord system derived by Boethius from the Greek gamut and revised by Guido and Johannes, seems to be unique. Most later theorists, such as Jerome\(^{57}\) and Conrad,\(^{58}\) follow Johannes’s plan.\(^{59}\) Adam’s classification differs from that of Johannes both in the naming of the top two groups (*Superexcellentes* and *Excellentes* as opposed to *Excellentes* and *Superacutae*), and also in the groupings of the notes. Both theorists show that the idea of the four-note tetrachord had disappeared, since they include groups of five notes as well.\(^{60}\)

The chart at the end of the chapter is of the *scala* type, so-called because of its resemblance to a ladder or

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57. Cserba, p. 56.
58. Gümpel, p. 197.
59. Johannes’s understanding of Guido’s system is somewhat confused. See Palisca’s introduction in Babb, p. 96-98; he supplies a useful chart on p. 98 which shows the various changes to the tetrachord system up to the time of Johannes.
60. See also Jacques de Liège, CSM 3, Vol. VI, p. 175, where similar names are used for octave groupings.
stairs. In addition to the new terms noted above regarding hexachords, it also contains one of Adam's few references to *musica ficta*. In Book I of the treatise, Adam distinguishes "true regular music" from "false (*ficta*) regular music". The latter "is when the notes are transposed in note-names, since in all those in which fa is not placed locally, soft B can be placed; similarly in all notes in which fa is placed locally, hard B can be placed, by the constraints of mode and necessity." The column labelled *Musica dicta ficta* on Adam's chart shows the accidental signs that were allowed on each pitch. It supports the above statement and Berger's idea of an unusual fourteen-step octave with sharps allowed only on C and F. This idea seems somewhat at variance with Adam's later conservative approach to *musica ficta* in the composition rules of Chapter 11.

61. See Berger, pp. 3, 10.
62. GS III, p. 333.
63. Berger, pp. 48-49, treats this in some detail. He notes that the more common formulations were the traditional twelve-step one, which became standard about 1500, or the more progressive sixteen-note octave. The fourteen-steps are found in only one other source, the Berkeley Manuscript. This source, however, has another section (Treatise 5) which advocates dividing the tone in three equal parts; this may be the first written example of a type of equal temperament. See Ellsworth, *Berkeley Manuscript*, pp. 240-47. For further on *musica ficta*, see also Margaret Bent, "Musica Recta and Musica Ficta," *Musica Disciplina* 26 (1972), pp. 73-100; Andrew Hughes, *Manuscript Accidentals: Ficta in Focus 1350-1450. Musicological Studies and Documents* No. 27 (n.p.:American Institute of Musicology, 1972).
Chapter 5 of Book II of the treatise deals with mutatio, a subject which ties together all the previous terms. Adam begins with a concise definition that is similar to earlier ones of Johannes de Garlandia, Lambertus, Jerome of Moravia, and Jacques de Liège, but is closest to Conrad's. Adam says simply that mutation "is the change of one syllable on the same pitch to another [syllable]." Unlike other theorists, he does not give several "reasons" for mutation, nor does he provide an exhaustive list of all possible mutations, as does Jerome. Adam does, however, name two types of mutation, using terms which seem to be unique to him: extrinseca and intrinseca. Berger mentions other terms that were used as well: explicita or vocalis for the first type, in which both syllables are sung on the pitch, and implicita or mentalis.

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64. De plana musica (c. 1240), CS I, p. 160.
65. (Pseudo-Aristoteles), Tractatus de musica (c. 1270), CS I, p. 256.
66. Cserba, p. 49.
67. CSM 3, v. 6, p. 179.
68. "Mutatio musica est unius musicae vocis pro alia in eadem clave et sub eodem sono datio vel variatio." See Gümpeľ, p. 199. Gümpeľ provides a detailed discussion of the word mutatio in music treatises of the time; see his Introduction, pp. 160-67.
69. II/5/1-3.
70. For example, Conrad (Gümpeľ, p. 199) or the Berkeley manuscript (Ellsworth, p. 49).
71. Cserba, pp. 49-55.
72. Unique to Adam for this particular subject as discovered by a search of the TML. The terms were earlier used in both Aristotelian philosophy and in mensuration treatises.
where only one syllable is pronounced, as might be necessary in the shorter notes of measured song.\textsuperscript{73} Adam does not make the more traditional distinction of "conjunction" (mutation on a common pivot point) and "disjunction" (change from one hexachord to another with no common tone).\textsuperscript{74}

Adam also gives two requirements for mutation. The first, a common rule, is that a change of hexachord take place only when necessary. The second requirement poses some translation difficulties. The author uses the term coniuncta but probably in its earlier sense of "pivot point" rather than in the later, more complex one of a hexachord beginning on a pitch other than C, F or G. Adam also uses the Greek word synnemenon, which Johannes Afflighemensis translates as adiunctum, and which Babb puts into English as "connected."\textsuperscript{75} Synnemenon can also refer to the tetrachord in the Greek gamut added to allow the inclusion of the note b-flat, a concept transmitted by Boethius.\textsuperscript{76} Adam seems to use the word, in fact, to refer to the note itself or to the semitone interval. Thus, his second requirement for mutation may be understood as a warning to the singer to be attentive to the proper placement of the semitone,

\textsuperscript{73} Berger, p. 7 and n. 28, p. 193. Adam is the first author cited for making this distinction. Riemann also discusses these terms; see Handbuch, p. 36.
\textsuperscript{74} For further details on these concepts, see Ellsworth, Berkeley Manuscript, p. 49, note 11, and also Ellsworth, "Origins," p. 90-97.
\textsuperscript{75} Affl., p. 59; Babb, p. 107.
\textsuperscript{76} See, for example, Boeth., pp. 214-17, 312-18; Bower, pp. 41-45, 126-31.
especially when a hexachord occurs in other than the three usual situations (thus producing *musica ficta*). Adam returns to this practical concern several times, most notably in the composition rules of Chapter 11. A similar warning is sounded in a somewhat later treatise (1540), possibly influenced (at least indirectly) by Adam. Sebald Heyden, in his Chapter 4 on solmization, writes as a requirement:

> Second: they should carefully observe through *b fa* and *# mi*, as principal keys in all songs, the use and movement of vocables and tones of all other keys. For nobody can sing any song accurately and dependably unless first he has expressly considered *b fa # mi* and then decides where *mi* or *fa* should be applied. It is most important to know whether *mi* or *fa* is sung on *b fa # mi*, since either of them influences the special nature and quality of a melody.  

A short paragraph at the chapter's end anticipates some of the polemics to come and speaks curiously of the "childish" rules about mutation. Adam prefers to omit these and let the understanding of intervals suffice. Again, he seems to wish for simplicity and brevity rather than intellectual complexity in his discussion.

The chart following Chapter 5 (Appendix C, nos. 10 and 11) succinctly summarizes material not discussed in the body of the chapter. It divides the eighteen pitches (the author omits *b, #, bb and ##*) into three groups, depending on the

number of syllables, and thus the number of possible mutations, on each pitch. Adam thus avoids the long lists of possible mutations which often feature in other treatises and maintains his desired brevity thereby.

Some Polemics (Chapter 6)

With Chapter 6 of Adam's Book II, a distinct change is almost immediately evident, a change of style and also, to some extent, a change of sources. These differences may indicate that this section of the treatise was not written at the same time as the first five chapters. Other later sections of Book II show a similar stylistic disjunction.

Chapter 6 commences with a statement which continues the subject of Chapter 5 and which more properly belongs there. It is the traditional rule that there can be no mutation between b fa and # mi, since they are a semitone apart. Mention of the semitone leads Adam to a brief discussion of this interval and its name. It had been a continuing concern of theorists to prove that the whole tone could not be divided equally in half. This may be illustrated by the chapter heading of Boethius, Book III, Chapter 1: "Demonstration against Aristoxenus that a superparticular ratio cannot be divided into equal parts,

78. See Chapter I above regarding Adam's problems in writing his final copy of the treatise.
and for that reason neither can the tone." This problem forms one crux of the continuing debate on reason versus the senses, for while it intuitively seems possible that there is an exact halfway point between two notes a whole tone apart, it cannot be found mathematically. A tone is represented by the sesquioctave ratio, 9:8. Addition of intervals is the equivalent of multiplying their ratios. Thus, the ratio of the exact half of a tone must be one which, when multiplied by itself, results in 9:8. This is impossible, however, without the use of irrational numbers. Adam returns to this problem in Chapter 7 of Book IV. There he compares dividing the tone measuring the diagonal of a square in rational numbers, another mathematical impossibility.

By touching on the idea of the division of the tone, Adam sets the stage for the following extended polemics. These polemics are not unusual for treatises of the time. Indeed, most of his concerns are traditional ones, and some

80. Adam makes no reference to, and seems unaware of, the controversial division of the tone into five parts by Marchetto in his 1317-18 treatise. See Herlinger, Lucidarium, pp. 130-61. This doctrine was bitterly criticized by Prosdocimo one century later. See Prosdocimo de' Beldomandi, Brevis summula proportionem quantum ad musicam pertinet and Parvus tractatulus de modo monacordum dividendi. A new critical text and translation....by Jan Herlinger, part of Greek and Latin Music Theory, ed. by Thomas J. Mathiesen and Jon Solomon (Lincoln, Nebraska: University of Nebraska Press, 1987), pp. 119-22.
81. GS III, p. 375.
of his comments are taken directly from other authors. What is perhaps interesting about this chapter is its length and its relationship to events in the musical world contemporary to him.

As mentioned, Adam starts with the subject of the division of the whole tone or the size of the semitone, a traditional concern of theorists. He uses this as foundation for a discussion of the importance of basing musical thought in reason. Several examples are given of shoddy contemporary practices by musicians unversed in this rational basis, such as ignorance of number and interval, and singing works in the wrong mode. Included here is Adam's contemptuous mention of the not-yet-identified Andrechius of Basel, who "had learned this alone in his school of philosophy, to avoid the learned absolutely, lest his ignorance be revealed in disputation." Adam quotes in emphasis of his point a popular verse of Guido's which was found in many medieval treatises:

From the musician to the singer how immense the distance is;
The latter's voice, the former's mind will show what music's nature is;
But he who does he knows not what, a beast by definition is. 84

82. See Chapter I above regarding attempts to identify this figure.
83. II/6/68-73.
84. II/6/94-102. The musicus/cantor split as a running theme in medieval treatises is discussed in some detail by Gushee, "Questions of Genre." See also Christopher Page, "Musicus and Cantor," in Companion to
Another running theme of the chapter is the necessity for musicians to rely on ancient authority as preserved in writing. As in the opening chapters of the book, Adam refers often to Guido of Arezzo and Johannes Affligemensis. However, in this section he also draws heavily on the music treatise of Boethius for the first time in Book II and invokes that theorist's name several times as an almost god-like figure. He mentions in particular Boethius's doctrine of the superiority of reason over performance of music, comparing it to the surpassing of the mind over the body. In yet another subtle dismissal of instrumentalists, Adam tells of their taking designations from the instruments, as if not worthy to be named "musicians."

These two themes, the foundation of music in reason and the reliance on the ancients, were also part of a fiery debate that was raging in Italy just as Adam was penning his work.\(^85\) The debate began with the 1482 publication in


\(^85\) There is no full treatment of this debate. Some information is available in biographical sources on and treatises of the individual composers involved; see, for example, Miller's "Introduction" to Nicolaus Burtius, \textit{Musices Opusculum}, pp. 10-20, and also his "Commentary" to Bartolomeo Ramis de Pareia, \textit{Musica Practica}, Commentary and Translation by Clement A. Miller (Neuhausen-Stuttgart: Hänssler-Verlag, 1993), pp. 11-38. See also Claude V. Palisca, \textit{Humanism in Italian Renaissance Musical Thought} (New Haven, Connecticut: Yale University Press, 1985), p. 222,
Bologna of the treatise of Bartolomeo Ramos, which dared to defy both the revered ancients and their preoccupation with rational speculation, in favour of ideas based on human sensation. Rabid and often slanderous discussion ensued for many years, involving such prominent theorists as Gafurius, Hothby and Burtius on the traditionalist side, and Spataro, supporting the progressive ideas of Ramos. The issues of the debate included the elimination by Ramos of the hexachord system of Guido, and his move away from the ratios of Pythagorean tuning, which had been the staple of music theorists for almost two thousand years.

Adam almost certainly was not aware of the Italian fireworks. There is no evidence that he ever visited Italy, and he never cites even the prominent pre-debate theorists there such as Tinctoris, Prosdocimo or Ugolino. Although the works of Ramos and Burtius had been published by the time of Adam's treatise, it is probable that the circulation was still limited and that he did not see them. Adam's writings do demonstrate, though, that the progressive ideas were in the air throughout Europe before the debate blazed forth in Italy. As might be expected, Adam takes a conservative viewpoint and rails against the more modern

tendencies to rely on sensory perception rather than on reason and ancient precedent (even though he betrays more progressive approaches in other parts of the treatise).

A third theme of Adam's long "sermon" in Chapter 6 is the superiority of the musicus or speculative thinker. He relies directly on Boethius for his classification of three types of musician: the instrumental player, the singer/composer, and finally the musicus, who judges the others and who, alone of the three, is based in reason: "this, then, since it is all placed in speculation and reason, will be considered music proper." 86 Yet Adam pities the art "which, although it was most laboriously created by the ancient philosophers, worthy of all praise, in our age is ruined, torn and confused by the most debased apprentices." 87

The final four paragraphs of the chapter are the most colourful. Adam first apologizes for his comments in case the reader thinks the author only criticizes to conceal his own ignorance. But he then continues to denigrate current musical practices vividly, invoking Boethius and Guido, while simultaneously begging their forgiveness. He quotes Johannes Affligemensis directly on the need for attention to one's master: "Even dumb animals and herds of beasts follow a leader, but our men attend to neither leader nor master,

86. II/6/161-65. See Boeth., p. 224; Bower, p. 51.
87. II/6/196-203.
knowing all for themselves: I should compare them to none better than to a drunken man, who does, indeed, make for home, but does not know by what path he should return."  

Adam finishes the chapter by again lamenting the mutilation of music by the unlearned.

Whom exactly is Adam criticizing in his diatribes? It is difficult to know for certain. Clearly his experience with singers has led him to have some contempt for both poorly trained apprentices and incompetent adult performers (perhaps in monastic choirs). He also seems to hold instrumentalists in low esteem, perhaps for inept arrangements of vocal pieces, for poor musicianship in performance, or for inappropriate changes and embellishments to written works. His interesting comment that music had become a mechanical art rather than a liberal one implies a frustration with the lack of creativity in his contemporaries, a theme that returns in the treatise. Since Adam was a church man and the bulk of his own composing (at least what has come down to us) is sacred music, he may disdain secular composers and performers in general. It will be noted below that he complains in particular of the corruption of chant in the hands of badly schooled musicians. In true Boethian fashion, Adam places the musicus, the thinker and judge of music, above all others. He reserves his most virulent criticism for those who are

88. II/6/239-250.
ignorant of the masters, urging his readers, for example, to "Believe the authors, and give more faith to the learned and skilful than to the illiterate."\textsuperscript{89}

\textsuperscript{89} GS III, p. 332.
ADAM OF FULDA ostensibly continues his scheme of discussing basic musical terms regarding plainchant in the next major section of Book II, chapters 7 through 12. However, after dealing with only one term, *modus*, he digresses into further polemics and then treats a topic which had become frequent in contemporary treatises, but was unrelated to his main topic of plainchant—composition in counterpoint. This chapter of the commentary will therefore deal with interval (*modus*) and Adam's rules of composition.

*Modus: Interval (Chapters 7 to 9)*

After the polemics of Chapter 6, Chapter 7 of Book II returns to a more succinct style of writing to define *modus*, one of the most ambiguous terms that Adam discusses. *Modus* can have the general meaning of "manner", or, as here, it can mean a musical interval.¹ *Modus* also refers to one of the three levels of mensural relationship (along with *tempus*).

¹ *Modus* was the most usual general term for "interval" in medieval treatises. Adam may be influenced particularly here by Johannes, who reserved the word *intervallum* for large intervals found infrequently in chant. See Babb, p. 112, n. 4.
and *prolatio*); Adam uses this sense in his Book III on rhythm. The term was used in the *Ars Antiqua* for the rhythmic modes, but that usage became obsolete with the new mensural complexities of the *Ars Nova*. Finally, *modus* sometimes implies a mode or octave species; Adam uses the term *tonus* for this concept, discussed in detail in Chapters 13 to 17 (see Chapter V, below, of this commentary).

Much of Adam's material in Chapters 7 through 9 is derivative, being drawn especially from Boethius. This is something of a change from his reliance in the first section mainly on Guido and Johannes Affligemensis. Most of the material here is also treated by other medieval theorists, and Adam adds little that is new.

2. For example, the *Ars cantus mensurabilis* of Franco of Cologne and its many imitators; see Cserba, pp. 232-33.
3. Eggebrecht provides an extensive discussion of *modus* in its rhythmic sense, but only touches on other possible meanings. See Wolf Frobenius in *Handworterbuch*, s.v. "Modus". Harold Powers in his *New Grove's Dictionary* article "Mode" discusses the scalar sense in some detail. See below, Chapter V, for commentary on Adam's treatment of mode in its scalar meaning. Bower, p. 2, n. 3, mentions the various meanings for Boethius.
4. It is now accepted that the music treatise of Boethius is a translation from the Greek of Nichomachus and Ptolemy. The Nichomachus works are not extant; the Ptolemy source is the beginning of his *Harmonica*. For details of origins, see Bower, pp. XXIV-XXIX, and also Calvin M. Bower, "Boethius and Nichomachus: An Essay Concerning the Source of De institutione musica," *Vivarium: An International Journal for the Philosophy and Intellectual Life of the Middle Ages and Renaissance* 16 (1978):1-45.
Adam provides several definitions of modus, as if he were unsure of the meaning himself. The second is taken directly from Boethius ("Interval is the distance between high and low sound"\(^5\)), and two of the definitions use the confusing terms *intensio* and *remissio*, which probably originally referred to the tightening and loosening of strings to change pitch.\(^6\) They are probably best translated as "raising" and "lowering" of pitch. It is noteworthy that Adam mentions the relationships of notes within the interval as part of its definition.

After providing the definitions, Adam states that the number of intervals is twelve, although (he says) other writers posit only nine. Boethius had discussed five consonances (the octave, perfect fifth, perfect fourth, perfect twelfth and double octave\(^7\)) as well as the tone and semitone.\(^8\) Guido enumerates six melodic intervals

\(^5\). See Boeth., p. 195; Bower, p. 16.
\(^6\). See Bower, p. 11, n. 46, for a discussion of the terms *intensio* and *remissio* in Boethius.
\(^8\). See Boeth., pp. 201-05; Bower, pp. 22-29. Boethius
(consonantiae)\(^9\)—tone, semitone, major third, minor third, perfect fourth and perfect fifth—while Hucbald names nine, including those of Guido with the tritone, minor sixth and major sixth.\(^{10}\) Johannes also gives nine intervals, but replaces the tritone with the unison.\(^{11}\) He uses the word consonantia for the intervals of Guido but intervalla for the larger ones, since they are rarely used melodically. Jerome adds the octave to Johannes's collection, but later specifies thirteen intervals (all the intervals from the unison through the octave),\(^{12}\) as does Jacques de Liège.\(^{13}\) Adam justifies inclusion of intervals rare to Gregorian chant (minor and major sixths, minor seventh) because they occur often in measured song (one of several of his departures from his stated topic for Book II of musica plana).

Two charts\(^{14}\) present further material on intervals (see Appendix C, nos. 13 and 14). The first, taken almost later in his treatise adds the eleventh as a consonance. This is probably the section translated from Ptolemy. See Boeth., p. 358-59; Bower, p. 169. For a full discussion of the eleventh, see Barbera.

9. See Guido, p. 103-06; Babb, p. 61.
10. See GS I, p. 106-07; Babb, p. 16. In his introduction to Babb's translation, Palisca discusses Hucbald's alterations of meaning of terms which he derived from Boethius, such as consonae; see Babb, p. 5.
14. Note that these two charts appear as such only in Bol. In Gerbert they are compressed into text.
directly from Boethius,\textsuperscript{15} classifies different interval types. It seems to deal with harmonic (simultaneous) rather than melodic (successive) combinations, although Adam does not make this distinction clear. The classification, with its short descriptions, contains concise definitions of consonance and dissonance:\textsuperscript{16} "Consonances are those [notes] which produce a compound, indeed mixed, but sweet sound" and "Dissonances are those which do not mix together sounds, but strike the sense harshly." The second chart lists and defines the twelve intervals. It is interesting that Adam sometimes characterizes the intervals not only by the number of tones and semitones they contain (a traditional method) but also by the size of leap, related more directly to musical notation by reference to lines and spaces. While not listing them as legitimate intervals, he does mention the tritone and diminished fifth.

The Bologna manuscript includes an additional chart at the end of Chapter 7 which does not appear in Gerbert's edition (see Appendix C, no. 15). This chart lists all the

\textsuperscript{15} See Boeth., p. 360-62; Bower, p. 170-71. Boethius in turn translates this material from Ptolemy.

\textsuperscript{16} II/7/47-51, 57-60. The term consonantia seems to have several meanings by Adam's time, and he does not always distinguish amongst them. As noted above (see Chapter III), in Guido's time it meant the melodic intervals used in chant. Adam uses the term also in the sense of sweet-sounding harmonic intervals. Barbera, "The Consonant Eleventh", p. 193, discusses Boethius's distinction of intervallum (melodic) and consonantia (harmonic). See also Jacques de Liège, Speculum Musicae, CSM 3, v. 6, p. 160.
intervals in the octave, including the tritone and diminished fifth, and provides musical examples of each. Musical examples like this are, however, unusual for the treatise as a whole, and, with one exception, are unique for Book II.

Chapter 8 is largely redundant, repeating matters covered in Chapter 1. This repetition may be a further indication of Adam’s problems in writing the treatise, or a symptom of a cyclical approach to pedagogy characteristic of medieval teaching. The chapter begins with the mention of several words derived from Greek with somewhat unclear meanings: *peribolo*, *periponus* and *diaphonia*. The first of these is part of medieval Latin terminology and means an enclosure or garden walkway. Adam seems to use it to make his metaphor of "walking about" the music more colourful. The other two occur again in Chapter 10, there in Greek script. The former word seems unique to Adam, but *diaphonia* had a long ancestry. Its meaning for Isidore was "dissonance". However, by the time of Guido, the term had

17. Mentioned, for instance, by Dolores Pesce, *The Affinities*, p. 6; and by Claude Palisca in his introduction to Babb’s translation of Hucbald’s treatise (see Babb, p. 5). Adam himself says in his Book III, "it is necessary to repeat quite often what the mind is always to retain." See GS III, p. 359. Page quotes Quintilian’s *Institutio oratoria*: "We often speak twice on the same subject." See *Summa musice*, p. 34.

18. As indicated by a search of the TML.

come to signify two-part music, that is, organum. This meaning was retained by most later theorists. The two contexts for these words in his treatise indicate that Adam may use the terms to distinguish the two types of intervals: periphonus for melodic (successive) and diaphonia for harmonic (simultaneous). Adam includes here an interesting chronological view, placing Jehan des Murs (c.1300 - c.1359) before Guido (c.991 - c.1033), and Odo of Cluny (878/9 - 942) after him.

The topic of the expansion of the gamut, already covered in some detail in Chapter 1, returns here, and with it, another reference to the "venerable Guillaume Dufay." Adam again acknowledges the Burgundian composer as an important inventor whom most moderns imitate. He implies, however, that this imitation casts aside the reliance on older authority (in contrast to his comments in Chapter 1). This leads to a short discourse on the value of balancing knowledge and performance of music, for "art without practice is worth little, and practice without art nothing." As before, contradictions in Adam's thoughts between the authority of the masters and the importance of practical experience become evident.

20. Guido, pp. 196-208; Babb, pp. 77-82.
21. Johannes Affligemensis, for example; see Affl., pp. 157-62, Babb, pp. 159-61.
22. See Appendix B, n. 63 regarding the confusion over this figure.
23. II/8/66-68.
In the final sentences of the chapter, Adam attempts to justify by reason the addition of notes to the traditional gamut. He recalls that music, as part of the quadrivium, delights in mathematical proportions, which can extend infinitely. The latter theme seems to be a traditional one. For example, Crocker cites several early sources touching on this.\(^{24}\) John of Garlandia (c. 1240) says "It should be known that the above-mentioned concords can be taken to infinity."\(^{25}\) The thirteenth-century Compendium Discantus, sometimes attributed to Franco of Cologne, states with regard to this tradition:

> And note that when you wish to ascend above the diapason, you will imagine yourself to be in unison with the tenor, and you will discant in the same way you would over the tenor in the lower register, because there is really no difference except that you are higher in pitch. Such elevation [of the discant] can be repeated indefinitely (*multiplex est in infinitum*).\(^{26}\)

Adam's meaning seems simply to be that, just as there are an infinite number of mathematical ratios, so also are there infinitely many intervals. They can be derived by adding the known consonances to successive multiples of octaves, and thus, expansion of the gamut is justified by reason and authority. However, in a final quixotic turn, he then states that "experience, who is the mistress of things,


\(^{25}\) Cserba, p. 208. "Sciendum, quod supradictae concordantiae possunt sumi in infinitum."

\(^{26}\) Crocker, p. 8; CS I, p. 156.
teaches this,"27 again reminding the reader of his ever-present conflict between authority and practice.

The discursive style is continued in Chapter 9, which begins with some rather meandering remarks against composers who move beyond the standard practice. Adam continues a theme of earlier writers who often complained of the corruption of chant. Guido, for instance, says:

False notes also creep in through inaccuracy in singing; sometimes performers deviate from well-tuned notes, lowering or raising them slightly, as is done by untrue human voices. Also, by ascending or descending more than is right for the prescribed interval, we pervert a neume of a certain mode into another mode or we begin at a place [in the scale] which does not admit [that] note.28

The tone of Adam's colourful critique is perhaps closer to that of Johannes, who devotes a full chapter to "How the ignorance of fools often corrupts the chant." His chapter begins:

We are not sure whether the fact that these and other such chants cannot be sung in the range proper [to their modes] results from the fault of the singers or whether they were thus issued by their composers in the first place. On the other hand, we do know most assuredly that a chant is oftentimes distorted by the ignorance of men, so that we could now enumerate many corrupted ones. These were really not produced by the composers originally in the way that they are now sung in churches, but wrong pitches, by men who followed the promptings of their own minds, have distorted what was composed correctly and perpetuated what was distorted in an incorrigible tradition, so that by now the worst usage is clung to as authentic.29

27. II/8/84-86. Adam uses the expression again in Book IV; see GS III, p. 373.
Adam implies that contemporary composers had felt the restrictions of rules of chant and had begun to use "non-musical notes and terminations" of others. He may refer here to ornamental elaborations to the chant, regional variations in far-flung monastic or parish churches, or ingrained errors from inexperienced choirs. That the church is still today worried about such deviations in the chant is evident in the introduction to the Liber Usualis:

Certainly in the course of time the Gregorian Chant incurred no small loss of purity. This was chiefly because the special rules of the Chant, as traditionally received from the Fathers, were either negligently overlooked or allowed to be altogether forgotten. Hence arose an evident decline in the spirit which is spoken of as "liturgical", and the "spirit of prayer", while at the same time the beauty and grace of the sacred melodies, if they did not wholly disappear, were certainly affected for the worse.

Adam goes on to castigate those who fear to learn in old age, possibly referring to conservative academic colleagues (like Andrechinus of Basel, mentioned in his Chapter 6) or perhaps to older members of monastic choirs. The subject allows him to show his classical knowledge with some anecdotes about ancient Greeks, possibly drawn from Latin sources. While at least some of these stories are probably apocryphal (the tale of Homer's suicide, for instance), they are vivid and make Adam's point: "there is greater embarrassment in being ignorant when old, than in

30. II/9/14-15.
studying in old age." He finishes this polemic with a recommendation once again to follow the rational bases of the authorities of music theory rather than the debased practices of those performers not grounded in principles.

The last part of Chapter 9 returns to more concrete musical matters. Adam presents the legendary development of the early gamut, basing his account on that of Boethius, which probably was translated from Nicomachus. He then takes up the later gamut again, once more noting Guido's extensions, and finally supplying his own Greek names for those notes added to the original fifteen (see Table 2.).

The derivation of the names from the Greek tetrachord system is evident. Adam's additions are explained by him as deriving from the positions of the new notes. Origneboleon is "sounding above the last" and Orexion means "newest." In the lower range Hyponomenon signifies "low sound" and Hyperexiapathon "lowest" or "last". The new tetrachord added above the Boethian gamut, diahyperboleon, is "above the highest" (Superexcellentes in Latin). Adam's new Greek terms seem to have been disregarded by later theorists, and they never reappear.

32. Socrates; see II/9/37-45. Adam also broaches the topic in his Prologue to Book II; see II/Prol/80-84.
33. See Boeth., pp. 205-09; Bower, pp. 29-35. The Nicomachus source is no longer extant.
The information, including Adam's new terminology, is summarized in a complex chart, somewhat different in shape but not in content in the Gerbert and Bologna versions (see Appendix C, nos. 16 and 17). The chart also shows interval relationships between some of the notes and gives Latin equivalents to the Greek note names. Adam’s names for the five tetrachords are superexcellentes, excellentes, acutes, medii, and principales. The chart gives a much clearer sense of the whole gamut and seems to contradict Adam's text. In particular, the text calls the hyperboleothesi range "all higher positions of the superexcellentes" while the chart appears to relate this range to the excellentes. In addition, the text implies that even higher notes are possible, since origneoboleones is plural.

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34. Boethius gives somewhat different Latin equivalents for the note names; see Bower pp. 31-39, 122-26. See above, pp. 35-36 for further on Adam’s division of the gamut.
Table 2. Adam’s Additions to the Traditional Gamut

Upper range, names original to Adam:
   ff. Origneboleon.
   ee. Orexion.
Guido’s additions:
   dd. Epinete diahyperboleon.
   cc. Epiparanete diahyperboleon.
   bb. Epitrite diahyperboleon.

Boethian gamut:
   aa. Nete hyperboleon
   g. Paranete hyperboleon
   f. Trite hyperboleon
   e. Nete diezeugmenon
   d. Paranete diezeugmenon
   c. Trite diezeugmenon
   b. Paramese
   a. Mese
   G. Lichanos meson
   F. Parhypate meson
   E. Hypate meson
   D. Lichanos hypaton
   C. Parhypate hypaton
   #. Hypate hypaton
   A. Proslambanomenos

Lower range, names original to Adam:
   Γ. Hyponomenon. (addition of Guido)
   F. Hyperexiapathon.

35. The gamut of Boethius is much more complex than Adam’s simplified chart indicates. It includes not only an extra tetrachord, the synnemenon, to account for the note b-flat, but also diatonic, chromatic, and enharmonic versions of each tetrachord. See Boeth., pp. 205-18, Bower, pp. 29-46.
Consonance (Chapter 10)

Having fully discussed the idea of musical interval, Adam now lays the groundwork for his rules of composition by presenting more material on consonance. He had briefly defined symphonia in Chapter 3 (based on Isidore) as the right proportion of modulation by concordant sounds. He had mentioned it again in Chapter 8 but in the sense of a melodic interval. Consonantia is, of course, the direct Latin equivalent of symphonia, as first formulated by Boethius. Adam had also given brief definitions of consonance and dissonance in Chapter 7, where it seems clear that he refers to harmonic intervals.

Chapter 10 begins with the recurrence of two unusual Greek terms, discussed above, this time written in actual Greek script. Adam then presents the traditional division of consonances into perfect (perfect fifth and octave with their compounds) and imperfect (thirds and sixths with their compounds). Again he is clearly speaking of harmonic intervals in preparation for his rules, which largely deal

36. GS I, p. 21.
38. For the definition of Boethius, see Boeth., p. 198; Bower, p. 19. Johannes gives two reasons for the possible use of the term, one that the consonances sound together more often in singing, the other that they are related among themselves by simple ratios. See Affl., p. 67-68, Babb, p. 110-11.
39. For background on classifications of consonances and dissonances, see Crocker, "Discant", pp. 1-21.
with counterpoint (in spite of the fact that Book II is supposedly about *musica plana*).

Adam is less traditional with respect to the perfect fourth, however. That interval had been a continually vexing problem for theorists, since it was represented by a simple ratio (4:3, making it one of the Pythagorean consonances), and yet had a harsh sound in polyphony. Crocker mentions that the thirteenth century still accepted the fourth as a consonance in discant, but the fourteenth rejected this classification, and most fifteenth-century theorists continued to find it dissonant. Tinctoris is ambivalent about the quality of the perfect fourth. In his dictionary, he considers it a perfect consonance. His detailed treatment of the interval in the *Liber de arte contrapuncti*, however, classifies it as the "first of all concords" for "our ancestors" but an "intolerable discord" which is "rejected by counterpoint."

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40. Crocker, pp. 5-6. Crocker's chart on p. 7 shows the fourth as a consonance c. 1300 but considered a dissonance by 1336 in Wolf's *Compendium*.


42. See *The Art of Counterpoint*, trans. by Albert Seay, *Musicological Studies and Documents* 5 (American Institute of Musicology, 1961), p. 29; CSM 22, V. II, p. 26. That the perfect fourth continued to be a problem was evident from the paper of Thomas Christensen, "*Sensus* and *Ratio* in Eighteenth-century German Music Theory: Mattheson's Critique of Mathematics in Music," delivered at the 1993 meeting of the American Musicological Society in Montreal. Referring to Mattheson's *Das Forschende Orchester* of 1721, Christensen described the author's more than 300 pages devoted to proof of the dissonant nature of the fourth as a great example of "musical historical
Adam had earlier classified the fourth as a consonance in a section derived from Boethius where the reference seems to be to harmonic intervals. In Chapter 10, however, he rather skirts the issue by calling the interval a "semi-dissoneance," a unique term. He implies (citing Jehan des Murs in an unidentified reference) that a fourth is dissonant by itself but can be made consonant by a preceding perfect interval. This rather mysterious claim is somewhat cleared up by his unusual reference to the contemporary technique of fauxbourdon. His statement that a fourth "does not make a consonance by itself, but in relation to others" seems to mean, then, that when combined with other consonances such as thirds or fifths in a chordal grouping (as in fauxbourdon), the fourth can be more consonant. He suggests, however, that the term arises from the bad sound it makes. Adam returns to the subjects of fauxbourdon and treatment of the fourth in his composition rules in Chapter 11.

43. II/7/47-51.
44. As revealed by a search of the TML.
46. Corroborated by his ninth rule of composition in Chapter 11. See below.
The final three paragraphs of Chapter 10 become more
generalized as Adam justifies his presentation of some rules
of composition by, once again, criticizing current musical
practices:

We discern from all sides music corrupted by those composing it: which happens, then, since the worst practice of instrumentalists became ingrained; when they know scarcely two rules, oh woe! they wish to compose songs; and would that it were only songs, but they also take up some grand things in performance. Some others, scarcely knowing the shapes of the notes, or somewhat adept in the art, amend all song, tear, damage and adulterate the correct composition. 47

This vivid sentence is quoted by Riemann, who thinks that the complaint applies particularly to arrangers of music for organ or lute. 48 It is clear again how much Adam disdains instrumentalists (he once more departs from his topic of musica plana), and he also here disparages the over-embellishment of music in performance, the same adding of improvised ornament that he had seen as one of the causes of the corruption of chant.

Rules of Composition: Background

Chapter 11 forms the most unusual, and possibly the most important, section of Book II; indeed, perhaps it is the most interesting part of the whole treatise of Adam von Fulda. The rules, dealing predominantly with counterpoint, depart from his stated topic of Book II, musica plana, and

47. II/10/76-93.
from the rest of its contents. The rules are also rather unique in comparison to those of earlier traditional treatises and of some important contemporary compilations concerning teaching of composition.

Fairly extensive investigation has been undertaken recently into the development of ideas about counterpoint in late medieval theory. Klaus-Jürgen Sachs and Ernst Apfel in particular have looked at the subject in some detail.49 Perhaps because Adam's treatise comes late in the tradition, or because he does not use the terms discantus and contrapunctus, both authors have covered him only in summary fashion. A somewhat more thorough consideration of Adam's rules is presented by Riemann, although his general discussion of the topic is dated and lacks some sources. Riemann (English version by Haggh) provides translations of Adam's rules which are somewhat free and also rather incomplete. The rules are "sketchy" in Riemann's opinion.50


By the fifteenth century, contrapuntal techniques were considered an important enough topic to be dealt with in separate treatises. This is the case with two of the most important works of the century on this subject, Prosdocimo's *Contrapunctus* of 1412 (CS III, pp. 193-99) and the *Liber de arte contrapuncti* of 1477 by Tinctoris (CSM 22, II, pp. 5-157). Other fifteenth-century theorists before Adam to devote significant attention to counterpoint, but within a more generalized treatise, include Gallicus, Ugolino, Burtius, and Guilielmus Monachus. Since all these treatises were probably written in Italy, it is likely that Adam did not know them. His rules resemble theirs only in the most general respects.

Prosdocimo's six rules are called by Herlinger a "model of concision"; he considers that they exemplify some of "the most common precepts of fourteenth and fifteenth century music theory." Herlinger summarizes them as follows:

1. Only concords are to be used
2. A counterpoint must begin and end with a perfect concord
3. Parallel perfect concords are prohibited
4. Imperfect concords are not to be used continually without the occasional insertion of perfect ones
5. In fifths, octaves, and the like, mi should never be placed against fa

51. Prosdocimus de Beldemandis, *Contrapunctus; a new critical text and translation* ...by Jan Herlinger, part of Greek and Latin Music Theory, ed. by Thomas J. Mathiesen and Jon Solomon (Lincoln, Nebraska: University of Nebraska Press, 1984), pp. 7-8.
6. Parallel imperfect concords are allowed, provided perfect ones are occasionally inserted.\textsuperscript{52}

Thus, here, as in most earlier counterpoint or discant treatises, the concern is with the allowable harmonic intervals, and with how those intervals should succeed one another.

\textit{De preceptis artis musicae}, the treatise of Guilielmus Monachus\textsuperscript{53} has received some attention because of its discussion of fauxbourdon. The lack of clarity in the language has given rise to some confusion and controversy. This remains one of the century’s more significant treatments of counterpoint, however. Apart from a number of specific rules and examples for three- and four-voiced improvised counterpoint, Guilielmus provides ten generalized requirements similar to those above of Prosdocimo.\textsuperscript{54} In addition to those provisions, Guilielmus includes two rules about melodic movement, one stating a preference for stepwise motion, the other urging avoidance of repetition of short melodic motives. He allows \textit{mi contra fa} for imperfect consonances and says that dissonant intervals can serve well when properly resolved (he gives some examples of this). Guilielmus also mentions twice that the penultimate interval must be an imperfect consonance resolving to the perfect final one.

\textsuperscript{52} Herlinger, p. 8.

\textsuperscript{53} c. 1480. CSM 11; CS III, pp. 273-307.

\textsuperscript{54} See CSM 11, pp. 34-35. The rules are translated in Riemann, \textit{History}, pp. 251-53.
By far the most important treatise on counterpoint is the extensive work of Tinctoris. This *oltramontano* living and working in Italy provides a detailed consideration of traditional aspects of the matter but goes far beyond in his delineation of dissonance treatment, including in it perhaps the first discussion of the suspension. His counterpoint treatise is divided into three books. The first two cover treatment in polyphony of all the possible harmonic concords and discords. The third and shortest gives eight more general rules of counterpoint which fall into the traditional categories found in many older treatises, including those of Prosdocimo and Guilielmus mentioned above. Tinctoris is also one of the first theorists to distinguish between improvised (*super librum*) and composed counterpoint (*res facta*), a distinction which, as Reaney says, "is not great in the late fifteenth century." 

Northern theorists of the fifteenth century seem less eager to discuss the rules of counterpoint, although fourteenth-century French treatises often did so. The only writers contemporary with Adam to mention the subject are Anonymous XI and XII of Coussemaker's volume III, an

57. Pages 416-75 and 475-96 respectively.
anonymous *Tractatus de Musica Figurata*, 58 and the *Utilissime musicales* of Guillaume Guerson. 59 Anonymous XI gives some twenty-four detailed rules dealing exclusively with treatment of harmonic intervals and melodic movement of the voices in three-part polyphony. The rules of Anonymous XII are very concise. Again they concern intervals (including the fourth as both an imperfect and a prohibited interval) and their successions. The *Tractatus* has seventeen rules which also touch on mensuration and clefs; a number of specific provisions and examples are included. Finally, Guerson provides five traditional rules about intervals in counterpoint and also five more dealing in detail with the sixth. He restricts his discussion to improvised, two-part polyphony. Johannes Keck in his *Introductorium Musicae* of 1442 actively rejects counterpoint as "not part of the current speculation" since it makes men of the church "seem not so much to make music as to groan." 60 Thus the very willingness of Adam to present rules for composition seems to mark a turning point in the attitudes of northern theorists.

58. CS IV, pp. 434-69.
60. GS III, p. 327. "...discantus, non est praesentis speculationis...ut non tam musicae quam gemitum facere videantur."
Adam’s Rules of Composition (Chapters 11 and 12)

In spite of Riemann’s characterization of Adam’s ten rules of composition as "sketchy", they might also be seen as broader than the traditional ones, and indeed as related more to aesthetic approaches to general composition than to specific techniques of counterpoint. Adam treats a number of basic aspects of musical composition, and in so doing points to some important topics of his treatise (mensuration and proportions, for example). The rules seem to be drawn as much from his practical experience as a composer and performer as from the traditional strictures for discant and counterpoint. He reveals his more general aesthetic approach and his liberal arts background in the comparisons to prose writing. Parallels between grammar and music, and indeed the derivation of concepts and terminology of the latter from the former, are frequent themes in medieval treatises. Adam draws other interesting comparisons later in his consideration of mode. Most of Adam’s rules apply to contrapuntal music (with three voices often implied) and probably to written rather than improvised forms. There are problems in understanding his meanings in some cases, and a striking difference in the sources for the first rule. Each of the rules will be considered individually below.

1. "In all song, at least one voice (vox) is said to be fitted to the true mode (tono); that is, however, to fit
to the mode, namely the eight [church] modes; that is, to place closes (clausulas) beautifully and properly; as the accent of prose is adorned through a point, thus also is mode through the eight."

The first rule presents interpretive problems because of different readings in the two sources. In two places, where Gerbert has octo (eight), the Bologna manuscript has actos. In the second occurrence in Bologna the word is capitalized, thus making it seem not to be a simple miscopying. Problems also arise from the inherent ambiguity of some of the terms used. Vox can mean voice in a general sense as well as voice part and, most specifically, solmization syllable. Clausula, deriving from grammar and rhetoric, had several meanings in medieval music theory, including a musical ending, an ending on the final of the mode, a closing melodic formula, a section within plainsong, or a section within a polyphonic setting. Finally, tonus can carry the general sense of "sound" but also can have the specific implications of the major second interval, mode or psalm tone. The problem with this last Latin term is compounded by Adam's use of the form tonatus, which may have a different meaning yet again. As the past participle of the verb tonare (to sound), this form would probably carry a

61. See New Grove's Dictionary, s. v. "Clausula".
62. The ambiguity between the meanings "mode" and "psalm tone" are particularly apparent in the final section of Book II; see Chapter V below.
more general sense rather than being specifically related to "mode" or "psalm tone". Thus, *actos tonatos* in the Bologna version might be translated as "actual sounding".\(^{63}\)

Harold Powers gives a translation of the rule "with emendations from Riemann":

In every song at least one voice is appointed to be adapted to a correct tone. Moreover, to adapt to a tone (namely, of the eight tones) is this: it is to place cadences beautifully and appositely, for as the rise and fall of speech is set off by the period, so the tone by a perfection.\(^{64}\)

Even given Powers's acute perceptions in the topic of modes, his translation of the rule still does not make it entirely clear. However, the first sentence does seem to touch on the role of mode in polyphony, a continuing question for scholars. One of the earliest mentions is a reference in the anonymous Berkeley manuscript, which gives some rules "with respect to every final of the tones or modes of any song -- motets, ballades, rondeaux, virelais, and the like."

The rules themselves are complex and somewhat confusing:

First, every song of this type that ends on any re, on sol B quadratum, on la naturalis, or on sol or la B mollis, is in the first or second tone. Every song of this type that ends on any mi or on la B quadratum is in the third or fourth tone. Every song of this type that ends on fa naturalis or on fa or ut B mollis is in the fifth or sixth tone. Every song that ends on sol or ut naturalis or on fa or ut B quadratum is in the seventh or eighth tone.\(^{65}\)

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63. Feldmann touches on this rule, "eben weil diese unklar lässt": see "Musiktheoretiker," p. 52.
65. Ellsworth, *Berkeley Manuscript*, pp. 84-85. See also Ellsworth's introduction, pp. 2-4, for background.
A famous and important statement is that by Tinctoris in his 1476 treatise on mode:

Hence, when some mass or chanson or whatever other composition you like is made from different parts carried through in different tones, if anyone asks of what tone such a composition may be, he [who is] interrogated ought to reply, for the whole, according to the quality of the tenor, because that is the chief part and the foundation of the whole relationship.66

Another interesting statement of Tinctoris, not often mentioned, is his fifth general rule of counterpoint:

The fifth rule is that above absolutely no note, be it medium, superior or inferior, should a perfection be taken by which a removal from its mode (distonatio) can happen. I believe that this can hardly be left to the judgment of the ears.... This perfection, however, for the medium and final clausula of each song is taken by making a perfect concord according to rule, although an imperfect one is inserted from time to time in its place.67

Adam is not as specific as his contemporary in Italy, saying only that at least one voice is fitted to the mode. That the consideration of mode in polyphony became an important one for composers in the sixteenth century is clear from a number of references to sources made by Meier.68

Part of the problem with the translations given is that the rule has two parts which seem only vaguely related. The

67. Seay, The Art of Counterpoint, p. 135-36. Riemann, History, p. 268 translates "A cadence shall be made on no note, neither a middle one nor a high or low one, which would make the mode of the melody uncertain."
first part deals with mode, as discussed above, and the second enjoins the composer to place cadences carefully, comparing the effect to that of closes in prose. Two possible interpretations may suggest a relationship between the two parts. The first is that Adam is really talking about *cantus firmus* technique, his favoured compositional approach, in this rule. The second possibility is that Adam's idea of "placing" cadences refers to the use of notes within the vertical harmonic formulae of the cadences, rather than to the location within the formal plan of the piece. This second interpretation would then imply the necessity of choosing notes that would not distort the mode, and would bring Adam's meaning close to that of the rule of Tinctoris.

2. "Let everyone composing learn to adorn song clearly with pauses, since they give variety; it is not less praiseworthy to pause than to sing, nor is the accent of prose without pause."

The second rule points out the need for rests properly placed in musical composition and relates the effect to that of pauses in prose. In similar fashion to several following rules, the second deals more with general aesthetic aspects than with detailed questions of musical technique. For polyphony, Adam would seem to refer to the individual voices regarding placement of rests, rather than the entire fabric.
His own music consists mostly of overlapping sections of counterpoint with an ongoing sound but appropriate rests in each voice part. Adam deals with pauses in a more detailed and technical manner in Chapter 9 of Book III.

3. "Every dissonance, if it can be, is to be avoided, and likewise the tritone and diminished fifth, since the difference of a semitone [from the fifth] is prohibited, except in the event that a perfect [consonance] follows it directly; I do not say demidiapente, as Virgil says "half-male Phrygians," since a semitone is not half of a tone."

Treatment of dissonance, especially the tritone, is the subject of the third rule, a precept closer to the traditional ones. Adam allows a tritone only when it is followed by a perfect consonance. He touches on the continuing problem of the division of the tone and the size of the semitone by mentioning that he uses the term semidiapente (a minor semitone less than a fifth) rather than demidiapente (which would mean exactly half a tone less than a fifth, an impossibility in the Pythagorean system). The Virgil quotation, often used by medieval theorists, does not add to the meaning of the rule and seems related to it only by the prefix "semi-". Again Adam resorts to classical

69. See Chapter III above for discussion of the continuing problem for theorists of the division of the tone into semitones.
allusion for the sake of making an impression rather than enhancing his statements.

4. "The true placing of the pitch in transposition of a tone will be carefully observed by the composer, since the meeting of the adjuncts is there, which the Greeks like to call synemmenon, but we call musica ficta."

The fourth rule discusses the problem of transposition, which Adam also mentions in Chapter 17. Here he seems most concerned with the placement of the semitone interval, the possible dangers of which he had previously warned. This may be an instance of his theory growing from his practical experience in performance—he had already mentioned this problem in his discussion of mutation (see Chapter III above). A clue to Adam’s meaning in this rule is supplied by the Berkeley manuscript and also by an unedited treatise from a Ghent manuscript. Both works use the term transpositio in referring to mutation and the conjunctae, that is, hexachords not beginning on C, F, or G, and thus producing musica ficta notes. Adam thus seems to warn the composer to use care in placing a musica ficta note, especially with regard to the location of the semitone within the hexachord. A certain amount of confusion results from Adam’s use again of the ambiguous term tonus, which

70. Ellsworth, Berkeley Manuscript, pp. 52-53, for example; Gent Rijksuniversitat MS 70(71), f. 122r.
might also refer to a psalm tone or mode. However his specific reference to the semitone interval makes the meaning given above probable.

5. "Let all those composing commit entirely to memory the twelve parts [intervals] of the art, since without these no song is composed."

The fifth rule is one of the most simple and basic of the ten. It merely emphasizes the need for composers to know their materials, that is, the intervals. These were enumerated by Adam in detailed fashion in Chapter 7 of the treatise. Adam may also imply here that the composer should be well familiar with all the parts of music in order to introduce needed variety, and also in order to use the intervals properly as consonances and dissonances in counterpoint.

6. "Let all composers have particular regard for the three first steps of music, namely mode, tempus and prolation; for the sake of number, so that what is proper in each case is applied to each, that is, the true signature for recognition and tactus."

The three basic levels of mensuration (*modus*, *tempus*, *prolatio*) are touched upon in the sixth rule, pointing forwards to the third book of the treatise. The second part
of this rule is difficult to translate clearly; Riemann thinks that it refers to writing the correct time signature.\textsuperscript{71} This interpretation is bolstered by Adam's definition in Book III: "Signum is that which gives the first knowledge of the song as to mode, tempus and prolation."\textsuperscript{72} Adam here mentions the important concept of tactus. He is the first theorist to discuss this,\textsuperscript{73} and treats it more fully in Book III. There he defines it as "the continuous motion in a contained measure by ratio" and gives several specific examples.\textsuperscript{74}

7. "No perfect consonance has a similar perfect [consonance] following, rising and falling, but any perfect [consonance] may appropriately have a perfect one dissimilar to it following, as a fifth after a unison, or an octave after a fifth."

The seventh rule is a traditional one of treatises on discant and counterpoint. Successions of similar perfect consonances are not allowed, but dissimilar ones are permitted. This may be compared with the third rule of Prosdocimo, although Adam provides some examples. It is interesting to note that Adam does not mention here the

\textsuperscript{71} Riemann, History, p. 271.
\textsuperscript{72} GS III, p. 361.
\textsuperscript{73} Howard Mayer Brown states that the topic was "first discussed in detail by Adam von Fulda." See New Grove's Dictionary, s. v. "Tactus."
\textsuperscript{74} "Tactus est continua motio in mensura contenta rationis." GS III, p. 362.
traditional practice that a piece must end with a perfect consonance preceded by an imperfect one (sixth to octave or third to unison), outlined, for instance, by Guilielmus.

8. "Although the ancients formerly prohibited more than three or four imperfect [consonances] following each other, we moderns do not prohibit this, especially tenths, which provide adornment when a voice is in the middle."

Also more traditional is the eighth rule, which permits successions of imperfect consonances. Adam notes that earlier theorists had allowed only three or four consecutive imperfect consonances but that the moderns are more free in their use. He mentions in particular parallel tenths as the outside parts in a three-voice texture. This effect is frequent in the music of his Netherlandish contemporaries, especially in the works of Obrecht. Regarding that composer, Howard Mayer Brown says "the facile side of his character is perhaps most obviously expressed by his readiness to move contrapuntal lines in parallel motion, especially by tenths in the outer voices." A good example occurs in Adam's own compositions. The setting of the responsory In principio erat verbum has the plainsong in long notes in the middle voice with the two outer voices in frequent parallel motion in tenths.

76. *Gerber, Mensuralcodex*, p. 58.
9. "The fourth must never be placed alone, unless it is bounded by a perfect or imperfect [consonance]: but also, it is allowed neither to ascend nor descend, unless there is fauxbourdon, as mentioned before, which some believe can be made false in hypothesi and hyperboleothesi ranges; but reason does not recommend this, since it is against a preceding rule."

The ninth rule deals with another continuing problem, the interval of the perfect fourth. The ambivalent attitude of Adam and other earlier theorists about this interval was discussed above. Adam presumably allows it only in a texture thicker than two voices, combined with a perfect or imperfect consonance. Even then it cannot move to another perfect fourth in parallel motion, unless it is in fauxbourdon. This latter possibility may necessitate musica ficta in certain ranges, against which Adam advises. The ranges are his principales tetrachord (also called graves; low r to D) and excellentes tetrachord (high d to g). Although his meaning is not clear here, the author may refer to the need for F-sharp against B-natural in fauxbourdon. This then would again demonstrate his

77. Note also that Guerson considers the perfect fourth dissonant in two-voiced counterpoint, but consonant with three or more parts. See Ferand, "Guillaume Guerson’s Rules", pp. 257-58.
78. This recalls Adam’s brief discussion of fauxbourdon in Chapter 10; see above.
conservative approach to problems of chromatic alteration. The "preceding rule" may be the third prohibiting dissonance, the fourth regarding the semitone in hexachord mutation, or possibly the earlier discussion of the fourth as a "semidissonance."

10. "Let all those composing a contra tenor in hypothesi, namely in the low range, learn to place perfect rather than imperfect consonances, except thirds with their aequisones [tenths]; this sound is moderated by a similar sound of consonance."

The tenth and final rule also considers intervals in harmonic combinations. In composing a voice below the tenor (which would probably be a cantus firmus), Adam allows perfect consonances and thirds and tenths, which seems to imply that the sixth was less favoured at this time as an imperfect consonance. The reason for this is not clear and cannot be determined from anything he discusses elsewhere. This rule may hint at the development of a sense of a true harmonic bass line, however.

Adam finishes consideration of this rule with a quote from Horace, which seems only distantly related in emphasizing the desire for the sweet quality of those imperfect consonances. It is noteworthy, however, that he would conclude his set of composition rules with a statement
about the desirability of sweetness. Again, Adam hints at a turning away from ancient principles of rational structure towards a sensuous aspect in music.

Indeed, it seems significant that Adam touches on the sensuous and expressive sides in view of concurrent developments in musical thought, such as the new attention to text setting of Josquin and his contemporaries. In addition, it is notable that the theorist everywhere uses the verb "componere" and its derivatives, rather than the more specific "contrapunctus" of earlier and contemporaneous works. He is clearly discussing a written creative act of composition, not an improvised practice. This emphasis on musical composition anticipates the idea of *musica poetica* and points to Adam as the most important harbinger of humanism in German music.

Chapter 12 of Book II forms a general conclusion for this section on intervals and composition. Adam gives no further technical musical information here; rather he returns to a rhetorical, but not so polemical, style and urges, once again, the proper study of rules and precepts for musicians. As often before, the author brings classical authority to bear in support of his ideas. He justifies his own presentation of rules, since a composer must be more than a mere singer. A striking sentence sets even higher standards for the composer: he "must be immune to all
criticism, for he stands above the others; he must never write anything of which he may repent later." This anticipates the following confession of some of Adam's own earlier "obscurities" and also acknowledges criticism he has received (perhaps from those same musicians he castigates for not following traditional authority).  

On a more practical level, Adam urges the composer to use the true musical proportions, that is, the intervals ordained by reason to be consonant. He also suggests perseverance in exploring the types of figures, which "hold embellishments and subtlety." In Book III on mensuration Adam uses the word figura for "noteshapes"; he would thus seem here to be advocating rhythmic variety in divisions. The term also suggests melodic motifs, an idea which was soon to become important in the Doctrine of Figures (Figurenlehre). While advocating seeking subtlety in composing by continual singing of the products, he nevertheless asks the composer to strive for understanding

79. 11/12/29-35. Noticed by Riemann; see History, p. 270.  
80. Adam discusses his "critics" more fully in the prologue to Book I of the treatise, without giving further clues to their identity. See GS III, p. 331-32. In Book III, he complains of criticism from "gymnosophistae" regarding the dedication of his treatise (GS III, p. 366). This unusual term, possibly fabricated by Adam, could refer to pedantic colleagues at a school or university.  
81. It is rather remarkable, then, that Adam mentions the non-Pythagorean ratio of 5:4 for the interval of the major third in Book IV (see GS III, p. 371).  
82. 11/12/48-50.  
and to avoid obscurity, whether in chant or mensural music. Here Adam confesses to his youthful transgressions; Riemann has interpreted this to refer to a fascination with "riddle canons, false proportions, etc." in "the contrived settings of the Netherlanders."\(^8^4\) Although canon is occasionally found in Adam’s music as a structural device, the complexities to which Riemann refers are by no means typical of his oeuvre.

An interesting phrase occurs as Adam urges creativity in a composer: "he is a miserable talent who uses inventions (\textit{utitur inventis}), and not what is to be discovered (\textit{inveniendis})."\(^8^5\) A similar quotation in the \textit{Speculum musicae} of Jacques de Liège\(^8^6\) is credited to Boethius but has not been found in any of his works. Adam uses the idea as well in his prologue to Book II, where it follows several others taken from the Pseudo-Varro \textit{Sententiae}.\(^8^7\) The sense of the passage would seem to be in the recommendation to find new musical ideas ("what is to be discovered") rather than to use what has already been invented. Adam invokes the importance of creativity in musical composition, seemingly at odds once more with his urging to follow ancient precepts.

\(^8^4\). \textit{History}, p. 270.
\(^8^5\). II/12/70-71.
\(^8^7\). II/Prol/42-44.
The author finishes with the humble admission that he is "not able to please all"\textsuperscript{88} but that he has relied on the authority and judgment of serious men. Again, Adam shows his conservative medieval approach in his foundation in reason and established doctrine.

\textsuperscript{88} II/12/78-79.
The final five chapters of Book II of the treatise of Adam von Fulda cover aspects of mode.\(^1\) In view of the long tradition of detailed treatment of this subject,\(^2\) Adam’s exposition is surprisingly summary. This brevity may relate to the author’s oft-stated desire for conciseness, or it may reflect the reasons for his writing the treatise (see below, Conclusion, for further discussion).\(^3\) He deals with only a few of the standard topics and even they are covered in only a generalized and often derivative manner. More unusual still is the fact that Adam cites not one example from plainchant, and his sole musical example is merely a short

\(^1\) A concise and detailed survey of the topic can be found in Harold Powers’s article "Mode" in the New Grove Dictionary of Music and Musicians. See also Willi Apel, Gregorian Chant (London: Burns & Oates, 1958), pp. 133-78. Dolores Pesce’s The Affinities provides much information on the subject while discussing the more detailed topic of the modal affinities, the association of three of the four modal finals, D, E, and F, with notes which could act as secondary or substitute finals (A, B and C, respectively).

\(^2\) Modal theory was often presented as the introduction to tonaries, large catalogues of chants classified by mode. For a complete history, see Michel Huglo, Les Tonaires: Inventaire, Analyse, Comparaison (Paris: Heugel et Cie., 1971).

\(^3\) It might even be suggested that Adam views the topic as not so important for his time, given the rise of polyphonic secular and instrumental music. See the final chapter of Book II (II/17/13-15) where he states that "for us with figured music, there is no concern about the differentiae."
series of modal formulae. Some information in these five chapters is presented only in charts (for instance, Chapter 14 consists of two diagrams with a mere five sentences to introduce them). Two topics (mediants and tonus peregrinus) are given more concentrated and non-derivative coverage, but these are unusual aspects of chant which Adam may have discovered to be more difficult for students to grasp. All these factors indicate that the treatise seems not to have been written for practical use. The style of discourse in this section eschews much of the impassioned polemical writing of the previous parts. All of these factors combine to give the final chapters of Book II their brevity and concision.

It is noteworthy that Adam’s discussion of mode is entirely separate from his consideration of the hexachord. Generally, theorists do not attempt to link the two ideas, possibly because the latter was a practical tool for teaching while mode is a more abstract concept applied to complex music (often with some difficulty). When Ramos suggested eliminating the Guidonian hexachord system in favour of an octave one, perhaps attempting to combine the concepts more closely, he incurred a great deal of wrath.

4. Richard Crocker has suggested in his article, "Hermann’s Major Sixth," that Hermannus attempted to join the two concepts; discussed also by Berger, Musica Ficta, p. 6.
Adam begins directly with his definition of *tonus*. As with other terms discussed above, he supplies several meanings (here two) which resemble those of other theorists. The first in fact is identical to that in a treatise of c. 1400 identified by Coussemaker as being by Philippi de Vitriaco: "*Tonus* is the discernment or recognition of the beginning and ending, ascent and descent, of any regular melody."\(^5\) Also in common with other terms Adam treats, there is sometimes an ambiguity present, partly because of the various historical uses of the word. *Tonus* can be translated simply as "tone" or "sound"; or it can mean more specifically the interval comprised by two unequal semitones; finally, it may signify "mode". Adam attempts to clarify his use of the term in this chapter, but the distinction is vague.\(^6\) Furthermore, it becomes clear very

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5. "*Tonus musice est discretio principii et finis, ascensus et descensus cujuslibet regularis cantus*;" CS III, p. 36. The treatise was contained in Cod. M.222 C.22 of the University of Strasbourg, but burned in the same library fire which destroyed the original manuscript of Adam's treatise in 1870. It was copied in 1411 and has also been attributed to Henri de Laufenburg. See Charles van den Borren, *Le Manuscrit Musical M.222 C.22 de la Bibliothèque de Strasbourg* (Antwerp: E. Secelle, 1924). For a reconstruction of this codex, see Martin Staehelin, "Bemerkungen zum verbrannten Manuskript Strassburg M.222 C.22" in *Die Musikforschung* 42 (1989):2-20.

6. The treatise mentioned in n. 4 above makes the distinction of *tonus sonorum* for "interval" but *tonus musice* for "mode".
soon in this section of Book II that Adam uses the word *tonus* to mean both a church mode and a psalm tone.\(^7\)

A brief exposition of the debate over the three possible words for the concept—*tonus, modus,* and *tropus*—ensues. The dissension over terminology began early with Boethius, who states, "From the species of the consonance of the diapason arise what are called "modes" [*modi*]. They are also called "tropes" [*tropos*] or "tones" [*tonos*"]."\(^8\) Guido states that the modes or tropes [*modi vel tropi*] are improperly called "tones" [*tonos*].\(^9\) This was expanded upon by Johannes Affligemensis, who cites Guido’s disparagement of *tonos*, even in his chapter heading.\(^10\) Johannes goes on to discuss the derivation of the words *modos* (from *moderando* [controlling] or *modulando* [measuring off]) and *tropos* (from "turning back"). As do others before him (Jerome of Moravia and Conrad von Lorenz, for example\(^11\)), Adam simply quotes this passage of Johannes. Although he takes no stand on the proper terminology, Adam consistently uses the term *tonus* in Book II when discussing mode or psalm tone.

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7. Page mentions that Johannes Affligemensis also mixes these two usages rather confusingly; see *Summa musice*, p. 21.
9. Guido, p. 133; Babb, p. 66.
10. Affl., p. 76-77; BabD, p. 115.
Another quotation taken almost literally from Johannes draws some parallels between music and grammar. In fact, this connection was made much earlier than the treatise of Johannes. Augustine's *De musica* dealt in five of its six books with poetic metres; this reminds one of the close relationship between music and poetry in ancient Greece. One of the first medieval theorists to compare the modes with grammatical (and other) concepts was Aurelian in his ninth-century *Musica Disciplina*. He also draws parallels with celestial motions and bodies, numerical disciplines, and the muses. Gushee points out that *accentus*, *tonus* and *tenor* were already established terms derived from grammatical writers well before Aurelian. Guido was one of the first authors to mention eight parts of speech (as well as the eight beatitudes) in comparison to the modes. The anonymous *Musica enchiriadis* and Berno's *Prologue* both describe the similarity of prose pauses (colon, comma) with musical ones called *diastema* and *systema*. This similarity is expanded upon by Johannes, who credits Aelius Donatus (*Ars grammatica*, fourth century) with some of his terms. Page notes that "musicians of the eleventh and

15. Gushee, "Questions of Genre," p. 391. See also his extensive note 37, p. 377-78, regarding the roots of the term "comma" in grammar and rhetoric.
16. Babb, p. 68. Babb lists the eight parts of speech as noun, verb, pronoun, adjective, adverb, preposition, conjunction and interjection.
17. GS I, p. 152.
18. GS II, p. 73.
twelfth centuries were taught to regard plainchant as a kind of applied grammar.... The study and performance of plainchant was a discipline with its roots in the punctilious study of the Latin language."19 That the connection between music and grammar was still of vital concern in Adam's time is reflected in a work of the same year as his treatise, Jean Le Munerat's *De moderatione et concordia grammaticae et musice*.20 Perhaps this interest can also be seen as a link between earlier ideas and the later concept of *musica poetica*.21

Adam's discussion of mode here, focusing on accents and pauses and even using the words *modos psallendi* ("ways of singing") signal very early in this section the ambiguity

21. This concept was first introduced by Nikolaus Listenius in his 1537 treatise, *Musica*. He divides music into three: theoretical, practical, and poetic. "Poetic is that which is not content with just the understanding of the thing nor with only its practice, but which leaves something more after the labor of performance, as when music or a song of musicians is composed by someone whose goal is total performance and accomplishment." Trans. Albert Seay (Colorado Springs: Colorado College Music Press, 1975), p. 3. For more information, see books and articles listed in George F. Buelow, "Music, Rhetoric and the Concept of the Affections: a Selective Bibliography" in *Notes* 30 (1973-740):250. For a discussion of the role of musical ideas in the study of grammar, see Edward A. Lippman, "The Place of Music in the System of Liberal Arts" in *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, edited by Jan LaRue (New York: Pendragon Press, 1966), pp. 545-59.
between mode and psalm tone. Perhaps this reflects his
dependance on old sources from a time when the two were less
distinct, since many complex free chants seem to have
evolved from older regular psalms.

A chart included at this point in the treatise (see
Appendix C, nos. 19 and 20) lists the eight modes first by
the more usual numbers used in all ecclesiastical sources,
and then by the Greek names (Dorius, Phrygius, Lydius,
Mixolydius, and their plagal equivalents). It is noteworthy
that this is the only place in the section on modes where
Adam uses these Greek names. This is not atypical, for the
treatise of Coussemaker's Anonymous XI makes no mention of
these names at all. 22

Adam quickly slides over the problem of how there can
be eight modes when there are only seven pitch classes by
quoting Virgil twice. Both quotations give an historical,
but not musical, justification for there being seven notes
in the octave. It is as if the mere citing of a classical
source provides enough authority for the theorist. The
texts are common in medieval music treatises, and the words
of the second one, septem discrimina vocum, are almost a
cliché. 23 Adam does not give any technical explanation of

22. CS III, pp. 416-75. See also Wingell, "Anonymous XI,"
p. 394.
23. See, for instance, Affl., p. 72; Babb, p. 113. The
attraction to Virgil's phrase goes back at least as far
as Isidore; see GS I, p. 23.
the reason for the number of modes being eight, although, as noted, some numerological significances and parallels with the numbers four and eight were mentioned. Thus, his explanation seems more mystical than logical.

A second chart at this point (Appendix C, nos. 21 and 22) divides the eight modes into the authentic (odd-numbered) and plagal (even-numbered) types. Here, the modes are designated only by number. Adam finishes the chapter with a brief description, but no definition, of differentiae, mentioning the melodic formulae (EUOUAE, that is, the formulae for Seculorum, Amen at the end of the Gloria Patri verses) which provide appropriate connections between psalms and their antiphons. Thus Adam again is mixing the concept of mode in general with that of psalm tones.

Initials and Finals of Modes (Chapter 14)

Chapter 14 is very short and consists mainly of two diagrams. The first (Appendix C, nos. 23 and 24) ostensibly lists the possible beginning and ending notes of each mode and also provides a traditional verse repeating the same material:
Song begins in four regular places.  First, fourth and sixth [modes] begin in a,  
The second in F.  Third, fifth and eighth start with c,  
But the seventh with d.  
Song ends in four regular places. 
Second and first [modes] finish in re,  
But third and fourth in mi.  
With fa [finishes the fifth] or sixth,  
The seventh or eighth in sol.  

It should be noted that what Adam refers to as the  
"beginning of song" is in reality the tenor of the psalm tone.  He may use the idea of beginning tones since the  
psalm tone incipit is heard only on the first verse of the psalm, and all succeeding verses would begin directly with the tenor note.  Another possibility is that the tenor is the beginning note of the EUOUAE formula.  Johannes Affligemensis uses the expected word tenor in a similar passage.  

The second diagram (Appendix C, nos. 25 and 26) is the only musical example in the entire section on modes (indeed, the only musical example in Book II aside from the chart of intervals included only in the Bologna manuscript).  

24. The source of the verse has not been found; it does bear some resemblance to material in the Summa musice, attributed by Gerbert to Jehan des Murs.  See GS III, p. 232; Page, Summa musice, pp. 109, 188.  The fact that the first half uses letter note-names and the second solmization syllables suggests the possibility of two separate verses and sources.  
26. The intervals chart is part of Chapter 7; see Appendix C, no. 15.
Although Adam calls this short piece a cantilena, it is really only a series of eight short melodic motives, each one associated with one mode. They seem to indicate closing formulae of the modes. The beginning notes of all but the seventh satisfy the foregoing stipulations about initials (tenors) and in fact correspond to the tenors of the psalm tones. Further comparison shows a close relationship between Adam's motives and the endings of the psalm tones given by others. There is exact equivalence, for example, with the second and third tone endings given by Johannes, and close similarities for fourth, fifth (differing only by the chromatic alteration of the note B), sixth, seventh and eighth tones. A chart of the psalm tones in the Speculum Musicae of Jacques de Liège shows similar relationships to Adam's formulae. The endings of fifth, sixth and eighth tones are the same, and others except the first are close. Finally the modern Liber Usualis indicates the same situation as with Jacques. The Liber Usualis supplies a number of possibilities, especially of the terminations.

27. It would appear that the seventh formula was copied one tone too low by Adam or Gerbert. A similar example in a later treatise, possibly influenced by Adam, changes the formula for the seventh mode, making it consistent as well with the verse. See Johannes Cochlaeus, Tetrachordum Musices, Introduction, Translation and Transcription by Clement A. Miller, Musicological Studies and Documents 23 (n.p.: American Institute of Musicology, 1970), p. 52.

28. Affl., p. 85; Babb, p. 119. The formulae given by Johannes are shown in Figure 4. below.

29. CSM 3, v. 6, p. 233. The chart is reproduced below; see Figure 4.

These may reflect regional or chronological differences in the manuscripts used for the Solesmes edition. The many termination formulae may also represent the differentiae mentioned but not specified by Johannes, Jacques, or Adam. It is curious that Adam's formula for the first tone differs significantly from the other sources. Possibly this is a scribal error of omission, since the four notes given resemble the first notes of the longer formula in the other sources.

Modal Affect and Ambitus (Chapter 15)

The idea of each mode having a unique affect is an ancient and almost universal one, which, in the written western tradition, derived ultimately from Plato's writings. It is touched upon by many medieval theorists, but it is hardly surprising that there is a rather wide variety of opinions about the affective quality of each of the eight modes. Steblin, surveying the affects attributed to the Dorian mode, points out that a fairly consistent

tradition begins with Aegidius de Zamora and endures until the Renaissance theorists returned to ancient Greek writings for reconsideration. If Steblin's survey indicates a definite late medieval stream for all the modes, then Adam seems to be a part of it.

Adam's exposition of modal ethos consists of a short verse which he credits to Guido:

The first [mode] is fit for all,
and the second for the sad:
The third is said to tend to the angry,
the fourth to the alluring.
Give the fifth to the happy
and approve the sixth for piety.
The seventh is youthful,
but the last is wise.

However, the verse has been found neither in any known works of Guido nor in any other available treatise. Each of the modes is characterized here by one descriptive word. These words are found in the first outline by Aegidius as well as in Gobelinus Person, Coussemaker's Monachus Carthusiensis, and Amon's Anonymous, all of whom give more detailed treatments to each mode. Adam provides a

33. II/15/6-17.
34. GS II, pp. 387-88.
35. Hermann Müller, "Der tractatus musicae scientiae des Gobelinus Person" in Kirchenmusikalisches Jahrbuch XX (1907):187. The treatise was completed in 1417.
36. CS II, p. 448.
classical imprimatur to his version with a quotation from Ovid: "When I was happy, I sang happy songs; sad, I sing sad ones." 38 The Ovid text adds no information to Adam’s treatment, and seems included principally to show off the author’s knowledge of ancient literature.

A summary of modal ambitus follows, with a brief nod to Berno for his regularization of this subject. 39 The definition, although citing Odo, is in fact exactly the wording found in Amon’s Anonymous. 40 The ranges described by Adam are the traditional ones of Johannes, 41 also mentioned by Jerome of Moravia, Conrad von Zabern, and the Szalkai manuscript. 42 In this traditional formulation, the authentic modes regularly ascend an octave above their finals, and, by license, a ninth or tenth. They descend one note below the finals (except the fifth mode, because of the semitone). Plagals ascend a fifth above their finals, and a sixth by license; they descend a fourth or fifth.

The final two paragraphs of Chapter 15 contrast the ancient idea of four modes (sometimes called maneriae) with

38. Epistulae ex Ponto, III, 9, 35.
40. "...cursus tonorum est certa lex ascendendi et descendendi cuiuslibet cantus regularis." See Johann Amon, Der Tractatus, p. 47. The Odo citation may refer to the Dialogus, attributed by Gerbert to Odo; see GS I, p. 257.
41. Affl., p. 92; Babb, p. 122.
42. Cserba, p. 157; Gümpel, pp. 223-24; Bartha, pp. 91-2.
the more modern concept of eight modes. Adam uses the Greek word *phthongos* (actually meaning "sound") and quotes Johannes’s parallel of the four ancient modes with the four seasons. Another Greek term employed here is *argous*, an alternative to *protus* or "first." It is probably a corrupt version of *archoos*, which occurs in some earlier treatises. Adam’s short verse (II/15/77-78) about modal ambitus has not been traced, although it is similar to those in Amon’s Anonymous, Anonymous XI, and the Szalkai manuscript. The characterization of modes by directional tendencies—authentics tending upwards and plagals downwards—would seem to refer solely to the ranges, rather than to any sense of melodic movement or cadential patterning. Adam implies that the "moderns" prefer the eight mode arrangement because it accounts for the differing ranges about the finals. Since the eight mode system made its appearance as early as Aurelian’s *Musica Disciplina* in the ninth century, his definition of "modern" seems rather flexible, here extending back some six hundred years.

43. Some of the earliest occurrences are in the *Musica* and *Scholica enchiridias*; see GS I, pp. 152 ff. and 174 ff. Later users include Johannes Ciconia; see *Nova Musica*, ed. and trans. by Oliver B. Ellsworth, part of *Greek and Latin Music Theory*, ed. by Thomas J. Mathiesen and Jon Solomon (Lincoln, Nebraska: University of Nebraska Press, 1994), p. 226.
44. See Amon, p. 46; CS III, p. 430; Bartha, p. 89. The Szalkai manuscript (Bartha) gives: "Vult descendere par, ascendere vult tonus impar." It is credited to Theogerus (GS II, pp. 183-96) but nothing similar to Adam’s verse has been found there.
Modal Alteration (Chapter 16)

The penultimate chapter of Book II devotes more detailed coverage to a particular difficulty that Adam had touched upon before and one that he may have encountered in his experiences in performing and teaching. It is the problem, discussed already in the treatise, of the use of the note b-flat. Adam employs here a rather problematic term, hemitonium. This word would seem to bear the same meaning as "semitone," and was used by earlier theorists in this sense. Adam, however, follows Johannes and the Summa Musice in implying by the word a "half-way point of a mode," that is, the mediant formula. The statement of Johannes is brief and vague, but the Summa, especially in the text and translation of Page, is clear in its delineation of the topic.\textsuperscript{45}

Chromatic alteration, Adam says, is allowed in protus (first and second modes, on D) and tritus (fifth and sixth modes, on F), but not the other two. He finds it inconsistent that some theorists permit a change in the plagal form of tritus (sixth mode) but not in the authentic

\textsuperscript{45} See Affl., p. 93 and Babb, p. 123. For the Summa, see GS III, p. 231; Page, Summa musice, pp. 112, 190. The Berkeley manuscript uses the term mediatio; see Ellsworth, Berkeley Manuscript, pp. 82-83.
(fifth mode). In elaborating this idea, Adam uses a puzzling term, *bisonum*, which seems to be unique to him.\(^\text{46}\) The word literally means "two sounds". A possible interpretation in this context is that it refers to the two notes called b, that is, b fa and # mi, which allow the alteration of a note in order to avoid a tritone. Once more, Adam expresses his surprise that some moderns do not follow the ancients in allowing a b-flat in both authentic and plagal tritus, but rather only permit it in the latter. It is possible that Adam is here referring to the common practice of transposition of modes to avoid notational chromatic alterations.\(^\text{47}\) He discusses this custom in his final chapter of Book II and also mentions it in the rules of composition in Chapter 11.

However, it seems more probable that Adam was here referring specifically to the mediant formulae of the psalm tones. His statements may be compared with the chart from the treatise of Jacques de Liège, shown in Figure 2. below. Jacques indicates a b-flat in the mediants of the first and sixth modes, in conformity with the "moderns" of Adam’s text. It is difficult to see Adam’s point about the authentic tritus (fifth mode) if he is discussing only

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46. Even more puzzling is *quartum bisonum*. Perhaps with this Adam means the fourth note of the hexachord, especially the soft hexachord on F, where the semitone occurs.

47. I am grateful to Dr. Thomas Mathiesen of Indiana University for this suggestion.
mediant formulae, since there is no note b to alter. He may be referring to the termination pattern. There, a b-flat would avoid a tritone with the opening f, although those two notes would be separated by the whole length of the verse and thus an alteration would seem unnecessary. He does say, however, that it otherwise "begins easily, and finishes harshly." \(^{48}\) The termination formulae given by Johannes (see Figure 2. below) seem to confirm this possibility, since they include a b-flat for the fifth mode. More puzzling is Adam's mention of a specific note, E, through which the tone moves to its final, creating a tritone. This note is not found in any examples of the fifth or sixth tones; unfortunately, Adam does not supply his own versions for corroboration.

That variations in the tones occurred frequently is confirmed by the *Summa musice*:

The mediations of the second, seventh and eighth modes are inflected in various ways according to the usage of churches in different regions, which is not surprising since ways of speaking and dressing also vary. In all satisfactory things, anyone who is content to leave such things alone will also be pleased to change them, for "with the passage of time a wise man modifies his ways without wrongdoing". \(^{49}\)

Adam ends the chapter with a brief complaint about musicians who use wrong modes through lack of understanding.

\(^{48}\) II/16/26-28.  
\(^{49}\) Page, p. 112. The quotation is from *Disticha Catonis*, I:7.
In a mild way, this recalls the more strident polemics of earlier parts of the book,\(^50\) as well as the comments of Guido and Johannes noted above. Adam may refer here to careless singers who might use the similar termination for the eighth psalm tone, for instance, when singing the third (which has the same tenor), and likewise with the first and fourth tones, or the seventh and sixth (although those pairs are less close).

\(^{50}\) See, for instance, II/6/48-52 where Adam mentions a church musician chanting the wrong tone.
Figure 2. Psalm Tone Formulae.

Johannes Affligemensis, Musica, Affl., p. 85

**Tonus Peregrinus (Chapter 17)**

The final chapter of Book II discusses another unusual topic, although not in great detail. The *tonus peregrinus* (wandering or pilgrim tone) had been in use for centuries.\(^{51}\) The name may come from the changing pitch of the tenor between the two halves of the tone (a for the first part and g for the second), or from its use in the so-called "Pilgrim’s Psalm" (113), *In exitu Israel*. It was first discussed by Aurelian of Reame as the *tonus neophytus*\(^{52}\) and by the anonymous *Commemoratio Brevis* as *tonus novissimus*.\(^{53}\) The term, *tonus peregrinus*, was fairly new in Adam’s day. According to Erbacher, it was possibly first used by Hugo Sprechtshart von Reutlingen in his *Flores musicae* of 1332, and it also appears in Monachus Carthusiensis and Anonymous XI.\(^{54}\)

Among Adam’s near-contemporaries, Johannes Twinger von Königshofen (Tonarius, c. 1400), Gobelinus Person (Tractatus musicae scientiae, 1417), Conrad von Zabern (Novellus musicae artis tractatus, c. 1460) and Johannes

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53. GS I, p. 218.

54. Erbacher, p. 67.
Cochlaeus (*Tetrachordum musices*, 1511) all employ the term. It is noteworthy that these are all German writers.

Adam states that this mode is not one of the regular, numbered tones, and that he considers the ending (*differentia*) to be of the first mode, not the eighth as some say. Adam then minimizes the importance of these considerations, saying that transposition is frequent in figured music, both because of vocal range and because of the necessity to match voice with instrument. (He uses the word "transposition" in the modern sense here, rather than to mean mutation between hexachords, as in Chapter 10.) In a passage made somewhat difficult by a missing word or phrase (II/17/30), Adam talks about some of the limitations of voice or instrument and gives an example of a resulting transposition. He seems to say, surprisingly, that he ends first mode songs on G since a true voice cannot reach the lower D (that is, D below ut⁵⁵). It is not clear whether he refers to voices or instruments here, or whether he is discussing multiple-voiced compositions or monophonic melodies. This idea recalls the affinities, the alternate possible endings for three of the four modal finals. However, the affinity for the first mode is A, not G; use of G for a final, moreover, would create a different interval structure above it unless the B were chromatically altered.

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⁵⁵. In which case Adam’s gamut would have to be extended even further downward from the expansions discussed above in Chapters III and IV.
A short concluding paragraph sets forth Adam's original intention for Book II to provide a concise introduction to musica plana as a basis for the next book on measured music, and emphasizes the need for a firm grounding in fundamentals before more complex later study. He finishes with a vivid metaphor, stated in a rather convoluted manner, of ploughmen gaining a foothold and not looking back. It is probably based on Luke 9:62, "And Jesus said unto him, No man, having put his hand to the plough, and looking back, is fit for the kingdom of God."56

Book II of the treatise ends, as do the other three books, with a Narratio in praesens, a short poem touching on the foregoing material and leading to the following section. Adam takes the opportunity to make some rhetorical flourishes and also to invoke some figures from classical literature, in this case, the Muses. This type of effusive verse is less typical of the late medieval treatises than it is of contemporary and later humanist-influenced works, especially in Italy.

CONCLUSION

A number of intriguing questions and even contradictions have arisen during the detailed consideration above of Adam von Fulda's *De Musica*, Book II. Was Adam an academic theorist in the late medieval tradition or a practical performer writing an instructional manual? Was he a rule-bound conservative relying on the authority of the ancients or a creative modern composer willing to bend regulations for sensuous effect? Who indeed did he consider "ancient" and "modern"? How much was he really influenced by humanist thought surging north from Italy? What did Adam really think of the musical conditions of his time, whom was he criticizing, and who were his critics?

These questions cannot be completely answered at this time, unfortunately. That the music treatise of Adam von Fulda, however, forms a vivid mixture of theoretical and practical, technical and rhetorical is clear. In spite of his constant references to and citations of ancient authorities, his work is informed on almost every page by his experience as a teacher, composer and performer in a varied musical milieu. To the extent, then, that Adam has allowed his own approaches and ideas to alter the time-bound rules, has admitted modern figures like Dufay as authorities, and has inflected his treatise with his own creative, and sometimes even sensuous attitudes, he can be
thought of as a real humanist, rather than just a conservative late-medieval writer in renaissance clothing. In particular, the rules of composition indicate a significant shift in attitudes of his time, from music as a mathematical science to music as a creative art. One of the most important aspects of his treatise is thus the clues it can give the modern historian about this great transitional period in music. An essential side of that issue is, of course, the window that the treatise gives on the general musical life of the time.

Aside from this general significance, Adam and his treatise can be seen to have more specific importance as well in his influence on later theorists. In the closing years of the nineteenth century, Riemann noted a close resemblance between Adam’s treatise and a work which the famous music theory historian had edited by an author now known as Leipzig Anonymous.\(^1\) The resemblances are many and include both the general plan and content and specific phraseology. Later studies by Clement Miller have shown this work to have been an early version of the *Musica* by Cochlaeus (c. 1504). Miller also discusses the close relationship of the Cochlaeus with the contemporary *Opus Aureum* of Wollick and Schannpecker (c. 1501).\(^2\) Thus, a

2. See "Introduction" to Cochlaeus, *Tetrachordum*, pp. 2-7. Miller also supplies a chart of sources for the
connection seems evident between Adam’s work and these early examples of the flowering of printed music theory in Germany. Further research, beyond the scope of this study, may well establish a more definite link between Adam and the city of Cologne, where both of those later theoretical works were published, as well as with the renowned theorist, Glareanus, who was a student of Cochlaeus.

Another possible stream of Adam’s influence may derive from his teaching of music at the University of Wittenberg, established by Frederick the Wise in 1502. Two later graduates, Georg Rhau (matriculated 1518) and Ornithoparcus (1516) demonstrate some parallels with the older teacher in their writings, although it is not known that they had personal contact with him. Rhau became an important publisher of music texts, and his Enchiridion may have been influenced by Adam.

Federhofer-Königs’s edition of the Practicae Musicae utriusque praecepta brevia by Johannes Oridryus often refers to Adam as the first in a series of possible influences from Tetrachordum; see pp. 90-91. For the Opus Aureum, see Niemöller, Die Musica Gregoriana, and Klaus-Wolfgang Niemöller, Die Musica figurativa des Melchior Schanppecher, Vol. 50, Beiträge zur rheinische Musikgeschichte, (Cologne: Staufen, 1961).

3. Georg Rhau, Enchiridion utriusque musicae practicae (musica plana), facs. ed. (Kassel: Bärenreiter, 1951). Although a detailed study has not been made, similarities are evident again in general content and in specific wordings.
Germany.\(^4\) In addition, Bank points to much borrowing from Adam in the treatise by Simon de Quercu.\(^5\) Finally, some similarity with and possible influence on the later treatise of Seybald Heyden has been noted above.\(^6\)

However, Adam's treatise itself was probably not widely known or read. Jill Palmer has noted that the treatise of Anonymous XII (CS III) was possibly "used for private tutoring, commonly done by university faculty members who accordingly left treatises on musical subjects."\(^7\) Carpenter mentions this as a general custom,\(^8\) and it is apparent that Adam's treatise follows in this tradition, albeit as a later record of completed teaching rather than as a manual for use. Adam indicated clearly in his dedication that the work was requested by Luntaler. At another point he mentions a twelve-year period of "learning", which might refer to his

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5. J. A. Bank, *Tactus Tempo and Notation* in mensural music from the 13th to the 17th century, (Amsterdam: Annie Bank, c. 1972) p. 25. There is no edition or translation of de Quercu's treatise; for a detailed discussion of it, see Heinz Ristory, "Die Mensurallehre des Simon de Quercu (Parts I & II)," *Musiktheorie* 6 (1991), pp. 3-28, 103-127.


acquaintance with the dedicatee, his tutoring of same, or even his general teaching career.\(^9\)

The style of the treatise lends support to the idea that it was written not for practical use, but as a gift to Luntaler, with the principal purpose of summarizing earlier tutoring. Adam several times expresses an explicit desire for brevity, and he omits a number of details that might be pertinent for a performer (but which might not be of interest to an amateur). For example, he gives little useful information about the important topic of \textit{musica ficta}, and his treatment of modes is unusually brief except in two isolated areas, chromatic alteration of psalm tones and the \textit{tonus peregrinus}, topics which may have aroused interest in his reader. Particularly striking are the lacks of musical examples and citations of specific chants, even by name. This contrasts with the approach taken by many practical treatises, and notably with Adam’s models (Guido and Johannes Affligemensis) and some contemporaries (Bartha’s Anonymous and Gobelinus Person, for example). The omissions are surely not to be attributed to Adam’s ignorance of the subject, as he was himself a practicing musician and accomplished composer.

\(^9\) In the final case, using the conjectural dates of birth from Chapter I above, Adam would have been 18-30 years old when he started teaching. An age of 25-30 would seem likely, giving birth years of 1448-53.
In spite of the author's stated aim of brevity, several parts of Book II are given over to extended polemics. This aspect, too, marks the work as being apart from the practica family of music treatises.\(^{10}\) Almost the entirety of Chapter 6 of Book II, the longest, is devoted to this rhetorical sermonizing, as well as substantial portions of Chapters 9 and 12. Adam may have wished to include material from former discussions about music with Luntaler or with other past students fascinated with new musical ideas, forms and techniques. It is also possible that, because he was writing to a specific individual, he may have felt more freedom to express his feelings on these general subjects that were not part of a traditional training manual for musicians. While these passages form some of the most vivid parts of the treatise and give a strong sense of Adam as a unique and deeply committed musician, they certainly remove it from the realm of musica practica.

The treatise seems to have existed as a single manuscript copy, recorded as being first at Altzelle, and then in Strasbourg where Gerbert found it and rescued it from oblivion. If the treatise was originally preserved in but a single exemplar given to Luntaler, that copy would not have been readily available either to Adam's contemporaries or to his students. Given these hypotheses therefore, it

\(^{10}\) See the discussion in Chapter II above regarding the classification of the treatise; see also Gushee, "Questions of Genre" for background on this problem.
can be said that one aspect of the importance of the treatise lies in its role as a record of Adam’s teaching, and thus also as a glimpse into music pedagogy in a northern Europe that was on the verge of a turbulent time, one which would take musical composition and thought far away from the traditions that were Adam’s touchstones. Clearly Adam was influential on later theorists, but his ideas were apparently communicated largely through lecturing and tutoring, rather than through this particular treatise being recopied and frequently studied in the master’s absence. Of course, it is entirely possible that he either wrote other theoretical works or made other copies which have since disappeared, although these have never been mentioned in available contemporaneous or modern sources.

Many unique features of Book II of Adam’s treatise have been noted in the detailed discussions above. He uses a number of unusual terms for the first time (for instance, periphonorum in Chapters 8 and 10, and semidissonantia in Chapter 10), and new ideas which reappear in later works (for example, the requirements for mutation which Heyden uses, found in Chapter 5 of the treatise). In particular, the rules of composition differ from others of either his own time or earlier. This was a topic touched upon little by his northern contemporaries, and his approach is thus even more remarkable in that it represents a broad and practice-based approach, with an innovative emphasis on the
creative art of writing music. New aspects of subjects
treated in the other books of the treatise have been
mentioned by other scholars and do not form a part of this
study. Of particular importance is Adam's discussion of
tactus in Book III, and his references to current musical
practices of composers like Dufay and Busnois, as well as of
music-makers of the more common folk.

Many examples and even specific quotations of classical
authors known to Adam have been cited in the footnotes which
accompany the translation. He is probably the first
northern theorist to quote so extensively from such a
variety of writers.\textsuperscript{11} Thus, Adam's treatise is an important
indication of the penetration of humanist ideas into the
north. He also gives some hints of an acquaintance with
Greek, even to the extent of coining new terms to add to the
older tradition. This knowledge was rather rare in his
time, especially in northern Europe, and undoubtedly added
considerably to his status as a teacher.

The music treatise of Adam von Fulda can be valued as a
rich commentary on an emerging German Renaissance musical
culture and as a unique contribution to musical learning in
areas such as counterpoint. Although more research is
necessary about his contemporaries and successors in order

\textsuperscript{11} It must be remembered, however, that clerics writing in
the earlier tradition of the monophonic Latin lyric
drew on many classical sources as well.
to assess fully Adam's position in the history of music theory, *De Musica* will stand as the vivid reflection of a passionate and learned musical mind, intimately involved with the cultural, social and academic life of his time.
BIBLIOGRAPHY

Primary Sources: Treatise Editions and Translations


Secondary Sources


Bank, J. A. *Tactus, Tempo and Notation in Mensural Music from the 13th to the 17th Century.* Amsterdam: Annie Bank, c.1972.


Herlinger, Jan. "Fractional Divisions of the Whole Tone." 

Hughes, Andrew. *Manuscript Accidentals: Ficta in Focus 1350-1450. Musicological Studies and Documents* No. 27. 

--------. *Medieval Music. The Sixth Liberal Art.* 
Toronto: University of Toronto Press, 1974.


--------. *Les Tonaires: Inventaire, Analyse, Comparaison.* 

Kassler, Jamie Croy. "Music as a Model in Early Science." 


Kristeller, Paul Oskar. *Iter Italicum; a Finding List of Uncatalogued or Incompletely Catalogued Humanistic Manuscripts of the Renaissance in Italian and Other Libraries.* London: Warburg Institute, 1963-.


La Fage, Adrien de. *Essais de Diphtherographie Musicale.* 

Lippman, Edward A. *Musical Thought in Ancient Greece.* 


Migne, J.-P. Patrologiae cursus completus, omnium SS. Patrum, doctorum scriptorumque ecclesiasticorum... Turnhout, Belgium: Brepols, 1956-.


APPENDIX A

Summary of Contents of De Musica

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Conclusion of the Treatise
The Latin text is based on Gerbert's edition in *Scriptores Ecclesiastici de Musica Sacra Potissimum*, Vol III, pages 341-358. Gerbert's footnotes are shown within the Latin text in square brackets identified with the abbreviation "G". Gerbert's page numbers also occur within square brackets. Significant differences in the Bologna manuscript are indicated within square brackets in the Latin text, identified by "Bol".

Since no symbol is available for square B (B-natural), "#" will be used. The entire gamut of Guido is shown as follows: Γ A B C D E F G a b c d e f g aa bb cc dd, with possible alternatives of # and ## for b and bb.

Charts and diagrams from both Gerbert's edition and the Bologna manuscript appear in Appendix C.
Prologus.

Credimus diversa fore hominum studia, quibus aliiis sua scripta insinuandae, ac quisquis, quo melius valet, poemata exornare conatur sua. Ego si poetae antiquitatisve fabulas aut historicas in medium fero, non tamen meis exemplificationibus aut verissimis historiis detraxisse quidquam puto. Mos est paribus paria referre, quo fit, ut cum poetarum libri philosophorumque per omnes fabulas aut historicas huic nostrae concordant arti, non veremur inducere historicas veteres & poetarum fabulas pro maiori artis notitia.

A SHORT PREFACE TO THE SECOND PART BY ADAM OF FULDA, MUSICIAN, BEGINS FAVOURABLY

Prologue.

We believe there to be diverse studies by men, in which they reach others by their writings, and each tries as he is best able to adorn his poetry. If I bear before the public fables or stories of poets or antiquity, I do not think that I have removed anything by my citings of examples or very true stories. The custom is to relate like with like, so that, since books of poets and philosophers agree with this our art through all fables and stories, we do not fear to bring in old tales and fables of poets for the greater celebrity of the art.
Attentos enim auditores facimus, ait Tullius, si ea, quae dicturi sumus, nova & magna ac utilia esse demonstramus; excellentissimum enim genus docendi est exemplorum positio, ut ait Varro; sed veris, non fictis modo introductis uti libet. Boetio fidem dabimus: hunc quasi ducem omnes alii imitati sunt, licet aliquid aliquando apposuerint, Marci Varronis sententiae memores, qui dicit: nil magnificum docebit, qui a se nihil inventit: utere inventis, labora pro inveniendis; non enim tam laudabile est invenisse, quam invenire, hoc enim alienum, id proprii muneros est. Si vis doceri, doce, & cares praecceptoribus exercitatione doceris. Quae nosti, construe lectionibus, quae vero nondum didicisti, disciplinis adquire, ait Isocrates.

We make attentive listeners, then, says Tullius, if we show that what we are about to say is new, great, and useful; the most excellent way of teaching is by the giving of examples, as Varro says; but it is preferable to use true [examples], not made-up ones just brought in. We will give trust to Boethius; all the others imitated him as a leader, although sometimes they have added something, being mindful of the opinion of Marcus Varro, who says: he will teach nothing wonderful who discovers nothing for himself; use what has been discovered, strive for what needs to be discovered; it is not as praiseworthy to have discovered as to discover; the former is a gift of someone else, the latter one's own. If you wish to be instructed, teach, and lacking teachers you will be taught by practice. What you know, build up from readings; what you have not yet learned, acquire from instruction, says Isocrates.

4. Also probably from *Sententiae Varronis*, 43-44. "Ex auditis memoriae referas laudem; ex inventis ingenio. non tam laudabile est meminisse quam invenisse: illud enim alienum, hoc proprii muneros est. neutrum sine altero scientem facit." Germann, p. 33.
5. The references to Isocrates have not yet been traced.
De Musica, Book II

Ego vero licet doctrina dispar, horum tamen haud immemor sententiae & opinionis, non dubitavi supplere, quem senseram defectum, me ipsum per alios informans; dicit enim Ovidius:

_Noster casus ubique valet, semper tibi pendeat hamus:_

_Quo minime credis gurgite piscis erit._

But I, although unequal in learning, yet not unmindful of the judgments and ideas of these men, did not hesitate to make up for this defect which I had observed, informing myself through others; for Ovid says:

Chance prevails everywhere; always let your hook hang: Where you least believe it, there will be a fish in the stream.⁶

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7. *Prologus antiphonarii sui*, GS II, p. 34: "...valde plura sunt, quae nostro sensu cognoscimus, quam ea, quae a magistro didicimus."

8. *Ad Lucillum epistolae morales* 76.1.7. "quid autem stultius est quam, quia diu non didiceris, non discere?"
It is always in my mind to stick close to the rudiments of Boethius and Guido. Even if rivals bear it ill, attributing more to the others, I will not budge; I prefer to imitate the learned negligence of Boethius and Guido, rather than the useless diligence of others.

Chapter I.

There are first of all seven considerations, through which, just as through principles, the way to art is better made clear, that is, manus [lit. hand], cantus [song], vox [voice], clavis [key], mutatio [mutation], modus [mode], tonus [tone].

Guido Aretino, abbot of St. Leufred's Cross, first taught that the inflection of the notes should be learned from the hand; rightly concluding that fifteen notes cannot suffice, he added gamma (Γ) below prostambanomenos, and four "superexcellent" [notes] above nete hyperboleon, dividing the three types of cantus [hexachord] in a sevenfold manner under seven letters, twenty claves [pitches], and six voces [syllables]. But Johannes thinks that the Γ was discovered before Guido.

9. The Bologna manuscript reads thus for lines 13-16:

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superaddens infra prostambanomenon [[ et ultra ]] non posse
Nete yperboleon super excellentes quatuor,
trivarium cantum
septempliciter dividens
litteris sub septem,
clavibus viginti, & vocibus sex. Ioannes tamen vult,
ante Guidonem Gamma Γ esse adinventum.
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The double brackets are of differing shapes and may have been added by other hands; non posse seems to be a scribal error, recopied from the previous line.

10. St. Leufred's Cross was an abbey in Evreux in northern France. Adam here is probably confusing Guido of Arezzo with the Benedictine monk, Guitmundus, who was in Evreux as a young man but who travelled to England and later became Bishop of Aversa in Apulia. The mistake is also made by
Trithemius, who may have received the information from Adam. See Hans Oesch, *Guido von Arezzo* (Bern: Paul Haupt, 1954), pp. 56-57. Oesch discusses other (probably false) traditions of Guido’s birthplace and travels.

11. The Bologna MS appears to preserve a better version; *Pentadecachord* could refer to the fifteen notes (strings) of Boethius’ gamut; see Boeth., p. 205-12, Bower, p. 26-39. Adam returns to this topic in slightly more detail in his Chapter 10.

12. The Bologna *infra* (below) makes more sense here.

13. That is, the notes bb, cc, dd, ee. The gamut of Boethius was the fifteen notes from A (proslambanomenon) up to aa (nete hyperboleon). Guido calls the notes added above *superacutae*. See Guido, pp. 93-95, and Babb, pp. 59-60. The naming and grouping of the notes is discussed by Adam in his Chapters 8 and 9.

14. For these uses of the terms, see below Chapters 2 to 4.

15. Affl., p. 59; Babb, p. 107. Guido, in fact, says that *gamma* was added by the "moderns"; see Guido, p. 93, and Babb, p. 60.
Sed decursu temporis moderniores musicae praecipitus his non contenti clavibus, concluserunt ex necessitate, tribus chordis, scilicet trite, paranete & nete hyperboleon, superaddere diapason superius, similiter lichanos, hypate, & parypatemeson diapason inferius mensuralis musicae gratia per venerabilem Guilhelmum Duffay; cuius compositio nostris magnum dedit initium formalitatis, vulgo manerum dictum. Nam ipse primus regulis contentus non immerito limites est supergressus in transpositione, cum instrumentis perutile sit ac eorum sciolis, quorum causa plus credimus admissum fore. Nos tamen regulis contentamur, nec minus antiquis obtemperabimus quam modernis, licet plus subtilitatis adeptus; nemo tamen inter omnes est, qui non ex veteribus se iactitiet quid accepisse.

But in the course of time more modern music teachers, not content with these claves [pitches], have concluded by necessity that to three strings, that is trite, paranete and nete hyperboleon are added [three] an octave above, and similarly to lichanos, hypate and parypatemeson [three are added] an octave below. [This was] devised by the venerable Guillaume Dufay on account of measured music; his composition, commonly called manerum, gave a great beginning of form to our [composition]. For he himself, not undeservedly strained by rules, first exceeded the limits with transposition, since it is very useful for the instruments and their teachings, for which reason we believe more [notes] to be allowable. Let us then be satisfied with the rules; nor will we comply less with those of antiquity than with those of the moderns, although we are more adept at discrimination; there is no one among all, then, who would not himself claim to have received something from the ancients.

16. In Bol, the words venerabilem Guilhelmum Duffay are also written in the margin.
17. That is, three notes an octave above f, g and aa.
18. That is, three notes an octave below E, F and G (the octave below G being F).
19. This term has not been found in any other source used in this sense.

About the division of the monochord, many speak a great variety of opinions, and one censures the division of the other, as does Ptolemy, who censures the divisions of Aristoxenus and Architas as an indulgence of music. 22 And Boethius, in fact, at length brought to light a not inept division, which all imitate in turn. 23 But Guido, having exceeded the limits, driven by necessity, made additions: 24 wherefore the moderns, relying on Guido’s boldness, have not hesitated to make further necessary additions. "Monochord" is said to be from monos, which is "one" or "lone", since it is an instrument of one string: 25 if you desire to know its arithmetical dimensions, I shall refer you to Johannes the teacher, who sets down easy dimensions. 26 But the teachings of Guido are more for singers than players: therefore let us discuss applying the division of the hand separately.

20. The words ut Ptolomaeus...reprehendit were omitted and added later above the line in Bol.
21. Appears in G in Greek script but in Bol in handwritten Latin.
22. This may refer to Boethius, Book V, Chapter 18: "How Ptolemy criticized the division of tetrachords by both Aristoxenus and Archytus." See Boeth., pp. 369-71; Bower, pp. 178-179.
23. Boeth. Book IV, Chapters 5-12, discusses the division of the monochord; see Boeth., pp. 314-35; Bower, pp. 126-146.
24. See above note 5.
25. This information is taken almost directly from Johannes; see Affl. p. 65, Babb, p. 110.
Manum vero initiantibus
omnibus practicare
consuevimus, cuius haec
descriptio est. Manus est 100
monochordum aut
instrumentum, vocibus,
litteris & clavibus
registratum, cuius
dispositio aut figura talis 105
est, ut sequitur [G: Figura
manus seu palmae ex
superioribus. Tomo III.
pag. 22.].

Chapter II.

Cantus autem, quem Graeci
odam, nos aliquando laudem
vocamus, est melodia ex
sono, tono & modo per vocem
vivam prolata [Bol:
formata]. Dicitur ergo male
canere in organis, in
buccinis, in citharis.
Meum tamen non est quemquam
reprehendere, praeertim
divum Hieronymum, cum
saepissime dicat, tuba
cecinisse Hebraeos. Sed si
vera est definitio, ergo
male dicitur, quia voces
sunt materiales: pulcrius
tamen dicitur, tuba
cecinisse, quam
tubicinasse.

We were accustomed to practice
the hand with all beginners;
this is the description of it.
The hand is a monochord or
instrument marked by voces
[syllables], letters and claves
[pitches], whose arrangement or
shape is such, as follows.27

Chapter II.

Cantus, then, which the Greeks
call "ode" and we sometimes
call "praise",28 is melody
produced from sound, tone and
interval by the living voice.
It is therefore wrongly said
"to sing" on organs, trumpets
or kitharas. However, it is
not my business to blame
anyone, especially the divine
Jerome, since he very often
says that the Hebrews "sang" on
the trumpet.29 But if the
definition is true, then it is
poorly said, since voices are
the subjects; it is more nicely
said, however, to have "sung"
on the trumpet than to have
"trumpeted".

27. Gerbert's footnote refers the reader to a schematic diagram
of the hand included with the treatise of Elias Salomonis in
GS III, pp. 16-64. The Bologna MS contains a crudely drawn
version but with some added information. Both are reproduced
in Appendix C; see nos. 1 and 2.

28. The word laudem here could possibly have a more specific
meaning referring to a worship service or song.

29. This is difficult to trace unless Adam refers to Jerome's
translation of the Bible. In that case, some examples
might be "Saul cecinit buccina" (I Samuel 13:3), "Cecinit
autem Ioab buccina" (II Samuel 18:16), "et canetis buccina"
(I Kings 1:34).

The ancients wished this [cantus, that is, hexachord] to be threefold, that is natural, soft and hard. But after teachers discovered the Hand, and moreover the place letters for each syllable, it was learned that cantus would have to acquire a double aspect, that is generally and specifically. Generally: the first division will remain; there are three hexachords in general, namely natural, b soft and # hard. Specifically: also there will be seven hexachords in the hand, two natural, two b soft, and three # hard. For the syllables are found in the hand seven times: so it is that wherever ut is placed, there another hexachord is begun. There are some, though, who assign to each one two syllables agreeing, as it were, with themselves; for they give to b soft ut and fa, to natural re and sol, to # hard mi and la; the arrangement of this matter the following chart sufficiently sets forth.

(Chart; see Appendix C, nos. 3 and 4.)
Initium vero psallendi in ecclesia coeptum est ad imitationem pastorum, qui inter sacrificiorum exhibitiones Deo laudes persolvere volebant. Alibi autem legitur, a beatissimo martyre Ignatius fuisse introductum, qui voces angelicas Domino decantantes audivit, & morem ecclesiae suae intulit: sic ritus canendi in diversas diffusus est ecclesias. Volunt tamen multi, inter Latinos S. Ambrosium ecclesiae Mediolanensis antistitem occidentali ecclesiae primo dedisse modum psallendi. Nos tamen Gregorium habemus auctorem, a quo cantus simplex Gregorianum nomen sortitus est.

The first singing in the church began in imitation of shepherds, who wished to render praises to God between the deliverings of sacrifices. Elsewhere it is read that it was introduced by the most blessed martyr Ignatius, who heard angelic voices singing to the Lord, and brought the custom into his church: thus the sung rite was spread into diverse churches. Many, though, want among the Latins St. Ambrose, bishop of the church of Milan, to have given the way of singing first to the western church. We, however, take Gregory as creator, from whom plain chant received its name "Gregorian".

30. Probably the first-century Bishop of Antioch.
31. The last two sentences are taken almost directly from Johannes Affligemensis; see Affl., p. 115, Babb, p. 136. The entire paragraph is similar to a passage in the treatise of Aurelian; see GS I, pp. 59-61.
Chapter III.

Vox is sound formed by the tip of the tongue striking the teeth, by the reverberation of the two lips like cymbals, by the hollow of the throat, and with the help of the lungs, which take in and expel air like bellows. There is also, however, a certain type of both sound and voice, and another type of sound not of voice; indeed (G: so to speak) sound through Echo of sounds is of a threefold nature: harmonica which consists of the singing voices: organica which arises from blowing: rhythmica which receives number with the help of strings by tension and by striking.\textsuperscript{33} One [type of] sound, discrete, which makes a consonance, is accepted in music; another, indiscriminate, which gives back a dissonance, is rejected.\textsuperscript{34}

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\textsuperscript{32} Lines 13-26 appear as a chart in Bol; see Appendix C, no. 5. 
\textsuperscript{33} This passage is drawn from Isidore, GS I, p. 21. It is quoted by Jerome; Cserba, p. 11. The reference to Echo is Adam's, however. The story of the nymph Echo is told by Ovid in the \textit{Metamorphoses} III, 339-401. 
\textsuperscript{34} cf. Affl., p. 58, and Babb, p. 107. A similar idea to Johannes's is found in Boethius; see Boeth., p. 199; Bower, p. 20.
Symphonia est modulationis temperamentum, concordantibus sonis, sive in voce, sive in flatu, sive in pulsu. A musicis autem humana vox specificata extat, quae musicaliter in sex voces aut syllabas locata est, quibus per mutationes omnis cantus regitur. Has Iohannes ex hymno: *Ut queant laxis &c. sumtas fore putatur. Sex sunt voces, *ut, re, mi, fa, sol, la.*35

Caput IV.


Chapter IV.

*Clavis* [pitch] is the letter of location [on the staff] modified by the syllables; twenty of these are placed in the hand, namely Γ. *ut,* A. re. etc. Of these, only three are located [i.e. marked by clef], namely C. *sol* fa ut, F. *fa, ut,* and G. *sol* re ut. The others are very rarely or never indicated. They are expressed under seven letters, called locations, with the order doubled above, namely A. B. C. D. E. F. G. There are then five types of *clavis,* that is, *Graves,* *Finales,* *Acutae,* *Excellentes,* *Superexcellentes.* But if a syllable or note has occurred outside of these types, it will have to be decided whether it is an octave above or below. The whole system of this subject is demonstrated in the following chart.

(Chart; see Appendix C, nos. 7 and 8.)

35. The final sentence appears as a chart in *Bol;* see Appendix C, no. 6.
36. This sentence is also taken from Isidore (GS I, p. 21) and quoted by Jerome (Cserba, p. 17).
37. *Affl.* , p. 49; *Babb,* pp. 103-104.
Mutatio est unius vocis in aliam in eadem clave variatio: non tamen vocem sonum puto, quia sonus in eadem clave non variatur. Volo autem vocem cantum esse, quia cantus in clave mutatur, #. duralis in naturalem, vel naturalis in #. duralem, aut b. mollem &c.

Mutatio est duplex: extrinseca est, quando vox in vocem aperte mutatur, ut in fa, sol in re, & e converso. Intrinseca est, quando vox, quae debet mutari, relinquitur, ut sit in cantu mensurali.

Ad mutationem duo requiruntur: non mutare, nisi mutare sit necessarie, hoc est, habieter mutare vocem in vocem: ut claves inspiciantur, & coniuncta, propter synemmenon in transpositione. 38

Nolui autem pueriles illas regulas de mutationibus casus notarum dictas huic opusculo nostro adiungere, cum non sit particulare studium vulgo bacchantria dictum, ubi non continue practicentur: sufficiat ergo specierum cognitio, sive modorum, de quibus postea dicetur.

38. Lines 12-27 are shown in Bol as two charts; see Appendix C, no. 9.

Mutatio autem in clavibus quomodo se habeat, aut quot quisque clavium habeat mutationes, sequens figura demonstrat.

How mutation works in the pitches, or how many mutations each of the pitches has, the following chart shows.

(Chart; see Appendix C, nos. 10 and 11.)

Caput VI.


Chapter VI.

There remains yet b fa # mi, and their octave bb fa ## mi, since there is no mutation on them, for we are unable to mutate fa and mi into one, there being a semitone difference. A semitone, then, is as it were a tone halved; the ancients wished to call the sound of the semitone a "minor tone": but it must be taken in such a way that the tone was not considered halved, since, just as we do not take a semivowel in letters for the middle of a vowel, neither can a tone be made from two semitones: because of this, Plato wished to name that a "limma", and the Greeks synemmenon b rotundum, that is "joined".

40. This is a common rule. See Jacobi Leodensis, Tres Tractatuli de Musica, ed. J. Smits van Waesberghhe, Eddie Vetter & Erik Vissers, Divitiae Musicae Artis DMA.A.IXa (Buren: Frits Knuf, 1988), p. 37, n. 49, which supplies a partial list of occurrences. See also Jerome of Moravia, Cserba, p. 53, and Conrad von Zabern, Gümpel, p. 49.

41. See Boeth., pp. 260-64; Bower, pp. 82-85, for an early discussion on the size of the semitone.

42. Babb disputes the idea that Plato used this term but supplies a number of later references; see Babb, p. 111.
Nevertheless, many without familiarity of this art from practice seem themselves to want to play well; yet they do not know how to reply when asked about number or interval. These same do not know the words of the philosopher Democritus, who says: the voices of the unskilled are the same as the rattlings which are sent back by the stomach; who cares whether some howl upwards and others downwards? I myself saw someone who wished to be considered a creator and composer in this art, who took care neither with the extension of number nor with the positioning of pitch: I asked why was he omitting these matters? He answered that it was not from necessity, since they are most necessary: and a certain other one, who wished to repeat his small office in the sixth tone, sang the first tone: and this was a musician of great repute; for as Horace says: the foolish common people, whom, as I believe, fame misleads, also often give honours to the unworthy.

43. This quotation has not been traced. Boethius uses a different quote from Democritus; see Boeth., p. 186; Bower, p. 7. For information on the contributions of Democritus to musical thought, see Edward A. Lippman, Musical Thought in Ancient Greece (New York: Columbia University Press, 1964), pp. 114-16.

44. Sermones I.6.15:

Iudice quo nosti, populo, qui stultus honores saepe dat indignis et famae servit ineptus, quem, ut credo, fama seduxit.
We recall also Andrechinus, a certain man of Basel, who, running about to and fro, declared himself to be the servant of now this, now that Prince, and among the ignorant he was considered as a very great musician, although he scarcely understood himself: but the philosopher had learned this alone in his school of philosophy, to avoid the learned absolutely, lest his ignorance be revealed in disputation.

So perverse is this type of men and of such swelled head, that they want more to appear to have art than to have it: they consider nothing correct except what they have done themselves, not conforming to the authors, and they wish to believe (G: from experience), not, however, in sovereign reason, although the judgment of both must be sought out: therefore let them divide the tone by reason. The unhappy ones by chance do not know that the difference between a singer and a musician is great; or perhaps they did not read Guido in the second book of Micrologus Musicae, where he speaks thus:

Musicorum & cantorum
magna est distantia:
Illi dicunt, isti scint,
quae componit 
 musica.
Nam qui facit, quod non 
sapit, diffinitur 
[Bol: diffinitur] 
bestia.46

From the musician to the singer how immense the distance is; The latter’s voice, the former’s mind will show what music’s nature is; But he who does, he knows not what, a beast by definition is.47

45. See Ch. I above regarding attempts to identify this person.
46. Bol does not set apart these lines in poetic form.
47. Taken almost directly from Johannes Affligimensis; see Affl., p. 52-53, Babb, p. 105. Also quoted by Jerome; see Cserba, p. 4. Both authors cite the quote mistakenly. It
Nec etiam Boetium
audiverunt dicentem primo
musicæ cap. 3. Is musicus
est, qui ratione perpensa
servitio operis, sed
imperio speculationis
assumit, tanto enim
praecellor scientia
musicae in cognitione
rationis, quam in opere
efficiendi atque actu,
quantum corpus mente
superatur; speculatio enim
rationis operandi actu non
eget, nam manuum opera
nulla sunt, nisi ratione
ducantur. Quo fit, ut
quanta sit gloria
meritionque rationis, hinc
intelligi possit [Bol: potest]; nam artifices
corporales, ut ita dicam,
non ex ipsa disciplina, sed
ex ipsis potius
instrumentis cepere
vocabula: nam citharoedus a
cithara, tibicen a tibiis,
ab organo organista [Bol:
organista] denominationem
habent.

Nor yet have they heard the
saying of Boethius in the first
book of music, chapter 3.\(^\text{48}\) He
is a musician, who, with reason
considered, takes up the
science of playing, not because
of the service of the work, but
because of the command of
speculation; the science of
music is so much more excellent
as the understanding of reason
than as the work and act of
performing; so much is the body
surpassed by the mind;
speculation of reason does not
need the act of performing, for
the works of the hands are
nothing, unless they are led by
reason. By which it happens
that how much glory and worth
there be in reason, can be
understood from this; for
artistic performers, let me put
it this way, took designations
not from the discipline itself,
but rather from the instruments
themselves: for the kitharist
takes a name from the kithara,
the piper from a pipe, and the
organist from an organ.

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\(^\text{48}\). The definition of a musician appears in Book I, Chapter 34. See Boeth., pp. 223–24; Bower, pp. 50–51. The whole paragraph is a paraphrase of this section of Boethius. The passage is also quoted by Jerome; see Cserba, pp. 3–4.

is from the *Regulae musicae rhythmicae*, attributed by Gerbert to Guido; see GS II, p. 25. Anonymous XI, CS III, p. 416 cites Guido’s "libro neumico." Many other treatises quote this verse. The translation is Babb’s.
In musical activity, three types are present; one is concerned with instruments; another fashions songs: the third judges both. The first [type], who performs on instruments, uses the whole attention, and is separated from the understanding of musical science, because he is a servant, nor does he offer anything of reason, but is totally inexpert in speculation.

The second [type], who fashions songs, is of the poets, and he is brought to song by a certain natural instinct, rather than by speculation and reason, and thus is set apart. Forgive, therefore, Boethius, since you also are a poet, and do not think it has been done for nothing; for he does not speak of the art of humanity.

The third [type], who takes skill in judging, can consider rhythms, chant and all song; this, then, since it is all placed in speculation and reason, will be considered music proper. Let them learn therefore that there is a difference between musicians, singers and instrumentalists, and let not the arrogant condemn the art and the authors, but let them believe the ancients, who bring more reason than they themselves understand.

49. This sentence appears as a chart in Bol. See Appendix C, no. 12.

50. The three foregoing paragraphs are derived from Boethius; see Boeth., p. 224; Bower, p. 51. Jerome also quotes the passage; see Cserba, p. 43.
Multi tamen verba mea, quod 175
accipiant partem, & me
multorum vitia narrantem,
quasi meam ignorantiam sic
obumbrare velim,
interpretantur. Sed testis 180
est mihi conscientia, quia
male de me sentiunt;
recordor enim verborum
Hieronymi ad Rusticum, ubi
sic inquit: inventi sunt
scioli tantum ad
detrahendum, qui eo se
doctos ostentare volunt, si
cunctorum dicta lacerent.
Sed & Tullius lib. II. de 190
Tusculanis quaestionibus:
stultitiae proprium est,
aliorum vitia cernere,
suorum oblivisci. Non enim
ego is sum; sed aliae me
movent causae: compatior
arti, quae cum ab antiquis
omni laude dignis
philosophis laboriosissime
sit inventa, nostro aevo a
vilissimis beanis
corrumpitur, laceratur &
confunditur.

Many take my words, I fear, in
bad part, and interpret my
telling of the sins of many, as
if I wished thus to obscure my
ignorance. But my conscience
is my witness that they judge
me wrongly; for I remember the
words of Jerome to Rusticus,
when he speaks thus: there have
been found those who know only
how to be negative, who want to
show themselves learned in it
if they tear to pieces the
words of all.51 But also
Cicero in the second book of
the Tusculan Disputations: it
is a peculiarity of folly to
discern the faults of others
and be forgetful of its own.52
Yet I am not this; but other
causes move me: I pity the art,
which, although it was most
laboriously created by the
ancient philosophers, worthy of
all praise, in our age is
ruined, torn and confused by
the most debased apprentices.

51. The letter is actually to Pammachius (no. 48, section 18);
see J.-P. Migne, Patrologiae cursus complectus, omnium SS.
Patrum, doctorum scriptorumque ecclesiasticorum...
(Turnhout, Belgium: Brepols, 1956- ), vol. 22, col. 508.
52. Actually from Book III, 30, 73-74.
Oh if Boethius lived, he certainly would be lamenting music, moved by piety, rather than conveying it. Not only would you be saying, Oh Guido, that singers are silly, but you would consider all masters [so]; for without masters, they believe all that they wish. Oh rash audacity! Oh detestable presumption! For twelve years already we fear with difficulty to learn, or if we learned lesser precepts, as if we bestow the innermost secrets of art, and, understanding little, we declare that we know all, and we wish to be subject to the corrections of no one, so that indeed what was written in the Musica of Johannes the Teacher may appear true in our work: the ignorant do not wish to know, and the knowing flee, they brazenly clamour when questioned, resist the truth, and defend their error with the greatest effort, as if possessed, neither seeing for themselves, nor obeying the leadership of those who do see, since nothing is learned without a master.

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53. See Guido, p. 86; Babb, p. 58.
54. The remark about twelve years is unexplained. It may provide some clue about Adam’s teaching career or his relationship with the dedicatee.
55. Several references to Johannes Affligemensis as Papa gave rise to a conjectural relationship of the composer with a pope. See Smits van Waesberghe’s introduction to Affl., p. 26.
56. This passage is based on Johannes; see Affl., p. 66; Babb, p. 110.
Even dumb animals and herds of beasts follow a leader, but our men attend to neither leader nor master, knowing all for themselves: I should compare them to none better than to a drunken man, who does, indeed, make for home, but does not know by what path he should return. Yet even a millwheel sometimes gives forth a distinct pitch in its creaking, though itself it does not in the least know what it is doing.57

Oh pitiable art! Oh lamented art! which everywhere all the unlearned claim for themselves; already students assume the duties of judging, but alas, less than students, that is, common laymen, who know neither art nor letters; having acquired too little facility in instruments, they judge all things; they mutilate all and confuse: so that music now seems to be not one of the liberal but one of the mechanical [arts]. Let them examine, therefore, whether art must suffer, and let them also grieve themselves, and let them confess that I have spoken truly: if not, however, the blame must be thrust back on me, but unjustly. But it is agreeable now to proceed, and to comply with the undertaking.

57. Gerbert’s note remarks that the passage is taken from Johannes; he refers the reader to his edition, GS II, p. 233. See also Affl., p. 52; Babb, p. 105.
Caput VII.

Modus est modulata intensio vel remissio vocum aut notarum; vel sic: modus est soni acuti gravisque distantia vel intervallum. Intervallum vero notarum gravitate vel acumine, intensione, vel remissione factum, a musicis modus dicitur, item habitudo vocum inter se; ex quo notarum casus accipiemos.

Sunt autem modorum duodecim, quamvis aliqui novem ponant solum, non annumerando semitonium cum diapente, semiditonum cum diapente, & tonum cum diapente, ideoque raro in Gregoriano occurrunt cantu; sed nos his mensurali vel figurativo saepius utimur. Statui ergo, eos cum caeteris annumerandos fore, & ad indagandam formam harmonicaelem, descriptionem eorum, qualiterve intenduntur aut remittuntur, potenter aut debiliter, postea duabus figuris, ut sequitur, indicare.

Ex quo vero modus est modulata intensio vel remissio vocum, oportet primo scire vocum proprietates, ut sequitur, deinde modorum species.

Chapter VII.

Modus [interval] is the melodic raising or lowering of the syllables or notes; or this: modus is the distance or interval of the high and low sounds. The interval of notes by lowness or highness, the raising or lowering made, is called modus by musicians, [and] likewise the relationship of the syllables between them; from this we get the occurrence of the notes.

There are, moreover, twelve intervals, although certain people posit only nine, not counting the semitone with diapente [minor sixth], the semiditone with diapente [minor seventh], and the tone with diapente [major sixth], since they occur rarely in Gregorian chant; but we use these quite often in measured or figured song. I decided, therefore, that they are to be counted with the others, and that their description is to be shown in investigating the harmonic form (or as they are raised or lowered, strongly or weakly) afterwards with two charts, as follows.

From this, then, modus is the melodic raising or lowering of the notes; it is important first to know the properties of the notes, as follows, and thence the species of intervals.

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59. This second definition is taken from Boethius. See Boeth., p. 195; Bower, p. 16.
60. This reference to charts is puzzling in Gerbert. However, in Bol lines 40-67 and 72-110 are shown as charts rather than continuous text. See Appendix C, nos. 13 and 14.

Some of the notes are unisonae, whose pulses singly send back one and the same sound. There are aequisonae [equal-sounding], whose pulses struck once make one simple sound from two, as the octave and double octave. Consonae [consonances] are those which produce a compound, indeed mixed, but sweet sound, as the perfect fifth and perfect fourth. Emmeles [melodic], which indeed are not consonances, can nevertheless be correctly fitted to the tune, as the tone with other types of interval. Dissonae [dissonances] are those which do not mix together sounds, but strike the sense harshly. Ecmeles [non-melodic] are those, such as the tritone or diminished fifth, which are not allowed in joining consonances in order that the melody can be produced.62 This division, to be sure, is held by Odo in the Enchiridion, and in the Musica of Hermannus of Swabia, written as a dialogue.63


62. This section is drawn almost entirely from Boethius and is based on Ptolemy. See Boeth., p. 361; Bower, pp. 170-1. Also quoted by Jerome; see Cserba, p. 66.

63. These references are very confused. Bishop Odo of Cluny was long thought to have authored an influential Dialogus on music, also known as the Enchiridion (edited by Gerbert, GS I, pp. 251-264; translated in Strunk Source Readings, pp. 103-120); the treatise is no longer credited to Odo. The Musica enchiriadis was edited by Gerbert (GS I, pp. 152-212) and attributed by him to Hubald, but is now thought to be by another anonymous writer. The treatise of Hermannus (GS II, pp. 125-153) is not in dialogue form; see also Leonard Ellinwood, Musica Hermanni Contracti, Eastman School of Music Studies No. 2 (Rochester: University of Rochester, 1952). The "division" or classification of interval types from Boethius is not found in any of the above treatises. For more on the identity of Odo, see Michel Huglo, "L'auteur du "Dialogue sur la musique" attribué à Odon," Revue de musicologie 55 (1969):
Duodecim sunt modi sive species saltuum. *Unisonus* est eiusdem clavis in eadem voce repetitio. *Semitonium* est saltus de *mi* in *fa* & e converso. *Tonus* est saltus a clavi in proximam, continet duo semitonia disparia. *Semitonium* est saltus de linea in lineam, aut de spatio in spatium, incluso semitonio. *Ditonus* est saltus ad tertiam, excluso semitonio. *Diatessaron* est saltus ad quartam generaliter ex duobus tonis & semitonio, nisi sit [Bol: *fit*] tritonus. *Diapente* est saltus ad quintam, includit tres tonos cum semitonio, nisi sit semidiapente. *Semitonium cum diapente* est saltus ad sextam vocem [Bol: *vocum*] tonorum & duorum semitoniorum. *Tonus cum diapente* est saltus ad sextam realis cum tonis quatuor & semitonio. *Semitidonus cum diapente* est saltus ad septimam tonorum quatuor & duorum semitoniorum. *Ditonus cum diapente* est saltus ad septimam tonorum quinque & unius semitonii. *Diapason* est saltus ad octavam, inter consonantias maior. There are twelve intervals or types of leaps. *Unisonus* is the repetition of the same pitch on the same syllable. *Semitonium* is the leap from *mi* to *fa* and the converse. *Tonus* is the leap from a pitch to the nearest one, and contains two unequal semitones. *Semiditonus* is the leap from a line to a line, or from a space to a space, including a semitone. *Ditonus* is the leap to a third, excluding a semitone. *Diatessaron* is the leap to a fourth, generally from two tones and a semitone, unless it be a tritone. *Diapente* is the leap to a fifth, and includes three tones with a semitone, unless it be a *semidiapente* [diminished fifth]. *Semitonium cum diapente* is the leap to a sixth note, of [three] tones and two semitones. *Tonus cum diapente* is the leap to a sixth with four real tones and a semitone. *Semitidonus cum diapente* is the leap to a seventh with four tones and two semitones. *Ditonus cum diapente* is the leap to a seventh with five tones and a single semitone. *Diapason* is the leap to an eighth, among the larger consonances. You will discover the proportionate form of these intervals laid out clearly in the last part [of the treatise] concerning proportions.
Caput VIII.

Proportionabilitas vero omnium periphonorum, id est, consonantiarum per [350] hos exquiritur modos, simul & diaphonia ex peribolo, aut deambulatione cantus chordarum musicalium. Boetius enim praecipuus huius artis inter Latinos auctor quindecim chordas posuit musicales, a proslambanomenon usque netehyperboleon quadruplam aut bis diapason comprehendens, quam maximam symphoniam appellabat. Hunc & Iohannes de Muris, qui hinc inde in gymnasiis practicatur, consecutus [Bol: consecutus est]. Venit post hoc Guido Italicae nationis homo non incellebratus musicus, merito concludens, monochordi species per amplius dilatari posse, quindecim chordis non contentus subiecit Proslambanomenos Γ [Bol: Gama] ac netehyperboleon superaddidit excellentes, quatuor viginti ponens chordas, ac modo leviori manu discendae instituit: quod demum per Odonem Cluniacensem monachum prosecutum esse creditur.

Chapter VIII.

The just proportion, then, of all surrounding sounds, that is, of consonances, is sought through these intervals, and likewise also two-part harmony, from "walkways", or from the moving about of the song [hexachord] of musical notes. For Boethius, pre-eminent creator of this art among the Latins, posited fifteen musical strings, from proslambanomenon to netehyperboleon, encompassing two octaves, which he called quadruple, the largest consonance. This also Jehan des Murs followed, which from that time was practiced in the schools. After this comes Guido of the Italian nation, a man not uncelebrated as a musician, rightly concluding that the types [sounds] of the monochord can be expanded more; not content with fifteen strings, he added Γ under Proslambanomenon and added the excellentes above netehyperboleon, the four [added] making twenty strings, and he taught that they should be learned by the method of raising the hand: which afterwards is believed to have been continued by Odo, a monk of Cluny.

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67. Actually nineteen; the gamut of Boethius had fifteen notes (strings).
68. See n. 63 above.
With the passing of time, musicians began to be more subtle with increased talents, and, not content with the hand and Guido’s teachings, but transposing song so often, they discovered that more notes were to be added below Γ, and similarly above ee la more notes were to be associated [by octave doubling]. Of this matter I believe the venerable Guillaume Dufay to have stood forth as inventor, whom also all more modern musicians imitate: many, however, obeying their will rather than authority. Most of them follow the practice without knowledge of the art, since for most the practice of musical art is innate. From this, then, wisdom without eloquence is of too little benefit, and eloquence without wisdom is of no benefit, but often it goes against it; thus art without practice is worth little, and practice without art nothing.\(^69\) I wished to prove by reason that the additions [notes] should be placed; for the authorities went before. For music, therefore, one of the quadrivium, delights in measure, number, and proportion, and all proportions, whether geometric or arithmetic, extend infinitely; why would not the harmonic proportions of voices or sounds extend infinitely, since they could be produced by a human or instrumental voice? for experience, who is the mistress of things, teaches this.

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69. See Ellsworth, *Berkeley Manuscript*, pp. 35-37, n. 3 for a discussion of the terms usus and ars.
Caput IX.

70Cum itaque inter componistas in usum maximum devene
tit, canonicas conficere cantilenas, in quibus nonnulli
totam artem quasi in nodo restrictam esse putant [Bol: putantur], & fatui fatuis credunt, quorum plurimi,
cum alios obscurare volunt, se ipsos ita obumbrant, ut vix meridie lusci videant ipsi: nam alienis utuntur vocalibus ac terminis non musicalibus, & in re non magni fructus longum conterunt tempus, aut parvissimam phantasiam multis exponunt metris, canonis loco; quibus ego dicerem: si non vis dici, non dicaris.


Chapter IX.

Therefore it became among composers the most widespread practice to compose chant based on the divisions of the monochord, in which many consider the whole art to have been restricted as if in a knot; foolish men believe fools, most of whom, when they want to "blacken" others, obscure themselves, so that they themselves, half-blind, scarcely see at noon: for they use the non-musical notes and terminations of others, in a matter of little profit, they waste much time, or display the tiniest fantasy in great measures, in place of the standard; to whom I would say: if you do not wish to be spoken of, you will not be not spoken of.

But alas, many, who delight more in seeming [to be] than in being knowledgable in neumes, unless they have acquired this in the youthful years, fear to learn in old age. And would that there were those to whom I wish to communicate sound advice, if they accepted [it], who might imitate Cato, who in old age wished to be instructed in Greek literature,71 and Solon, who learned while dying,72 and Socrates, who, as an old man, devoted himself to music;73 and when he was asked by someone, "Were you not embarrassed to study in old age?" replied: "there is greater embarrassment in being ignorant when old, than in studying in old age":

70. Bol has Modi hena (?) sub hijs speci in margin.
71. This may be a myth growing from a mistranslation of a story that Cato learned the Greek language late in life; see Cambridge History of Classical Literature, V. II, Latin
& non elati Homerum [351] sectentur, qui cum problema a piscatoribus sibi propositum solvere non posset, seipsum, ut fertur, in mare praecipitem dedit. Discant ergo plus quaerere artem, quam sibi ipsis credere, ac musicis vocalibus & chordis plus uti, quam alienis.

and let them not in their pride follow after Homer, who, when he could not solve the problem set before him by fishermen, as it is said, threw himself headlong into the sea. 74 Let them learn, therefore, more to seek art than to believe themselves, and to use more the notes and strings of musicians than of others.

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72. Refers to a famous saying of Solon which may be found in Poetae Lyrici Graeci, ed. Theodorus Bergk (Leipzig: B. G. Teubner, 1882), p. 47 (no. 18): [Gerasko d’ aiei polla didaskomenos]. It is also reported by Plutarch; see Lives, Solon, 31, e.

73. The reference may in fact be to dancing, not music; see Plato, Symposium, II, 19; Athenaeus of Naucratis, Deipnosophistae, I, 20, f. It may also allude to Plato’s Phaedo, which reports that Socrates wrote verse in his last days; see Phaedo, 4.


Boethius, then, posited fifteen strings, to which he gave Greek names, perhaps taken from Pythagoras, as it was said, and this is shown in the following chart. Nicomachus reports at first there was a simple musical constant of four strings; and this, the aforementioned Boethius also says in chapter two of Music, Book I, lasted until Orpheus. The tetrachord had been discovered by Mercury from the shell of a rotten fish. Corebus, son of Atys, added the fifth, Hyagnis of Phrygia the sixth, Terpander of Lesbos the seventh, Licaon of Samos the eighth, Prophrastus of Pieria the ninth, Histiaeus of Colophon the tenth, Timotheus of Miletus the eleventh.

75. A note by Gerbert refers the reader to his edition of the treatise of Egidius Zamorensis, who adds four more strings credited to four other Greek figures; see GS II, p. 382.

76. An elaborate chart is provided at the end of the chapter; see Appendix C, nos. 16 and 17.

77. Actually a tortoise in the original myth from the Homeric Hymn to Mercury; see New Grove’s Dictionary of Music and Musicians s.v. "Lyre". Adam returns to this story in the Prologue to Book III, where the shell is said to be from a tortoise; see GS III, p. 359.

78. cf. Boeth., pp. 205-09; Bower, pp. 29-35. The passage is a drastic condensation of the version of Boethius. Bower provides detailed notes on all the figures mentioned; he equates Licaon with Pythagoras. The Berkeley Manuscript also gives a detailed account of this legendary process and provides interesting illustrations of contemporaneous stringed instruments; see Ellsworth, pp. 191-213.
Guido autem superaddidit unam gravem & superexcellentes quatuor: deinde moderniores metas supergressi sub & supra quid addiderint, praetactum est. Cum enim Guido cum sequacibus adiunctas sive superadditas voces innominatas reliquerint, volui prius supplere Guidonem, & chordam in gravibus adiunctam, videlicet Γ. ut hyponomenon vocare, id est, gravem sonum, quia in manu gravissimus est: & quatuor supercellentibus [Bol: superexcellentibus], scilicet b. c. d. e. geminatis, primo b. epitrite diahyperboleon, id est, superexcellens, trite hyperboleon duabus vocibus, sequentesque epiparanate diahyperboleon, ac epinete diahyperboleon, iuxta praecedentem manere formam. Ultimam vero, videlicet ee la orexion, id est, novissimum in manu sonum appellare: superadditiones autem modernorum cum nominibus careant, ad unum in hypothesi, id est, suppositione hyperaxiapathones, id est, gravissimum vel ultimum sonum vocare; similiter hyperboleothesi, id est, superexcellenti superpositiones omnes insimul origneoboleones, id est, supra ultimam sonantes vocitare volui, ut figura sequens indicat. vid. FIGURA.

Guido then added one gravem and four superexcellentes above; thence what the moderns added beyond the limits above and below was mentioned before. Since Guido left unnamed the notes joined to the ones following or added, I wished first to complete Guido, and to call the string added below, namely Γ ut, hyponomenon, that is, the "low sound", since it is the lowest in the hand; and the four superexcellentes, namely the twins [octaves] of b. c. d. e.: first, the b [I wished] to stay epitrite diahyperboleon, that is, superexcellens, trite hyperboleon of two notes [i.e. an octave], and the following ones epiparanate diahyperboleon and epinete diahyperboleon after the preceding form. The last then, namely ee la, I wished to call orexion, that is, the "newest" sound in the hand; then since the further additions of the moderns lack names, I wished to call the one in hypothesi, that is, the low range, hyperaxiapathones, that is, the "lowest" or "last" sound; similarly in the hyperboleothesi range, that is, all higher positions of the superexcellentes, I wished to call alike origneoboleones, that is, "sounding above the last", as the following chart shows. See chart.

(Chart; see Appendix C, nos. 16 and 17.)

79. See above, Chapter 1 (discussed in Chapter III of the commentary) and Chapter 8.
De Musica, Book II

Caput X.

Ex quo vero de modis chordis (f. chordarum) seu [periphonia] & [diaphonia] dictum est, scire modo convenit ex modis consonantias simul & dissonantias; nam tota musica symphoniae causa discitur & harmoniae.

Igitur consonantiarum aliquae sunt perfectae, scilicet unisonus eadem vox, diapente quinta, diapason octava, cum earum aequisonis, octava, duodecima, & bisdiapason. Aliae imperfectae, ut dietonus aut semiditonus, qui est tertia, item tonus aut semitonium cum diapente, sexta, cum earum aequisonis decima & tredecima.81 Reliquae autem etsi in infinitum metiri haberent, harum tamen reiteratio sunt.

Chapter X.

Since it has been spoken of regarding the intervals of the notes or periphonia and diaphonia, it is now fitting to know the consonances and dissonances alike of the intervals; for all music is learned for the sake of consonance and melody.

Therefore some of the consonances are perfect, namely the unison on the same note, the diapente fifth, the diapason octave, with the aequisones [equal-sounding] of these, the octave, twelfth, and double octave. Others are imperfect, as the dietonus or semiditonus, which is a third, as well as the tone or semitone with diapente, the sixth, with their aequisones, the tenth and thirteenth. But although the remaining ones were held to be measured to infinity, they are the reiteration [i.e. octave doubling] of these.

80. In Greek script in both sources. Bol also has both words in Greek script in margin.

81. Lines 10-23 appear as a chart in Bol; see Appendix C, no. 18.
Caeterum quidam diatessaron perfectam fore dicunt consonantiam, quidam imperfectam; nos vero eam semidissonantiam esse dicimus, id est, cum nulla per se solam concordantem [Bol: concordans]. Quam etiam (Iohannes) de Muris consonantiam fore negat, nisi eam perfecta praecesserit consonantia; cum perfectis vero aut imperfectis moderatur concordantiiis, & ipsa [Bol: ipsam] consonantiam facit non ex se, sed respectu aliarum; quod musici gentium vocabulo faulx bordon vocare coeperunt, quia tetrum [Bol: thetrum] reddit sonum. Omnes autem voces, praeter iam dictas, ad unum dissonantiae sunt, hoc est, cum omnibus aliis discrepantes.

But some say that the diatessaron is a perfect consonance, others an imperfect; but we say that it is a semidissonance, that is, concordant with nothing by itself alone.\textsuperscript{82} Jehan des Murs also denies that it is a consonance unless a perfect consonance precedes it;\textsuperscript{83} then it is governed by perfect or imperfect concords, and does not make a consonance by itself, but in relation to others; this musicians began to call by the popular term "faulx bordon", since it gives back a bad sound. All notes, then, except those already mentioned, are dissonant to every single [other] one, that is, out of tune with all others.

\textsuperscript{82} Adam discusses this matter in a similar but more detailed fashion in Chapter 6 of Book IV. See GS III, p. 373.

\textsuperscript{83} A short treatise or section, \textit{De discantu et consonantiiis}, is attributed by Gerbert to Jehan des Murs (GS III, pp. 306-07). It discusses consonances in discant but accepts only the perfect fifth and octave as perfect and makes no mention of the fourth. Other treatises of this author name the fourth as a perfect interval but in a melodic usage or speculative sense. As there is much confusion about which treatises Jehan actually wrote, Adam may be referring to someone else’s.
Ex consonantiiis vero praescriptis omnis symphonia componitur per arsim & thesim, id est, per elevationem & depositionem, non solum simplicem neumam, quam Berno distrophem aut tristrophen vocat; sed & duplicem triplicemque rationem concordantem puto cantum. Cum igitur vitiosa consuetudo ab opere [Bol: opero] consueto, Bernone teste, & cantorum ore nullo modo aut vix evelli possit, a praeceptoribus quaedam compositionis regulae adinventae sunt, ne quilibet suo duceretur arbitrio.


Symphonia then is composed from all the previously described consonances through arsis and thesis, that is, through rise and fall, not only by simple neumes, [but also by what] Berno calls distrophe or tristrophe;84 but I also consider concordant song in duple and triple ratio. Since therefore the faulty practice from habitual performance, as Berno witnesses,85 can in no way, or scarcely, be uprooted from the mouth of the singers, certain rules of composition were devised by teachers, lest anyone be guided by his own judgment.

For these reasons it seemed good to insert some [rules] at this point, since, alas, we discern from all sides music corrupted by those composing it: which happens, then, since the worst practice of instrumentalists became ingrained; when they know scarcely two rules, oh woe! they wish to compose songs; and would that it were only songs, but they also take up some grand things in performance. Some others, scarcely knowing the shapes of the notes, or somewhat adept in the art, amend all song, tear, damage and adulterate the correct composition.

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84. These terms are used only by Johannes (Affl., p. 158; Babb, p. 159) and Adam; Johannes also cites Berno.

85. Adam may have copied this citation from Johannes (Affl., p. 75; Babb, p. 159). A similar quotation is not found in Berno.
I do not mention many who, although they be well imbued by teachers, so often err, since they have not entrusted a single [thing] to memory, either by fault of teachers, or of themselves; and there are many more who learned more facility than art, who consider what they do the law; and one throws abuse at the other, and the fool refutes the fool, and if there were a thousand, scarcely ten would agree. The first says, as does Guido, Master Bruno taught me thus. Another says I was taught thus by my Master Albinus. But a third [says] my Master Odo reliably informed me otherwise;86 such being the case, while each prefers his own master, there are as many men with different theories of composing as there are masters in the world, and the saying of Ovid occurs to us:

Pectoribus mores quot
sunt in orbe figurae,
Dum sibi quisque placet,
credula turba sumus.

There are as many customs as faces in the world. While each pleases himself, we are a credulous lot.87

But he who prefers rather to adhere to irregular practice than to obey the truth, let him learn that mimes and jesters are going to be the composers of the future.88

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86. cf. Affl., p. 134; Babb, p. 147.
87. Actually two separate quotations: Ars Amatoria 1.759 and Remedia Amoris 686.
88. cf. Affl., p. 51; Babb, p. 104.
Caput XI.

Antiquorum autem regulas utiliores hic informare libuit, decem praeertim utiliores mihi visas, communi componistae rationibus multis, ne levi ducantur insania, ac quisque sine praecptis suo trahatur arbitrio.

Prima: in omni cantu ad minus una vox dicitur aptari vero tono; hoc est autem aptare tono, scilicet octo [Bol: actos] tonatos, id est, clausulas pulcre localiterque ponere, sicut enim accentus prosae per punctum ornatur, sic tonus per octo [Bol: Actos].

Secunda: omnis componens discat cantum distincte pausis ornare, quia varietatem faciunt; non minus enim laudabile est pausare, quam cantare, nee accentus prosae sine pausa sit.


Chapter XI.

I wanted then to convey here the more useful rules of the ancients (ten seeming especially useful to me) to the ordinary composer, for many reasons, lest they are led by trivial madness, and [lest] each goes his way as he pleases without any teachings.

First: in all song, at least one voice is said to be fitted to the true mode; that is, however, to fit to the mode, namely the eight [church] modes; that is, to place closes beautifully and properly; as the accent of prose is adorned by the point, thus also is mode through the eight.

Second: let everyone composing learn to adorn song clearly with pauses, since they give variety; it is not less praiseworthy to pause than to sing, nor is the accent of prose without pause.

Third: Every dissonance, if it can be, is to be avoided, and likewise the tritone and diminished fifth, since the difference of a semitone [from the fifth] is prohibited, except in the event that a perfect [consonance] follows it directly; I do not say demidiapente, as Virgil says "half-male Phrygians,"89 since a semitone is not half of a tone.

89. Aeneid 12.99; also quoted by Johannes; see Affl., p. 69; Babb, p. 111.
Fourth: the true placing of the pitch in transposition of a tone will be carefully observed by the composer, since the meeting of the adjuncts is there, which the Greeks like to call synemmenon, but we call musica ficta.90

Fifth: let all those composing commit entirely to memory the twelve parts [intervals] of the art, since without these no song is composed.

Sixth: let all composers have particular regard for the three first steps of music, namely mode, tempus and prolation; for the sake of number, so that what is proper in each case is applied to each, that is, the true signature for recognition and tactus.

Seventh: no perfect consonance has a similar perfect [consonance] following, rising and falling, but any perfect [consonance] may appropriately have a perfect one dissimilar to it following, as a fifth after a unison, or an octave after a fifth.

Eighth: although the ancients formerly prohibited more than three or four imperfect [consonances] following each other, we moderns do not prohibit this, especially tenths, which provide adornment when a voice is in the middle.

90. This rule recalls the second requirement for mutation in Chapter 5; see II/5/24-27.
Nona: diatessaron numquam sola ponenda est, nisi aut perfectam aut imperfectam moderetur: sed & nec simul ascendere, nec simul descendere licentiam habet, nisi sit, ut praetactum est, faulx bordo, quod quidam fictum in hypothesi putant, & in hyperboleothesi fieri posse; sed hoc ratio non suadet, quia contra praecedentem esset regulam.

Decima: discat omnis componens contra tenorem in hypothesi, scilicet in gravibus potius perfectas ponere consonantias, quam imperfectas, demta tertia cum eius aequisonis, qui sonus consonantiae pari canore temperatur; de hoc Horatius dicere videtur, ubi ait:

Non satis est pulcra esse poemata, dulcia sunt.

Si autem omnibus addiunxissem figuras, aut clarius elucidare attentassem, [Bol: attemptassem], taedium potius legentibus quam voluptatem inferret; ideoque omnia omittere volui, ut lectoris animus aviditate legendi non confundatur.
Caput XII.


Chapter XII.

Thus these ten precepts for all composers of songs appeared necessary by the will of the ancients: but for the moderns who, as Priscianus says,93 are as much more observant as they are younger, there are many more rules, so that I would have said, with all respect, that there is no true composer unless he has learned all the teachings of this little book. It still does not suffice for a composer to be a singer, but also [he must be] a perfect musician, who, since he would wish to compose for others what they sing, should also himself know what he does, lest he labour to no purpose; for Seneca says:94 it is shameful to say one thing and think another; but it is shameful to do one thing and know another, since the former can harm in the present, but the latter in the future. The composer must be immune to all criticism, for he stands above the others; he must never write anything of which he may repent later.

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Finally, if he wishes to use proportions in composing, let him use musical ones, since the rest, with few exceptions, lack harmony. Let him thus be zealous to establish these carefully, lest he put one in place of the other, since one is an error, and the other is a disgrace. Thence, let him by no means cease exploring the types of figures, for these are many, since they hold embellishment and subtlety.

If, indeed, he works at composing chant based on the rules, let him seek understanding rather than obscurity, or let him not cease to sing products with the genius of great subtlety; for there is no difference whether it be metric or unmeasured song, since that is the rule; for many, while they love obscurity, are laughed at by the learned because obscurity is rarely without error. But to tell the truth, I too have made use of this, showing my ignorance rather than forming anything artful. Yet he proves he is a miserable talent who uses inventions and not what is to be discovered.95 Therefore let each do as well as he can, for if you have done well, you will give authority to your character, as Socrates said. I wished to say this, with all respect, without exaggeration or concealment, for I am not able to please all. Nor have I attempted this without the judgment of the most serious men, relying on whose authority I would dare to proceed with this all the more boldly, and to please those who are accepting.

95. A similar adage is credited to Boethius by Jacques de Liège; see Speculum Musicae, CSM 7, v. 2, p. 13. No trace of it has been found in Boethius, however. It
Caput XIII.

Tonus est discretio vel cognitio principii & finis ascensus ac descensus cuiuslibet melodiae regularis; vel sic: tonus est regula docens finem perfectum regularium symphoniarum. Tonum autem non modalem, id est, in modis captam consonantiam symphoniae puto, sed melodiarem aut formalem puto tonum. Aliqui autem tonos tropos a convenienti conversione dicunt; aliqui modos a moderando, Graeci autem phthongos, nos tonos vocamus, licet Guidoni incongruum videatur, hoc autem Iohannes pulcre excusat.

Chapter XIII.

Tonus is the discernment or recognition of the beginning and ending, ascent and descent, of any regular melody; or thus: tonus is the rule teaching the perfect end of regular harmonies. I consider [here] melodic and formal, not intervallic mode, that is, the consonance of the melody kept in the interval. Some people, however, say "trope" for mode from a suitable "turning back"; others say mode from moderando [regulating], but the Greeks say phthongos, and we call them tones, although it seems inconsistent with Guido; but Johannes explains this well enough. 97

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96. This definition is almost exactly that in Liber Musicalium (attributed by Coussemaker to Philippi de Vitriaco, 14th century), CS III, p. 35.

97. See Guido, p. 133, Babb, p. 66. This passage is taken directly from Johannes; see Affl. p. 77, Babb, p. 115. It is also quoted by Jerome (Cserba, p. 153) and Conrad von Lorenz (Gümpel, p. 218).
Olim tamen antiqui musici, cum tonum musicalem tantummodo consonantiam appellarent, grammatici orationis accentus usurpato vocabulo etiam tonos appellare coeperunt. Et quia inter accentus prosaicae locutionis & psallendi modos non parvam similitudinem esse constat, generale nomen hoc esse utrisque sanxerimus; sicut enim toni accentus tripartitus est, scilicet gravis, acutus & circumflexus, sic & prosae, sed pausas prosales colon, comma, periodum, id est, membrum, incisio, clausura, nam omnium rerum finis est periodus, hoc musici diastema, systema, teleusimque voluerunt vocare. De his scire volens Ioannem inspiciat.

Formerly, then, since ancient musicians only called a musical consonance a tone, grammarians, taking over the term, began to call accents of speech tones. And since it is agreed that there is no small similarity between the accents of spoken prose and the modes of singing, we confirmed this as the name in general in both cases; as the accent of tone is tripartite, then, namely grave, acute, and circumflex, thus also with prose; but the prose pauses (colon, comma, period), that is, membrum, incisio, clausura (for the period is the end of all things), musicians wished to call diastema, systema and teleusis. Let anyone who wishes to know about this examine John.

(Chart; see Appendix C, nos. 19 and 20.)

But although there are eight modes, they cannot be demonstrated by the words of Regino, unless there are seven separate sounds distinct among themselves; Virgil, recognizing this, says:

I have a pipe made of seven unequal hemlock stalks.

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98. This entire paragraph is a paraphrase of Johannes. See Affl. pp. 78-80; Babb, p. 116. See Babb's n. 9, p. 116 regarding use of some of the terms in Isidore and Berno.


100. Eclogues II, 36.
Obloquitur numeros septem discrimina vocum.

Tonorum autem ideo octo ponimus: nam sicut octo partibus continetur omne, quod dicitur, sic omne, quod cantitur, octo moderatur tonis.

His utimur, differentiisque eorum, quae peritorum cantorum placito sunt adinventae, necessariae quidem in ecclesiastico officio multis rationibus, propter psalmorum variationem, propter antiphonarum inchoationem; ita ut interdum differentia plus congrua videatur vero tono, quem Gregorianistae Evovae vocant, id est, seculorum amen, propter psalmorum finem; nam finis dat tonum, sicut generale est proverbium: in fine videbitur, cuius toni.

Caput XIV.

Qui vero tonos memoriae commendare velit, oportet, ut tonorum litteras sciat initiales, finalesque sedium litteras. Sunt autem quatuor initiales, quatuorque finales.

He accompanies their measures with seven different notes.101 We therefore posit eight tones: for as all is contained by eight parts [of speech], as it is said, thus all that is sung is regulated by eight tones.102

(Chart; see Appendix C, nos. 21 and 22)

101. Aeneid 6.646. A frequently found quote in medieval treatises. See Affl. p. 72; Babb, p. 113, for example. Adam (or Gerbert) misquotes slightly; Virgil has numeris, not numeros.

102. Taken from Johannes (Affl., p. 76; Babb, p. 115) and based on Guido (Guido, p. 150; Babb, p. 68). Also found in Jerome (Cserba, p. 152) and Conrad (Gümpel, p. 219).

Si quis singulorum cupit tonorum scire melodiam, hanc attendat normam.

Et sic fine brevi studioque levi poterit hic scire tonos diffinire.

Caput XV.

Quilibet autem tonorum uni hominis accidentium aptari potest aut complexioni, quod pulcre Guido his notavit versibus:

Omnibus est primus, sed & alter, tristibus aptus:
Tertius iratus, quartus dicitur fieri blandus.
Quintum da laetis, sextum pietate probatis.
Septimus est iuvenum, sed postremus sapientum.

[357] De hoc Naso innuit:

Laeta quidem laetis cecini, cano tristia tristis.

The following song then shows you the form of the tones and the true melody of ruler [authentic] and subject [plagal].

If someone desires to know the melody of single tones, let him pay attention to this rule.

(Chart; see Appendix C, nos. 25 and 26)

And thus with a quick end and easy study this person will be able to know how to define these tones.

Chapter XV.

Any of the tones occurring, then, can be fitted to one single man or temperament, which Guido recorded beautifully in these verses:

The first [mode] is fit for all, and the second for the sad:
The third is said to tend to the angry, the fourth to the alluring.
Give the fifth to the happy, and approve the sixth for piety.
The seventh is youthful, but the last is wise.

Ovid made note of this:

When I was happy, I sang happy songs; sad, I sing sad ones.

103. These alternative terms probably first occur in the anonymous *Commemoratio Brevis*; see Apel, p. 133, n. 1.
104. This verse has not been found in any works of Guido, nor in any other treatises on the TML.
105. *Epistulae ex Ponto*, III, 9, 35; also slightly misquoted. Ovid has *laetus* for *laetis*. 
Tenemur autem ambitu regulari, ut Bernoni placet. Ambitus autem tonorum, ut refert Oddo in Enchiriade est certa lex ascendendi & descendendi cuiuslibet cantus regularis. Igitur omnis authentus a sua finali sede ascendere habet diapason, licentialiter aut nonam aut decimam: descendunt autem a finali in proximam. Plagales autem ascendunt usque diapente, licentialiter ad sextam aut septimam: descendunt vero ad diatessaron, ut omnium musicorum voluntas est, praesensque modernorum opinionum locutio convenit.

Olim vero quatuor phthongos veteres invenrunt, quibus usi sunt ad similitudinem quatuor temporum: sicut quatuor temporibus variantur secula, sic quatuor modis variatur omnis cantus. Hoc psalmista notare videtur, ut scribitur psallite Deo nostro, psallite, psallite regi nostro, psallite. Unde quatuor tantum habentur finales. Sed & nos moderniores, qui figurato utimur cantu, continuo his utimur tonis, hoc est binis ac binis, aut uno antiquorum.

We are bound, then, by a regular range, as it please Berno. The range of the tones, as Odo mentions in the Enchiriade, is a sure law of any ascending and descending regular song. Therefore every authentic tone has to ascend an octave from its final place, or more freely a ninth or tenth: and they descend from a final to the next [note below]. The plagals ascend to a fifth, more freely to a sixth or seventh: but they descend to a fourth, as is the will of all musicians, and the present discourse of modern views agrees.

Formerly the ancients discovered four phthongoi [tones], which they used in analogy with the four seasons: as the centuries change with the four seasons, thus all song varies [through] the four modes. The psalmist seems to note this, as it is written, "Sing to our God, sing, sing to our king, sing." Hence they have only four finals. But also we more modern people, who use figured song, continually use these tones, that is, by twos and twos, or by one of the ancients.

106. Exactly like a sentence in Amon’s Anonymous; see Amon, p. 47.
107. Closely adapted from Johannes; see Affl., p. 92; Babb, p. 122. Also quoted by Jerome; see Cserba, p. 157.
108. Prologus in tonarium (c. 1030), GS II, pp. 69-72.
109. Dialogus de musica (c. 935), GS I, p. 258. Bol has Berno, Odo in Enchiriade in margin.
110. Taken from Johannes; see Affl., p. 76; Babb, p. 115. The quoted verse is Vulgate Psalm 46: 7.
Quatuor sunt toni antiquorum, protus vel argous, deuterus, tritus, tetrardus, quorum quilibet continet secundum se duos alios, primum, secundum; tertium, quartum; quintum, sextum; septimum, octavum. 

Non tamen dico, non posse nos uno contentari tono, sed quia modernis varietas placet, authentique ascendere, plagales vero descendere habeant, ut hoc meter:

*Impar vult sursum, sed par ad infima tendit,*

unusque horum pro varietate non sufficiat, bis utimur, aut uno veterum.

There are four tones of the ancients, *protus* or *argous*, *deuterus*, *tritus*, *tetrardus*, of which any one contains according to itself two others; the first [contains] the second; the third the fourth; the fifth the sixth; the seventh the eighth. But I do not say that we cannot be content with one tone, but that variety pleases the moderns, and the authentics have to ascend but the plagals descend, as in this rhyme:

*Odd-numbered [tones] want to go upwards, but even-numbered ones tend downwards.*

and one of these does not suffice for variety, so we use two, or one of the ancients.

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111. This sentence appears as a chart in Bol. See Appendix C, no. 27.

112. The source of this verse has not been found.
Caput XVI.

Duobus autem hemitonium in b. fa. # mi. si necesse erit, concedimus, scilicet proto & trito, aliis vero duobus denegamus: sunt tamen nonnulli, qui id trito regali omnino denegant, praesertim in actibus tonatis, cum hoc trito plagali, id est, sexto totaliter attribuant. Miror ego, hoc regali denegari, quod plagali conceditur; nam incongruum rationi videtur, quia totius toni hemitonium ornatus est: certa enim poeniteat, qui domino ornatum aufert, & servo tribuit.

Chapter XVI.

In two [psalm tones] we allow a hemitonium [mediant] in b fa # mi if necessary, namely protus and tritus, but we reject [it] in the other two: there are some however who reject it entirely for the authentic tritus, especially in actual sounding, since they assign this to plagal tritus, that is, the sixth [tone]. I do wonder that this is denied to the authentic when to the plagal it is allowed; for it seems inconsistent with reason, since the "hemitone" of every tone is adorned; and he would certainly regret it who removes ornament from the lord and grants it to the servant.\footnote{113. This metaphor may be based on Johannes; see Affl., p. 93; Babb, p. 123. It seems to be a play on words with the terms for "authentic" and "plagal".}
Cumque omnium tonorum opus sit, finaliter pulcre conclusere cantus, quis non intelligat, quartum hemitonio allato bisonum esse, cum leviter incipiat, dureque concludat in actibus tonatis? Sed veteres hoc trito concesserunt, qui ambos continet authentum & plagalem: hoc nostri irritum faciunt, ac veterum opinionem reiciunt, cum plagalem plus regali faciunt, ipsi admittentes, quod authento denegant. Insuper cum eius sedes finalis per hypate meson sit, vitiosum eum faciunt, tritonum superinducentes, qui ab omnibus musicis tamquam irregularis & incongruentissimus sonus vitari perhibetur. Sunt & alii, qui tonorum proprietates [358] non intelligentes pro tertio octavum, pro quarto primum, aut pro sexto septimum ponunt, ut aperte in eorum patet carminibus. Sed calamo manum subtrahere volo, ne omnes iniuria, ut ipsi aiunt, comprimere videar: omnia tamen peritorum iudicio corrigenda relinquo musicorum.

Since it is needed for all tones finally to end the song beautifully, who would not understand the fourth bisonum to have been applied to the "hemitone", since it begins easily, and finishes harshly in practice? But the ancients allowed this to the tritus which contains both authentic and plagal: people of our time make this invalid, and reject the idea of the ancients when they make the plagal more ruling [authentic], themselves allowing what they deny to the authentic. Moreover, since its final place is through hypate meson [E], they do make this faulty, introducing the tritone, which is asserted to be avoided by all musicians as an irregular and disagreeable sound. There are also others who, not understanding the properties of the tones, use an eighth [tone] for a third, a first for a fourth, or a seventh for a sixth, as is abundantly clear in their songs. But I wish to remove my hand from the reed, lest I seem to place all together unjustly, as they say themselves: I leave, however, all corrections to the judgment of skilled musicians.

114. cf. Pliny, Historia naturalis XXXV, p. 80: "quod manum de tabula sciret tollere."
Caput XVII.

Postremo tonum adiiciunt, quem peregrinum vocant; sed aliqui eum differentiam octavi esse affirmant: ego autem eundem potius primi differentiam esse dicerem, cum in lichano hypaton, id est, in D. finale terminatur. Nullius tamen opinionem probare aut reprobare volo, nam ipse inter tonos non numeratur, & in figurata musica de differentiis nulla nobis cura est: quapropter nec tonorum differentias inferre volui, comprehenduntur enim omnes sub regali & subiugali proto, deutero, trito, tetrardo; non ergo necessarium fuit, quia apud nos continua est tonorum transpositio propter inaequalitatem vocum ad instrumenta. Ego quoque omnem cantum primi toni in lichanos meson finire cogor propter organum: nam baryphonizans --- diapason lichanos hypaton in hypothesi attingere non valuit vera voce, ac in hyperboleothesis vix per a meson; itaque deficientie causa deficere solet & effectus, non enim ad voluntatem, sed ad utilitatem aliquando cantus transponitur.

Chapter XVII.

Finally they add the tone which they call *peregrinus*; but some assert that it is the *differentia* of the eighth tone; I, however, would say rather that it is the *differentia* of the first tone, since it is terminated with *lichano hypaton*, that is, with D final. I do not wish, though, to approve or reprove the view of anyone, for it is not numbered itself among the tones, and for us with figured music, there is no concern about the *differentiae*: wherefore I did not wish to introduce the *differentiae* of the tones, for they are all included under ruling [authentic] and subject [plagal] in *protus*, *deuterus*, *tritus*, *tetrardus*; it was therefore not necessary, since for us the transposition of tones is continual due to the inequality of voice to instrument. I am also compelled to finish every song of the first tone on *lichanos meson* [G] on account of the instrument: for it is not possible to touch the deep-sounding octave [of] *lichanos hypaton* [D] in the hypothesis range with a true voice, and in the *hyperboleothesis* range scarcely through a *meson*; therefore it is usual for the effect also to fail when the cause fails, for song is sometimes transposed not by choice, but for usefulness.
You thus have here what I think about tones, and Gregorian or plain music, and plain song, and the opening of the figures, which depends on this, and the end of the second part; since we believe that there are few who understand fundamentals with a sound intellect, as necessity itself requires, I wished to present this beforehand, thus at last to take the way towards measured music. I therefore related the second part on plain music in order (as was touched on before, the standard having been conciseness for beginners as much as I am able) so that he rising may plant his foot firmly; if they fasten their foot there, without a doubt they holding the plough will not look at those behind their backs. 115

Narratio in praesens

Congeriem immensae sonorum
vidimus artis,
Quae nimium mentem movit
hucusque meam.
Nunc abit, et pauc a post
visa est illa redisse,
Cui dabit initium et
numer us atque modus.
Castalides Musae praesidia
ferte vocanti,
Desinat ut simplex, et
mensurata crescat.
Atque meos Musa semper
miserata labores
Nunc etiam in nostro
conatu fer opem.
Iungito Pierides
Liberthides
Aganippides,
Praestant obsequia nunc
simul arte sua.
Donet et Euterpe tibias,
Polonia iungat
Barbiton, Thespiades et
choros et instrumenta,
Ne manet obscurum nomen
opusque meum.

Narration in the present

We have seen the mass of the
boundless art of sounds,
Which thus far has greatly
stirred my mind.
5 Now it departs, and little
after it seemed to have
returned,
To which number and mode
will give a beginning.
10 Castalian Muses, bring
patronage to the one
who calls,
So that simple [music] may
cease and measured arise.
15 O Muse, always compassionate
to my labours,
Now too bring help in our
undertaking.
20 Join the Pierides, Liberthides,
Aganippides,
Let them now provide their
services along with their
art.
25 Let Euterpe too present pipes,
let Polonia add
The lyre, and the Thespiades
choirs and instruments,
Lest my name and work remain
in obscurity.

116. Most of the names mentioned are associated with the Muses. Castalia and Aganippe are sacred fountains, Pieriae and Thespiades are names referring to the Muses, Liber was Dionysus, and Euterpe was the Muse of lyric poetry (and thus of music). Polonia may be Polyhymnia, the Muse of mime.
APPENDIX C

CHARTS AND DIAGRAMS

1. Bol: Diagram of Guidonian Hand, end of Chapter 1
2. G: Diagram of Guidonian Hand; from treatise of Elias Salomonis (GS III, p. 22)
3. Bol: Chart of hexachords, end of Chapter 2
4. G: Chart of hexachords (GS III, p. 344)

<table>
<thead>
<tr>
<th>General, &amp; sunt</th>
<th>Common, communs, dupliciter</th>
<th>Specialiter, &amp; erunt</th>
</tr>
</thead>
<tbody>
<tr>
<td>$^a$ duralis eft, qui durum &amp; asperum facit sonum, ratione autem litterae &amp; soni dicitur $^a$ duralis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. mollis eft, qui mollem ac levem facit sonum, quo ut ratione litterae &amp; soni dicitur b. mollis.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naturalis eft, qui nec durum, nec mollem facit sonum, sed partem ab $^a$ durali, &amp; partem à b. mollis sumit.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Primus $^a$ duralis incipit | G. ut. G. fol. re. ut. in | E. la. mi. e. la. mi. ee. la. mi. |
| Tertius | G. ut. G. fol. re. ut. | a. la. mi. re. |

Quorum quisque habet sub se duas voces

| Primus | b. mollis incipit | F. fa. ut. F. fa. ut. |
| Secundus | c. fol. fa. ut. | a. la. mi. re. |
| Tertius | c. fol. fa. ut. | a. la. mi. re. |

In C. naturaliter, f. b. mollis, G.que $^a$ duralis

In A. naturaliter, D. b. mollis, E.que $^a$ durali

Specialiter.

5. Bol: Chart replacing Gerbert text, II/3/13-26
(GS III, p. 344)

(GS III, p. 344)
7. Bol: Chart of gamut, hexachords and tetrachords, end of Chapter 4
8. G: Chart of gamut, hexachords and tetrachords  
(GS III, p. 345)
9. Bol: Chart replacing Gerbert text, II/5/12-27
(GS III, p. 346)

10. Bol: Chart of mutations, end of Chapter 5
11. **G**: Chart of mutations (GS III, p. 346)

---

| Omnis clavis aut habet | Unam vocem & sunt quantor | nullam habent mutationem | Si vox est simplex, fiet mutatione nulla.
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>r. ut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B. mi.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. la.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duas voces, &amp; sunt octo.</td>
<td>C. fa, ut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D. sol, re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E. la, mi.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F. fa, ut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>G. sol, fa.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tres voces, &amp; sunt sex.</td>
<td>G. sol, re, ut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. la, mi, re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. sol, fa, ut.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. la, sol, re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. la, sol, re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. la, mi, re.</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>f. la, mi, re.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>g. la, mi, re.</td>
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<td></td>
</tr>
</tbody>
</table>

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12. **Bol**: Chart replacing Gerbert text, II/6/134–38 (GS III, p. 347)
nulla sunt quae singulatim pudere utrum atque eodem sonum
haec sunt quae simul quidem utrumque atque singulum
sonum faciant bis lapidem et bis lapidem.
Consonae sunt quae comparatione quidem sermiorum seque stumm effec-
tur sonum in alia parte digitatione.
nulla sunt quae non sunt rete tandem ab
melius aptati notunt ut tunc cum certa intervariae spatio-
bus sonus sunt quae non permiscunt inter ille
et Melius a que in consonantiarum conjunctione us multa effici
nepat non respicere ut est primus et simul a patre.
Nescio quid est quod in sedentia debeatur in que libri
Germani aeditis sub Dialogo cri-vo.
Proportionalem formam haurum modernum affinov de proportionibus partis inversae lucido digitam
15. Bol: Chart of intervals, end of Chapter 7 (does not appear in Gerbert)
16. Bol: Chart of intervals and note names, end of Chapter 9
17. G: Chart of intervals and note names
(GS III, insert after p. 351)

<table>
<thead>
<tr>
<th>Quadrupla</th>
<th>Bisdiapason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Tripla.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonus irregularis.</td>
<td></td>
</tr>
<tr>
<td>Dupla superbipartiens.</td>
<td></td>
</tr>
<tr>
<td>Diapason.</td>
<td>Dupla.</td>
</tr>
<tr>
<td>Diapason.</td>
<td>Dupla.</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>Superadditio</td>
<td>Hucusque Boetii chordae quindecim.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<table>
<thead>
<tr>
<th>musicales</th>
<th>musicales</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td></td>
<td></td>
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<tr>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>m.</th>
<th>m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>a.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cantus</th>
<th>Synemmenon</th>
<th>nominatus</th>
<th>Tertius</th>
<th>b.</th>
<th>mollis</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chorde</th>
<th>Chorde</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chorde</th>
<th>Chorde</th>
</tr>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th>Surp.</th>
<th>Surp.</th>
</tr>
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<tr>
<td></td>
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<td></td>
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</tbody>
</table>

The font Consonantiae musicales vere bipartitas.
18. **Bol**: Chart replacing Gerbert text II/10/10-23 (GS III, p. 351)

19. **Bol**: Chart of names of modes, Chapter 13
20. **G**: Chart of names of modes, Chapter XIII  
(GS III, p. 355)  

<table>
<thead>
<tr>
<th>Tonorum octo sunt.</th>
<th>Gentium Graecorum vocabulis dixi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primus.</td>
<td>Dorius.</td>
</tr>
<tr>
<td>Secundus.</td>
<td>Hypodorius.</td>
</tr>
<tr>
<td>Tertius.</td>
<td>Phrygius.</td>
</tr>
<tr>
<td>Quartus.</td>
<td>Hypophrygius.</td>
</tr>
<tr>
<td>Quintus.</td>
<td>Lydus.</td>
</tr>
<tr>
<td>Sextus.</td>
<td>Hypolydus.</td>
</tr>
<tr>
<td>Septimus.</td>
<td>Mixolydus.</td>
</tr>
<tr>
<td>Octavus.</td>
<td>Hypomixolydus.</td>
</tr>
</tbody>
</table>

21. **Bol**: Chart of authentic and plagal modes, Chapter 13
22. G: Chart of authentic and plagal modes, Chapter 13 (GS III, p. 355)

Tonus eft duplex.

Autentus vel regularis omnis tonus postus in numero impari, & funt quatuor.

Plagalis aut subiugalis eft omnis tonus paris numeri; & funt quatuor.

Primus.  
Tertius.  
Quintus.  
Septimus.  
Secundus.  
Quartus.  
Sextus.  
Octavus.

23. Bol: Chart of initials and finals of modes, Chapter 14
24. **G: Chart of initials and finals of modes, Chapter 14**

(GS III, p. 356)

<table>
<thead>
<tr>
<th>Incipit in</th>
<th>Finitur in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primus.</td>
<td>Primus.</td>
</tr>
<tr>
<td>Quartus.</td>
<td>Secundus.</td>
</tr>
<tr>
<td>Sextus.</td>
<td>Tertius.</td>
</tr>
<tr>
<td></td>
<td>Quintus.</td>
</tr>
<tr>
<td></td>
<td>Oclavus.</td>
</tr>
<tr>
<td>a.</td>
<td>F.</td>
</tr>
<tr>
<td>b.</td>
<td>C.</td>
</tr>
<tr>
<td>c.</td>
<td>d.</td>
</tr>
<tr>
<td>D.</td>
<td>E.</td>
</tr>
<tr>
<td>F.</td>
<td>G.</td>
</tr>
<tr>
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<td></td>
</tr>
</tbody>
</table>

25. **Bol: Musical example of modal formulae, Chapter 14**

![Musical Example]
26. G: Musical example of modal formulae, Chapter 14
(GS III, p. 356)

27. Bol: Chart replacing Gerbert text, II/15/62-70
(GS III, p. 357)
# APPENDIX D
## PARALLEL PASSAGES FROM OTHER TREATISES

### TABLE OF PARALLEL PASSAGES, ADAM VON FULDA, *DE MUSICA*, BOOK II

<table>
<thead>
<tr>
<th>Adam</th>
<th>Source</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>II/1/81-85</td>
<td>Affligemensis</td>
<td>Monochord</td>
</tr>
<tr>
<td>II/2/65-74</td>
<td>Affligemensis</td>
<td>Ambrose and Gregory</td>
</tr>
<tr>
<td>II/3/8-20</td>
<td>Isidore</td>
<td>Three types of music</td>
</tr>
<tr>
<td>II/3/26-30</td>
<td>Isidore</td>
<td>Symphonia</td>
</tr>
<tr>
<td>II/6/100-167</td>
<td>Boethius</td>
<td>Definition of musician</td>
</tr>
<tr>
<td>II/6/220-243</td>
<td>Affligemensis</td>
<td>Need for a master</td>
</tr>
<tr>
<td>II/7/3-5</td>
<td>Boethius</td>
<td>Definition of modus</td>
</tr>
<tr>
<td>II/7/40-66</td>
<td>Boethius</td>
<td>Types of intervals</td>
</tr>
<tr>
<td>II/9/68-79</td>
<td>Boethius</td>
<td>Development of gamut</td>
</tr>
<tr>
<td>II/10/107-118</td>
<td>Affligemensis</td>
<td>Teachers</td>
</tr>
<tr>
<td>II/12/5-9</td>
<td>Affligemensis</td>
<td>Priscianus quotation</td>
</tr>
<tr>
<td>II/13/1-5</td>
<td>Philippi de Vitriaco, Liber Musicalium</td>
<td>Definition of tonus</td>
</tr>
<tr>
<td>II/13/13-48</td>
<td>Affligemensis</td>
<td><em>Tonus</em>, grammar parallels</td>
</tr>
<tr>
<td>II/13/64-69</td>
<td>Affligemensis</td>
<td>Eight parts of speech</td>
</tr>
<tr>
<td>II/15/26-29</td>
<td>Amon Anonymous</td>
<td>Definition of ambitus</td>
</tr>
<tr>
<td>II/15/29-39</td>
<td>Affligemensis</td>
<td>Range of modes</td>
</tr>
<tr>
<td>II/15/46-54</td>
<td>Affligemensis</td>
<td>Four seasons parallel</td>
</tr>
</tbody>
</table>

Full references to the sources will be found in the corresponding locations in the translation, Appendix B.
SELECTED PARALLEL PASSAGES FOR COMPARISON

Adam, II/3/8-20 (GS III, p. 344)
Est tamen quaedam species & vocis & soni, alia soni non vocis, quidem sonus per Echo sonorum triformis est natura: harmonica, quae ex vocum cantibus constat: organica, quae ex flatu subsistit: rhythmica, quae ex chordarum administratione, intensione, pulsuque numeros recipit.

Isidore (GS I, p. 21)
Ad omnem autem sonum, qui materies cantilenarum est, triformem constat esse naturam. Prima est harmonica, quae ex vocum cantibus constat. Secunda organica, quae ex flatu consistit. Tertia rhythmica, quae impulsu digitorum numeros recipit.

Adam, II/6/220-31 (GS III, p. 348)
Nescientes scire nolunt, scientesque fugiunt, quaesiti impudenter obstrepunt, veritati resistunt, erroremque suum summo conamine defendunt, energumeni neque per se videntes, neque videntium ducatui obtemperantes, cum nulla res sine magistro discitur.

Affligemensis (CSM 1, p. 66)
Quodsi aliquando ut fit musicus eos de cantu, quem vel non recte vel incomposite efferunt, compellat, irati impudenter obstrepunt, veritati acquiescere nolunt suumque errorem summo conamine defendunt.

Adam, II/6/231-43 (GS III, p. 348)
Muta enim animalia ferarumque greges ductorem sequuntur, sed nostri nee ducem nee magistrum curant, omnia per se intelligentes: quos nulli melius quam ebrio comparaverim, qui domum quidem repetit, sed quo calle revertatur, ignorat. Sed & rota molaris aliquando discretum reddit stridorem, ipsa tamen quid agat penitus nescit.

Affligemensis (CSM 1, p. 52)
Cui ergo cantorem melius comparaverim quam ebrio, qui domum quidem repetit, sed quo calle revertatur penitus ignorant? Sed et molaris rota discretum aliquando reddit stridorem, ipsa tamen quid agat nesciens, quippe quae res est inanimata.

Adam, II/7/3-5 (GS III, p. 349)
Modus est soni acuti gravisque distantia vel intervallum.

Boethius (Boeth. p. 195)
Intervallum vero est soni acuti gravisque distantia.
Adam, II/10/107-18 (GS III, p. 352)
Dicit primus, ut Guido ait, magister Bruno sic me docuit. Alter ait, ego a magistro meo Albino sic didici. Tertius vero, certa magister meus Odo aliter me informavit: quo fit, dum suum quisque praefert magistrum, tot sunt componendi diversificatores, quot sunt in mundo magistri.

Affligemensis (CSM 1, p. 134)
Dicit namque unus: Hoc modo magister Trudo me docuit; subiungit alius: Ego autem sic a magistro Albino didici; ad hoc tertius: Certe magister Salomon longe aliter cantat. Et ne te longis morer ambagibus, raro tres in uno cantu concordant, ne dum mille, quia nimirum dum quisque suum praefert magistrum, tot fiunt diversificationes canendi quot sunt in mundo magistri.

Adam, II/13/1-5 (GS III, p. 354)
Tonus est discretio vel cognitio principii & finis ascensus ac descensus cuiuslibet melodiae regularis.

Philippi de Vitriaco, Liber Musicalium (CS III, p. 36)
Tonus musice est discretio principii et finis, ascensus et descensus cujuslibet regularis cantus.

Adam, II/13/13-19 (GS III, p. 354)
Aliqui autem tonos tropos a convenienti conversione dicunt; aliqui modos a moderando, Graeci autem phthongos, nos tonos vocamus, licet Guidoni incongruum videatur.

Affligemensis (CSM 1, p. 77)
Modi a moderando sive modulando vocati sunt, quia videlicet per eos cantus moderatur id est regitur, vel modulator id est componitur.... Tropi a convenienti conversione dicti; quomodocumque enim cantus in medio varietur, ad finalem semper per tropos id est tonos convenienter convertitur. Quos autem nos modos vel tropos nominamus, Graeci phthongos vocant. Et sciemund, quod eos tonos appellari Guidoni incongruem videtur et abusivum.
Affligemensis (CSM 1, pp. 78-80)
Cum ergo Latini antiqui consonantiam quandam in musica tantummodo tonum vocarent, grammatici etiam accentus orationis, vel distinctiones tonos appellare usurpato nomine coeperunt. Rursus Latini cantores non parvam esse similitudinem inter cantus et accentus prosaicae locutionis modosque psallendi considerantes, nomen hoc commune utrisque esse sanxerunt. Sicut enim toni id est accentus in tres dividuntur species, scilicet gravem, circumflexum, acutum, ita in cantu tres distinguuntur varietates.... Sicut enim in prosa tres considerantur distinctiones, quae et pausationes appellari possunt, scilicet colon id est membrum, comma incisio, periodus clausura sive circuitus, ita et in cantu. In prosa quippe quando suspensive legitur, colon vocatur; quando per legitimum punctum sententia dividitur, comma, quando ad finem sententia deducitur, periodus est.... Quod autem in prosa grammatici colon, comma, periodum vocant, hoc in cantu quidam musici diastema, systema teleusin nominant.

Adam, II/15/24-29 (GS III, p. 357)
Ambitus autem tonorum... est certa lex ascendendi et descendendi cuiuslibet cantus regularis.

Amon Anonymous, p. 47
Pro quo nota: Quod cursus tonorum est certa lex ascendendi et descendendi cuiuslibet cantus regularis.
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