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A TRANSLATION OF THREE TREATISES BY MARTIN AGRICOLA--
"MUSICA CHORALIS DEUDSCH," "MUSICA FIGURALIS DEUDSCH," AND
"VON DEN PROPORCIONIBUS"--WITH INTRODUCTION,
TRANSCRIPTIONS OF THE MUSIC, AND COMMENTARY

The Ohio State University

Ph.D. 1979

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A TRANSLATION OF THREE TREATISES BY MARTIN AGRICOLA—
MUSICA CHORALIS DEUDSCH, MUSICA FIGURALIS DEUDSCH,
AND VON DEN PROPORCIONIBUS—WITH INTRODUCTION,
TRANSCRIPTIONS OF THE MUSIC, AND COMMENTARY

DISSERTATION

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

By
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*****

The Ohio State University
1979

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PREFACE

The inspiration for this dissertation came from a portion of Fourscore Classics of Music Literature by Gustave Reese in which the significance of the treatises on choral music by Martin Agricola is indicated. Further recognition is due Agricola, a precedent-setting pioneer among Protestant cantors. Outside of Germany, however, difficulties in understanding the early sixteenth-century German have made his major treatises largely inaccessible. Furthermore, obscurities in Agricola's subject matter, style, and presentation have also been a deterrent to the dissemination of this knowledge. It is the intention of this translation and commentary to overcome these problems.

The purposes of this dissertation are: (1) to shed light on Martin Agricola and his historical importance as the first Protestant cantor; (2) to encourage greater familiarity with his major German treatises on choral music, so that they may be recognized to be at least equal in significance with the better-known treatise on instrumental music, Musica Instrumentalis Deudsch;  

1New York: The Liberal Arts Press, 1957, pp. 41-42.  
2This treatise alone of Agricola's writings has received widespread recognition from the time it was written.
(3) to bridge the language barrier by making the contents of these treatises comprehensible to English-speaking music scholars; and (4) to clarify matters in these treatises through explanatory comment and comparison with the work of other Renaissance theorists, particularly Franchinus Gafurius.

Microfilms of the treatises were provided by the Library of Congress, Washington, D.C. These include a copy of the 1533 third edition of the first treatise by Agricola (originally published in 1528 as Ein Kurtz Deudsche Musica), Musica Choralis Deudsch, and a copy of the original 1532 edition of Musica Figuralis Deudsch together with the appended smaller 1532 treatise Von den Proportionibus. With the exception of this latter work on proportions, which is only twenty folios in length, the treatises are now available in facsimile in a single volume which also includes the original 1529 edition of Musica Instrumentalis Deudsch and a 1539 Latin treatise only thirty-two folios in length. Rudimenta musices. ³

The identical title page—apart from the title itself—was used by the printer Georg Rhau for Musica Choralis Deudsch, Musica Figuralis Deudsch, and also for other music theory publications. The title appears in a

³Martin Agricola, Musica Figuralis Deudsch (1532); Im Anhang: Musica Instrumentalis Deudsch (1529), Musica Choralis Deudsch (1533), Rudimenta musices (1539) (Facsimile reprint ed., Hildesheim: Georg Olms, 1969).
rectangular space provided in the middle, surrounded by ornamental figures (including a flutist and drummer) and by a four-voice setting of an initial phrase of the Te Deum, with one voice part at each corner of the rectangle (this setting is transcribed at the beginning of Part One). At the center of the bottom appear two sets of initials, G. R. above K. K. These initials often appear on the title pages of Rhau publications.  

The writer has faithfully endeavored to translate the treatises into clear contemporary English and to transcribe their musical examples into modern musical notation. Some flexibility was required whereby certain German terms have been translated by more than one English equivalent, depending on context. At times it seemed necessary to give the literal English translation of a term, but to underscore it to call attention to its variance from present-day English usage (for example, key, meaning one of the notes of the gamut, but clef rather than signed key for zeichnete Schlüssel). Where such a term first appears, its meaning in present-day terms is also given; further explanation, when necessary, appears in footnote commentary. Where Agricola uses a Latin term or phrases, the text of the original language is included as well as

---

Transcriptions of the music use reduced note values. In *Musica Choralis Deudsch* the reduction ratio is 4:1, whereby the semibreve (diamond equivalent of the modern whole note) is transcribed as a quarter note. In the treatises on mensural music, the reduction—usually 2:1 or 4:1—varies in order to center on the quarter note, maintain consistency of note values throughout a given example, and avoid an excess of thirty-second or double-whole notes. Incipits show the first few notes of each part in original notation just ahead of the start of the transcription. Indications such as $\Diamond = \downarrow$ clarify examples with a diversity of mensural signs and proportions where reduction of note values must vary from one part to another and within a particular part. In such cases, each new mensuration sign or numbers of a proportion is shown above the staff together with any change of note values, in a form such as $\Box \cdot \varnothing = \downarrow \cdot$ or $\Diamond^4 = \downarrow \cdot$. The proportion $\frac{3}{2}$ at times results in triplets, transcribed with the number three placed above such a grouping of notes. Editorial bar lines and modern time signatures have been added to guide the eye and make visible certain implications of the original music. Ligatures in the original notation are indicated in the transcription by means of a solid brace above the notes that were bound together in ligature: $\square \square \square$. Coloration (blackening of notes usually white) in the
original notation is indicated in the transcription by means of a broken-line brace above the colored note or notes: \[\text{\textbf{~}}\text{\textbf{\textbf{~}}}\]. Both types of brace may appear simultaneously, one above the other. Editorial accidentals are placed above the notes for which they are suggested. The modern treble and bass clefs have been used, as well as the treble clef with the numeral 8 placed below it to indicate that the pitch is one octave lower than written.

For the convenience of the reader, the obverse and reverse of each folio of the treatises are indicated as closely as possible to the point where each begins in the original print by a folio designation within brackets at the left margin of the translation. The folio is indicated as in the original by a capital letter followed by a small Roman numeral from one to eight. In addition, the reverse of each folio is indicated by a superscript letter v (\textit{verso}) at the end, e.g., H vii\textsuperscript{v}; the absence of the superscript v indicates the obverse (\textit{recto}) of the folio.

Much of the background information not included in Agricola's own writings comes from the 1933 study by Heinz Funck, \textit{Martin Agricola: Ein frühprotestantischer Schumaniker}.\textsuperscript{5} Many sources used by Funck are presently inaccessible to the writer. Indeed, Magdeburg, Schwiebus, and their environs now lie behind the iron curtain.

\textsuperscript{5}Wolfenbüttel: Georg Kallmeyer Verlag, 1933.
I am deeply indebted to the late Dr. Charles Evans, head of the Temple University German Department from 1912 until 1948, who most amicably gave countless hours of his time from 1970 to 1975 helping to unravel the mysteries of this transitional early-new-high German and explaining its elusive ambiguities and rough-hewn early-sixteenth-century style. Deep gratitude is expressed also to: Dr. Richard Hoppin, my adviser during the last ten years, for pains-taking guidance and patient good humor; Dr. Keith Mixter, my present coadviser, for sympathetic assistance and encouragement with the revisions; Dr. Herbert Livingston, Chairman of Music History and Literature, and Dr. Norman Phelps, Professor Emeritus, for their careful reading and thoughtful advice; Dr. Wolfgang Fleischauer and Dr. Harry Vredefeld of the German Department and Dr. Harold Grimm of the History Department at The Ohio State University for their generous help and expertise; Mrs. Shirley Enderle, for typing and editing assistance; Beatrice, my dear long-suffering wife, for the final copies of the music and the graphic illustrations; and Tara, Elizabeth, and Tirzah, for encouragement to their part-time dad.

I dedicate this work to them, to the memory of my beloved parents, who did not live to see the full fruition of their sacrifices on my behalf, and to the honor and glory of Almighty God.
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Studies in Piano Performance. Professor George Haddad

Studies in Psychology of Music. Professor William Poland

Studies in Theory of Music. Professor Harold Luce
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## Part One

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*Non-figural Music [book] in German*  
Mart. [Martin] Agricola, 1533

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3. Tonus...

4. Semidotonus...

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THERE FOLLOW THE LARGE PSALMS

THERE FOLLOW OTHER FOUR-VOICE MAGNIFICATS

Concerning the Foreign Mode

PART TWO
TRANSLATION OF MUSICA FIGURALIS DEUDSCH:
FIGURAL MUSIC IN GERMAN
Mart. Agricola, 1532

[PREFATORY MATERIAL]

Musica Figuralis, Together with Its Appertaining Examples, Together with an Especially Fine Little Book Concerning Proportions, Quite Useful for All Ordinary Singers, Instrumentalists, and Beginners to Know, Composed in German Most Simply and Understandably

To the Wise and Honorable Mr. Heinrich Harsleben, Councilman of the Old City of Magdeburg and My Especially Favorably Inclined Lord

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**PART THREE**

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INTRODUCTION: MARTIN AGRICOLA'S LIFE AND WORKS

Martin Agricola appears to have been the first of a long line of German Protestant cantors, having been in the right place at the right time—the city of Magdeburg at the beginning of the Reformation in 1524. He is also in the first rank with regard to the quality of his work, its historical significance, and his influence upon his successors. This is a result of his diligence and ability as a writer of music instruction books, as an organizer of Protestant school music curricula, and as a composer. His significance as a pathfinder for later Protestant cantors has not been fully appreciated for some 350 years.

Agricola's Childhood and Education

Very little is known of the early years of Martin Agricola's life. Most of the available information comes from Agricola himself in the prefaxes and parenthetical remarks of his publications. In the dedication of his 1541 Sangbüchlein, he affirms that his family name was Sore and that he came from the town of Schwiebus in Silesia. The traditional birthdate of January 6, 1486, frequently cited in reference works, is not documented.¹

¹This date was first given, with no citation of his
None of the surviving church and town records in Schwiebus mention Agricola at all. However, since he was teaching in Magdeburg as a trained musician no later than 1520, a date of birth well before 1500 is quite probable.

The first evidence of his having adopted the name Agricola is its use in his initial publication in 1528. Whether or not he was following the example of Alexander Agricola (whose adopted name was the Latin form of his family name, Ackermann), Martin Sore took the name Agricola as a testimony of his pride in "coming to music from the plow," as he frequently says in his writings. This is quite in keeping with the times; Martin Luther also refers to his own peasant ancestry.

The town of Schwiebus was in a relatively stable and flourishing condition around 1500 because of a fortunate lull in its grim history of war, fire, and pestilence. A surrounding plateau of fertile farm lands, a thriving clothmaking industry, and a strategic position


Funck, Agricola, p. 4.

See p. 7 below for Agricola's and Sigfried Sack's statements to this effect. Sack also says that Agricola was "a grey one" at the end of his life (1556).

along trade routes brought prosperity to the city and gave it opportunity for intellectual and cultural activity. There was an older school in the Catholic Cloister and also a town school that had been established around 1460 to teach the trivium as well as the basics of the faith.\footnote{Funck, \textit{Agricola}, pp. 8-9.}

Whichever school young Martin Sore attended, his early musical impressions would have been formed largely by Gregorian Chant. Polyphony would have been neither as prevalent nor as progressive as in the great courtly centers; what there was of it in Schwiebus probably represented the simplest medieval practices.

In the preface to his 1545 edition of \textit{Musica Instrumentalis Deudsch}, Agricola indicated both his love for the noble art of music "from the cradle on" and his lack of opportunity for substantial music study during his early schooling:

\begin{quote}
And if the opportunity
That comes to schoolboys now
To learn this art had come to me
When I was young, I vow
I would have gone most eagerly
To school, not like a cow
As some kids do who presently
No good from it allow.\footnote{Martin Agricola, \textit{Musica Instrumentalis Deudsch}, rev. ed. (Wittenberg: Georg Rhau, 1545), folio A viii.}
\end{quote}

There was probably a period of time after the completion of his basic schooling when Martin worked on his father's farm. This would have provided the agricultural activities...
experience to which he refers in his writings. By the law of primogeniture, the oldest son inherited all of a farm to avoid its fragmentation. Martin—not the heir—knew that some day he would have to make a living on his own.

His love of music and a desire to study it more fully eventually caused him to set out on a journeyman period of travel:

Nothing with me more agreed
Than on this trip to go indeed
At tender Lady Music's call;
Therefore I loved her best of all.7

He states that his great love and desire for music drove him to far greater lengths of study than he would otherwise have been capable of;8 however, no direct evidence pertaining to his journeyman period has been found that would indicate where and when he was learning the "noble art of music" during the years prior to his arrival in Magdeburg in 1519.

Two events of this period might have had a bearing on his activities. First, a severe plague ravaged Schwiebus in 1510. This could have led Martin to leave home for further education if he had not done so already. Second, Hans Sore, whom Heinz Funck believes to be Martin's father, is not mentioned in the archives after 1518.9

It is possible that the death of Hans Sore soon after this

7Agricola, Instrumentalis, fol. A viiV.
instruments and musical practice of Poland and of Italy, whose influence was very great in Poland at this time.\textsuperscript{12}

As regards the nature of his musical activities during the journeyman period, his life-long interest in and involvement with instrumental music suggest professional instrumental performance during this time. Also, he must have been reading many significant writings on music, since his treatises reveal a familiarity with important works by authors ranging from classical antiquity to his own time. He would have had to rely upon available Latin translations, as it is highly unlikely that he knew Greek. He did this reading without benefit of a teacher; we learn from his own words that he did not study music formally at any institution of higher education:

\begin{quote}
Remember the fact that I have had no special teacher in music, apart from God, in my entire life, so to speak, but rather came to it directly from the plow, as I may say. Therefore it is no wonder that a farmer errs from time to time, since indeed such a thing often befalls many wise and learned men.\textsuperscript{13}
\end{quote}

This assertion that he did not have a particular teacher but learned the art of music through assiduous individual study is supported by various sources.

\textsuperscript{12}In a personal interview at The Ohio State University on July 18, 1975, Professor Harold Grimm suggested Cracow, Poland, as a city that might have attracted a music student from Schwiebus. Gustave Reese, in Music in the Renaissance, rev. ed. (New York: W. W. Norton, 1959), p. 746, says "At the end of the 15th century, Cracow became the center of musical activities in Poland. Italian influences penetrated the country more and more."

\textsuperscript{13}Agricola, Musica Figuralis Deudsch (Wittenberg: Georg Rhau, 1532), folios A iii-A iii\textsuperscript{v}. All translations of Agricola's writings are my own.
efforts (with the help of God) appears several times in his writings. He sums it up by saying "therefore I might well be called a self-taught musician."^{14}

It seems clear that Agricola must have spent much time during this formative period before 1519 individually studying as many books on music as were available to him. Therefore, the place where he did this—whether Schwiebus, Leipzig, Frankfurt an der Oder, Cracow in Poland, or elsewhere—is not nearly so important as the fact that he became well qualified for the musical tasks that lay ahead.

The Old City of Magdeburg circa 1520

and Agricola's First Years There

In 1519 Martin Agricola arrived in Magdeburg, where he was to spend the rest of his life. This date is established both by Agricola's letter to Georg Rhau of 1545, in which he speaks of having served diligently in the schools of Magdeburg for twenty-five or twenty-six years,^{15} and by Siegfried Sack's statement in the preface to Agricola's posthumous Duo libri musices that the author had been teaching music for thirty-six years when he wrote the work (1555-56).^{16} Both statements indicate 1519 or 1520. Funck points out that Agricola probably arrived at least

^{14}Agricola, Instrumentalis (1545), fol. L v.
^{15}Ibid., fol. L v.
^{16}Wittenberg: Georg Rhau Erben, 1561, fol. A ii'.
several months prior to beginning the regular teaching of music; hence the choice of the earlier year.\textsuperscript{17}

It was logical for him to come to the largest and most important city of Saxony. Magdeburg was well known in Silesia because of its influence as a business center, because of the legal opinions delivered by its courts, and because of considerable activity on the part of missionaries connected with the famous Magdeburg Cathedral.

The geographic area covered by Magdeburg was even greater than that covered by Paris in those days. It was divided into the new city to the north, the old city, the southern part of which formed the Cathedral Quarter or "Newmarket," and the south city below that. The different parishes of the city were populated by different classes of people. Within the old city, wealthy landowners were associated with the parish of St. Ulrich's Church; businessmen and councilmen belonged to that of St. John.

Prosperous times enabled the burghers to take an interest in cultural and educational affairs. The trivium school, under the control of the cathedral, was widely renowned. Martin Luther was sent to school there in 1497. There were other parish schools but no municipal school prior to the Reformation. Attempts by the city council to exercise control in education represented only one aspect

\textsuperscript{17}Funck, \textit{Agricola}, pp. 21-22.
of a recurring power struggle, which by the time of Agri-
cola's arrival had intensified to the point of animosity
toward the Catholic clergy on the part of the councilmen.
This condition made Magdeburg ripe for the early adoption
of Protestantism that was to occur.

Music had long been encouraged by the church. It
played an important role in ceremonial rites and process-
ions, in which various instruments were used. The cathe-
dral possessed a cantor as early as the thirteenth century.
The new building constructed in the mid-fourteenth century
included two organs--a large one and a smaller choir organ.
Both men's and boys' choirs took part in the church serv-
ces. Each parish church also had its choir of boys, who
were to perform at church services, weddings, and funerals.
Besides the church, the city itself fostered music through
the required appearance on official occasions of the munici-
pal "orchestra" of various instruments. The instrument-
alisists, led by the pipers, marched at the front of fes-
tival processions each year for over a century. Thus,
Magdeburg was a scene of considerable musical activity at
the time of Agricola's arrival.18

There is no record of Agricola's teaching or other
musical endeavor before 1528 apart from his 1545 statement
that he had served in the schools of Magdeburg for nearly

18Funck, Agricola, pp. 22-28.
twenty-five or twenty-six years. Had he taught at one of the parish schools, some record of the fact is likely to have survived. Therefore, he may have taught at one or more of those private schools established for particular social classes or occupational groups, besides giving individual instruction in the homes of leading citizens as he seems to have done throughout his career in Magdeburg.

The influx of humanistic thought from neighboring universities by way of Wittenberg provided further impetus for the Reformation in Magdeburg during the time when Martin Luther was involved in the historic events that would lead to irrevocable separation from the church of Rome. By 1524 there were fanatic laymen preaching openly on the streets of Magdeburg. Preachers from the outside were settling in the city, as was a printer of Lutheran songs, Hans Knappe from Eilenburg.

On May 6, 1524, a traveling artisan sold many copies of new songs by Martin Luther in the marketplace, singing them to the crowds that gathered. These songs soon came to be sung regularly by the people in all the churches before the start of the sermon. When Luther appeared in Magdeburg by request of the citizens on June 24, 1524, the inability of the churches to hold the overflowing crowds gave an indication of the extent to which these Lutheran

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\(^{19}\) Agricola, *Instrumentalis* (1545), fol. L v.
hymns and teachings had won the hearts of the people. At once the congregation began to call for the new order of worship, and within a few weeks German was being sung and Protestant preachers were being installed in the principal churches.  

There were dangers in such rapid upheaval. Lower classes of society, led by fanatic preachers, associated the concept of religious freedom with those of social and political freedom. Luther had to send his closest and most trusted friend, Nikolaus von Amsdorff, to Magdeburg in September of 1524 to bring the fanatics back to the purely religious Lutheran teachings. It was important to present a united front against the stiff-necked resistance of the Catholic clerics.

One of the first concerns of Amsdorff was organizing the establishment of a municipal school in accordance with the recommendations of Luther. By the end of that autumn, instruction had begun. A lack of qualified Protestant educators initially forced the school to operate under the leadership of two schoolmasters of the old parish schools. In May, 1525, Luther's prize pupil Caspar Cruciger assumed the post of rector upon the city council's vote of approval (he had been recommended by Luther). The number of pupils increased to such an extent that the school was moved to

the Augustine Cloister in order to have sufficient space.

Because he was needed by Luther at Wittenberg, Cruciger was called back early in 1528; the post of rector remained vacant for a year. Early in 1529 the city council again accepted a recommendation by Luther, calling Georg Major from Wittenberg for the appointment. Under Major's leadership another great expansion of the school prompted a second move, this time into the Franciscan Cloister.21

The Magdeburg school gave the title of cantor to its chief music teacher, who was then responsible for the music in the churches as well. This was soon the case for many Protestant Latin schools established in various cities of north Germany; the precedent had been set by Catholic schools such as the Thomasschule in Leipzig. Agricola is mentioned as Magdeburg cantor in two mid-sixteenth-century publications. *Hymni aliquot sacri* . . . is a 1552 hymn collection by Georg Thymus with ten works by Agricola. Within its lengthy title is credited "D. Cantore Parthenopolitano Martino Agricola Musico celeberrimo compositis." A 1561 instruction book by Agricola's immediate successor is *Practica modorum explicatio collecta per Gallum Dresslererum nebraeum scholae Magdeburgensis cantorem*. In the preface Dressler says "... not neglecting the way taught with praise for many years by my predecessor of

blessed memory, Martin Agricola."\textsuperscript{22}

Exactly when the position of cantor in the Magdeburg school was first established is not recorded. In a city with as rich a musical heritage as Magdeburg, the need for someone to supervise music instruction must have been evident at the time of the school's founding in 1524 or at least by the time of the first great expansion of 1525. There is evidence to suggest that Martin Agricola was holding this position well before the school's second great expansion in 1529: (1) In the preface to his 1541 Sangbüchlein, Agricola mentions that he had been staying with his patron, Councilman Heinrich Alemann, since the middle of 1527 (and that he was afforded more leisure thereby to work on his treatises).\textsuperscript{23} Free lodging was regularly a concomitant benefit of such a position; Agricola might have begun to receive it at some point in time after, but hardly before, he commenced his duties. (2) \textit{Ein kurzt Deudsche Musica}, the first of Agricola's textbooks for use in the German schools, was completed early in 1528; it gives the impression of having grown out of years of practical experience with his pupils.\textsuperscript{24} This evidence suggests that Agricola became the cantor of the municipal school in Magdeburg

\begin{itemize}
\item[\textsuperscript{22}] Ibid., pp. 98-99.
\item[\textsuperscript{23}] Magdeburg: M. Lotther, 1541, fol. 4\textsuperscript{v}; as cited in Funck, Agricola, pp. 35, 73-74.
\item[\textsuperscript{24}] Wittenberg: Georg Rhau, 1528.
\end{itemize}
between 1524 and 1527.

Although the position of cantor was a step above that of teacher, remuneration was minimal, as was commonly the case with such Protestant posts. Throughout his life Agricola was dependent upon the town fathers for his room and board as well as for other compensations such as firewood. However, he expressed his gratitude that Alemann cared for him as a father would, giving him opportunity to write and compose as he could not otherwise have done.

The significance of his writings, as well as his teaching, curriculum planning, and other activities, was magnified by their influence as precedents. The nature of these works and the far-reaching extent of their influence will be examined presently. It is his position as initiator that is emphasized here.

The city of Magdeburg—first to be won to the Reformation—appears to have been both the first to organize a Protestant municipal school and the first to appoint a Protestant school cantor. Martin Agricola thus became the first in that long and illustrious line of German Protestant cantors who produced so many enduring masterworks in the course of the ensuing centuries.

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25 Georg Krynner, an elementary teacher in the school from 1527 to 1530 who also taught singing, received fifty florins a year plus room and board. His letters deal with musical matters; Agricola, however, is not mentioned, according to Funck in Agricola, p. 34.

26 Agricola, Sangbüchlein, fol. 4.
The First Protestant Cantor's Initial Writings

After the establishment of the Reformation, the sphere of activity for Agricola and other Protestant musicians in Germany was distinctively different from that of preceding generations of musicians, who had been involved in Roman Catholic, upper-class, and courtly milieus. The emerging Protestant world reflected a middle-class urban environment.

Daily activities centered around the church and the newly-established Protestant municipal school; these played a prominent role in cultural life as well. Hence, music was often less independent, written to proclaim the new Protestant message in church, school, and home.

The first generation of Protestant reformers faced a struggle just establishing the basic Lutheran Confession, as is manifest in Agricola's repeated references to the pernicious attacks of slander and calumny against him; he fought them with continuing determination. In this struggle he had allies, not only among the local burghers under whose auspices he was operating, but also in the great Wittenberg Protestant circle headed by Luther himself. Agricola was directly linked with this circle through his many school colleagues who traveled to and from Wittenberg, and through his friendship with the printer Georg Rhau. Most of his writings were published by Rhau, whose help and counsel he sought in his work.
The prefaces to Agricola's writings reveal that he understood the significance of his path-finding role as first Protestant cantor. In organizing music pedagogy for the Protestant schools, he felt a sense of responsibility somewhat comparable to that of Luther in theology. He viewed his occupation as a calling from God—a Protestant middle-class conception.\(^2^7\) Considering his task partly in a preparatory light, he planned and organized his didactic writings carefully with the stated hope that more gifted writers would follow his example.\(^2^8\) By concentrating his powers on these pedagogical tasks, he established a solid foundation upon which others could build in their writing and composition.

In choosing the vernacular for this series of books on the art of music, Agricola was following the example of Luther, who had translated the Bible into German for all the people. It was not just for the pupils at Magdeburg or for that privileged class of those who could understand Latin that Agricola was writing, but "for the good and use of the young people of the entire German Land."\(^2^9\) It was

\(^2^7\)Funck, *Agricola*, pp. 39-41. This opinion was supported by Dr. Harold Grimm, Professor Emeritus in Reformation History at The Ohio State University, in a personal interview on July 18, 1975.

\(^2^8\)Agricola, *Figuralis*, fol. A iii\(^v\).

also under the influence of Luther and the Protestant middle-class ethos that Agricola strove for brevity and clarity in his works. Wishing to include only what was essential to the training of performers, he eliminated much of the philosophical speculation and citation of ancient authorities that occupy a large part of earlier treatises.

His first publication, printed by Rhau in 1528, was a German handbook of music fundamentals. Its original title was Ein kurtz Deudsche Musica. The extent of its popularity is indicated by the fact that it required a new printing in 1529 and yet another in 1533. Agricola was apparently satisfied with the work as it stood, for he made no changes of text in the later printings. Beginning with the second printing, however, he added a second set of four-voice Magnificats—one in each of the church modes. By the time of the third printing, his second and third treatises had appeared: Musica Instrumentalis Deudsch and Musica Figuralis Deudsch. In order to form an exact parallel with these titles, he changed the title of Ein kurtz Deudsche Musica to Musica Choralis Deudsch in 1533.

The hearty tone of his 1528 prefatory letter to Georg Rhau indicated an already-established friendship. Agricola addressed Rhau as "my especially beneficent friend and patron." He also said "you may further desire from me" a book on mensural music, suggesting that they
had already discussed the matter. While Rhau had published a number of Protestant books since 1524, the *Ein kurz Deudsche Musica* of 1528 by Agricola was the first of many significant works that Rhau was to publish in the area of music.

In the prefatory pages, Agricola gives three reasons for the work. (1) He intends to treat the subject in as brief and easy-to-understand a manner as possible, as previous treatises on music were so ponderous and wordy as to frighten away rather than to instruct the young. (2) He wants to train and teach young people properly, as urgently instructed by Luther in a public missive. (3) He hopes to enable young people using this handbook to praise and glorify God by means of all kinds of singing and playing; this is the foremost task of music according to the Protestant point of view. While the German mass, spiritual songs, and psalms which have been emanating from Wittenberg serve this purpose, the young must be able to perform such music in an appropriate manner. This is the purpose of his handbook—to provide them with instruction even if they have no teacher.

The greatest importance of this first book lies in its straightforward presentation of material, perhaps

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Agricola's most original contribution. The usual musica plana topics are found, including notes, solmization, intervals, and the eight church modes. It is the logical arrangement of contents, the clear and brief presentation, and the practical point of view with performance in mind that made the work such an influential model for many later books of this type that were published for use in other Protestant Latin schools in Germany, often with no credit given to Agricola.\textsuperscript{32}

His second book dealt with instrumental music, a field in which he was a most influential and significant pioneer. Unlike most of his contemporaries, Agricola rated instrumental music as highly as singing, so long as it was used to the honor and glory of God. He was one of the first to bring instrumental instruction into the school, especially using the recorders and bowed string instruments.\textsuperscript{33} The playing of instruments was of special value for boys with changing voices for whom singing is a problem.

In writing an instruction book on instrumental music in the German language, Agricola had a model and a precedent to follow—the Musica getutscht by Sebastien Virdung, which had appeared in 1511. Agricola found this

\textsuperscript{32} For examples, see below, pp. 50-52.

\textsuperscript{33} Funck, Agricola, p. 44.
work insufficiently clear to be used directly within the schools. It was not practical or extensive enough in its performance instructions, especially with regard to bowed string instruments. Moreover, he had in mind a special educational device: rhymed verse as a memory aid. Therefore he prepared a new work, *Musica Instrumentalis Deudsch*, and sent it to Georg Rhau only a few months after the first book; it appeared early the next year. This became Agricola’s best-known book, selling even more copies than Ein kurzt Deutsche Musica; additional printings appeared in 1530, 1533, and 1543. A completely revised edition was published in 1545, towards the end of his second grouping of publications (1538-1547). The editions of 1529 and 1545 were brought together in a new printing—partly in facsimile—by Robert Eitner in 1896. A study comparing the two editions—ideally with English translations of both—would certainly be warranted.

In the preface Agricola again takes to task writers who frighten away young people by overwhelming them with useless words and rules instead of diligently encouraging

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35. A translation of the 1529 edition and a comparison with other writings on instrumental music of the sixteenth and early seventeenth centuries are contained in "Martin Agricola's Musica Instrumentalis Deudsch: A translation" (Ph.D. dissertation, North Texas State University, 1972. Published on demand by University Microfilms, Ann Arbor, Mich., No. 72-24,188).
them with clear introductory instruction in the art. He intends this book, like the first, to be of use to amateurs as well as students—to anyone, in fact, who can read German. He has only harsh words for those who practice their art "for art's sake" rather than for "good Christian purposes." At the end of his prefatory letter he asks Rhau again, as he had done in the first book, to take pains with the printing and to guard against shameful slanderers.

In the body of the text, Agricola makes a threefold classification of instruments into those blown by wind, those having strings, and those made of metal that rings, such as bells or anvils. For each instrument or group of identically-played instruments (for example, instruments of different sizes within one family such as recorders), he gives a description and practical instructions for performance; Virdung, by contrast, only gives instructions for one instrument in each of the three categories, even though many instruments within a given category are not played at all alike. Agricola also describes the special notation or tablature used by a particular instrument or group of instruments. His arrangement of the wind instruments and of the instruments that ring is similar to that of Virdung. In the category of string instruments, however, there are important differences. Specifically, Virdung gives much less space to bowed instruments, which

36 Agricola, Instrumentalis (1529), folios A' and Aii.
he categorizes as "of no use," whereas Agricola, quite ahead of his time, employs instruments of the viol family in school, considering their beautiful tone the closest to the human voice.\(^\text{37}\) He warns the beginner not to attempt those few bowed instruments that have no frets.\(^\text{38}\) His knowledgeable discussion of Italian and Polish string instruments calls attention to the musical practice of these countries as a source of his early fondness for bowed instruments.

In the revised edition of 1545 Agricola no longer deals with tablatures. He gives additional space to playing techniques for flutes and bowed instruments and to the exact measurement of fret placements, whose tuning he bases on the use of the venerable monochord. There is also an increase in mathematical speculation, including calculations of interval ratios and proportions.

Taken as a whole, the contributions of Agricola to instrumental pedagogy are far greater than those of Virdung. Nevertheless, the debt he owes to his predecessor cannot be ignored, especially as some of his and Virdung's woodcuts are nearly identical (a few are reversed in Agricola's book)!

Musica Figuralis Deudsch, the third and final book of Agricola's German trilogy, seems to have taken longer

\(^{37}\)Funck, Agricola, p. 107.

\(^{38}\)Agricola, Instrumentalis (1529), fol. G.
to prepare. Although his intention to write it had already been announced in the preface to the 1528 *Ein kurzt Deudsche Musica*, it did not appear until 1532, three years after the second book. A second edition appeared in 1545.

Agricola dedicated the work to Councilman Heinrich Harsleben, with whom he had made music daily for many years and whom he had taught the flute and string instruments. Harsleben had requested a book on mensural music with which he could occupy his advancing years. Many of Agricola's friends had also requested such a book from him. Furthermore, it was difficult to understand instrumental music without a knowledge of mensural music. Above all, Agricola intended the book to be of help to choirs at Protestant Latin schools that had been established in Magdeburg, Hamburg, Lübeck, and elsewhere not long before. The preface ends with an exhortation to all musicians and poets urging them to desist from their shameful secular works, using their great gifts instead for the praise of God and the benefit of their neighbor.

This dedicatory letter is followed by a foreword to the reader, essentially a diatribe against those who scorn education and the arts (possibly directed against those who took their children out of the school when it became Protestant). Here Agricola was lamenting the lack of honorable behavior, warning of dire consequences for those improperly brought up and educated. He observed that the
poor claim they cannot spare their children from work while
the rich think their children can get along without schooling. Agricola was sounding a warning in the hope that some
would act before there developed a shortage of learned
clergy, teachers, and other professional people without
whom it is impossible to keep any good discipline within
the land.

Twenty additional pages of introduction give the
traditional references to music from the ancient world so
often found in such treatises, largely intermixed with fur­
ther observations on Agricola's own era. There are fifteen
stories in rhymed verse, ostensibly recounting the exten­
sive and excellent use of music among the ancients, but
often—through disadvantageous comparison with the low
state of the art in his own time—returning to the previous
diatribe against unlearned and uncultured people. The con­
clusion recounts the traditional assertions that music was
invented by Jubal and furthered by Moses, Pythagoras,
Boethius, and many others. This was as close to music his­
tory as most Renaissance writers came.

In the first chapter Agricola describes figural or
mensural music:

Mensural or figural music is an art by which we
thoroughly learn all that is necessary for measured
song. Now, it is called figural because its notes
are made with many kinds of figures and characters,
. . . But it is called mensural or one that is
measured because all of its notes are not of one
kind . . . Rather, each note in particular is
measured according to the evidence of the gradations and symbols. One note is larger or smaller in value than another. 39

The starting point of measured music, then, is the time values of the various notes and rests. This was a complicated matter in the notation of the time; chapter headings indicate subjects that required consideration:
(1) The Description of Music. (2) Notes and Rests.
(9) Dots. (10) Imperfection and blackening of notes.
(11) Alteration or doubling of notes. (12) Proportions.
The same topics were covered by Franchinus Gafurius in the second and fourth books of his 1496 Practica musicae, on which Musica Figuralis Deudsch is largely based. Gafurius is the authority whom Agricola quoted directly in matters of notation, although he cited ancient authorities quite knowledgeably on other subjects.

Agricola organized an original presentation of the subject matter. Always aiming for the concise and practical, he rearranged the order in which the topics were introduced, omitted a considerable amount of Gafurius's discussion, and often changed the points of emphasis. One of the most valuable contributions Agricola made was to

39Agricola, Figuralis, fol. B viiiV.
provide musical examples—normally four-voice compositions—illustrating the points discussed.

The two-hundred-page treatise concludes with a chapter on proportions that is brief and useful. Agricola then expanded on this subject in an additional forty-page booklet, Von den Proporcionibus; it appeared concurrently as an appendix to the larger work. He, like Gafurius, felt an obligation to treat the subject so thoroughly as to reach the frontiers of theoretical possibility. However, his approach is quite different from that of Gafurius. There are only two additional illustrations; most of the musical examples of proportions appeared in the concluding chapter of the previous treatise. Only one uncommon proportion, \(\frac{7}{2}\), is illustrated in the music. Instead, there are many tables showing relative values of notes in certain proportions for particular mensuration signs. Comprehensive treatments of proportions became increasingly rare in writings on mensural music after Agricola's time. The era was past in which they were of educational interest to practising musicians; indeed, the more complicated proportions had never served any practical purpose.

With Musica Figuralis Deudsch and its accompanying little treatise Von den Proporcionibus, Agricola completed his original plan to write in German on all three areas of musica practica (which for him meant musical performance) and published no new work during the next six years.
Although in two of his prefaces he expressed an interest in writing a book on composition, and although he showed an increasing interest in mathematical speculation in later writings, he never wrote treatises on these two subjects, *musica poetica* and *musica theorica*, perhaps because he was primarily interested in teaching schoolboys and amateurs to sing and play.

School, Church, and City in the 1530s

Agricola was fortunate in having an understanding and sympathetic superior in office during the time in which he was writing *Musica Figuralis Deudsch*. Georg Major, the brilliant young rector of the Protestant Latin school at Magdeburg, had sung as a boy in the choir of Frederick the Wise, Duke of Saxony, where he experienced the great Netherlands masterpieces. Major took charge of the Magdeburg school in 1529 and immediately supervised its second expansion, the move into the Franciscan Cloister. Within a few years its fame had spread throughout the Protestant lands; Luther himself praised it in a table talk:

> Magdeburg is arranged in a fine way, the crown of all schools, in which 600 boys are enrolled to their advantage. Georg Major has done well.

A school order or constitution was drawn up in the

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40 Agricola, *Choralis*, fol. A iii, and *Figuralis*, fol. C.

early 1530s. It is nearly certain that Agricola assisted Major in the preparation of this curriculum, an influential prototype that was followed by many other schools. Music was given an important role in the program. Everyone in the school joined together in song at certain times each day; a schedule of specified hymns for particular days was established. Apparently many hymns by Agricola were sung. Some of these appeared in collections published between 1544 and 1612, the most notable being Agricola's *Melodiae scholasticae* (1557); the order of hymns as found therein was a model for many scholastic collections. A few other hymns by Agricola survived the destruction of the Thirty Years' War and the intervening centuries in manuscripts.

The five upper school classes received music instruction four hours a week (Wednesday afternoons were free); the four lower school classes only took part in the general singing when all of the classes met together. There were also many kinds of dramatic productions—almost exclusively Biblical—presented by the school; much music of various kinds was written for and presented at these events as well.

Musical instruction in the school was of a practical

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43 Wittenberg: Georg Rhau Erben. For other collections with music by Agricola, see below, pp. 46 and 49.
44 For a list of manuscripts containing music by Agricola, see Funck, *Agricola*, p. 149.
nature only, preparing the students for performance in church, school, and home. The scientific and philosophical study of music, reserved for the more gifted, was still the province of the university; hence Agricola did not teach *musica theorica* in the school. It is not surprising that he did not write a book on this subject. It was important for the schoolboys to learn the German hymns, odes, and spiritual songs thoroughly in order to help the congregation in general church singing (which was from memory rather than printed music). In addition, the boys learned Latin polyphonic compositions to sing in the church as part of a separate choir. Collections of Protestant German songs were intended for the congregation to use, while collections of Latin sacred music were intended for choir members.

The *Ulrichskirche* became the leading church in Magdeburg during the Reformation. Since its members were mostly wealthy landowners, it was singularly appropriate that this was the church at which Agricola—whose background included farming—regularly directed the choir in polyphonic music. The rest of the churches were provided only with monophonic music at first; as choirs were developed under Agricola's leadership, they began to sing on a rotating basis at these other churches. Teachers of subjects other than music often led the choirs of boys in the various churches during the worship services, and

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46 Ibid., pp. 53-55.
also during other ceremonies for which music was provided. These included various celebrations and festivals in the school and in the city, but especially weddings and funerals. The boys and their directors received financial remuneration for these appearances. Indigent boys with good, well-trained voices could further supplement their income by joining roving bands of choirboys who would sing in front of citizens' houses. The older boys had the responsibility of keeping the level of music "pious, sacred, and chaste."47

Agricola made a singular contribution of quite a different nature to the city of Magdeburg in the 1530s: a set of bells that he devised for the 1425 clock on the city hall. Each quarter-hour it would play two verses of a familiar psalm tune. It too was lost in the 1631 destruction of the city during the Thirty Years' War.48

Agricola's Musical Compositions

Throughout his life Agricola apparently remained active as a composer, providing over two hundred four-voice musical examples for his treatises as well as many sacred hymns, odes, and motets for use in church and school—evidenced by contemporary accounts as well as by those works

47 Ibid., pp. 56-57.
48 Ibid., p. 70.
that have survived in print and in manuscript form. The compositions of Agricola display a heavy but sure touch, reflecting the influence of the Netherlands masters, the simple German song, and Gregorian chant. Many are canonically or extensively imitative. Agricola always preferred to demonstrate the theoretical by means of the useful and practical. His treatise on Musica Choralis Deudsch offers seventy-two brief but musical four-voice examples in note-against-note cantional style—homophonic, like chorales and hymns. The three- to five-voice examples in Musica Figuralis Deudsch are on a larger scale and often contain complexities to serve pedagogical purposes. Often these complexities are confined to that aspect of mensural notation being illustrated; when the solution to the difficulty is found—sometimes included near the example by Agricola in simpler notation—an ingratiating musical piece is disclosed. His musical style ranges from the complicated examples of multiple proportions found at the close of the little 1532 treatise Von den Proporcionibus to the simple monophonic scripture settings in the 1541 Sangbüchlein. Agricola often stated in prefaces to his works that music was intended to serve in praising and glorifying God. It is not surprising, therefore, that no compositions by him

49 For a discussion of this, see below, pp. 46-50.
with secular texts are to be found.\textsuperscript{50}

\textbf{Writings, Mostly in Latin, of the Middle Years: 1538-45}

After the strong tendency at the beginning of the Reformation to replace Latin with the vernacular both in the school and in the church, as in the \textit{German Mass} of 1526, there developed in the 1530s a humanistic desire to return to the use of Latin as much as possible in the Protestant schools. Luther was a strong motivating force behind this trend; he also encouraged a return to Latin in the church for those numbers sung by the choir. More and more collections of sacred music employing this language appeared in many places. Especially well known and significant was the series of Latin motets published by Georg Rhau from 1538 to 1544. Latin, therefore, was the language used for the growing number of music instruction books for the Protestant schools published during this time.\textsuperscript{51} In the preface to the 1530 and later editions of his \textit{Enchiridion utriusque musicae}, Georg Rhau expresses the wish that the treatises of Agricola, "a musician of wise erudition and our singular friend," existed in Latin

\textsuperscript{50}For a discussion of Agricola's compositions, including those in the instruction books, as well as a listing of other sources--printed collections of music and unpublished manuscripts--see Funck, \textit{Agricola}, pp. 123-49.

\textsuperscript{51}For a discussion of the influence of Agricola's works on the contents of such books, see below, pp. 50-52.
because "nothing higher in quality could be desired."\textsuperscript{52}

Although he could no longer use his German treatises in the schools in view of this demand for Latin, Agricola did not yet undertake to write a complete textbook in this language. He had not received much income from the sale of his first three books, despite the additional editions required for each of them. More disappointing was the lack of recognition and appreciation of his work by the local citizens, and especially their unwillingness to provide adequate compensation to those who taught in the Magdeburg school.

Agricola therefore introduced into the schools a handbook that had won wide acceptance in Leipzig and elsewhere, the \textit{Musicorum libri quattuor} of Venceslaus Philomathes (Vienna, 1512), which may have come to Agricola's attention through a 1534 edition printed by Rhau. It was ideal for use in the school because the hexameter verse in which it was written made it easy for the pupils to learn the rules by heart.

Because of its brevity, however, this work of Philomathes could not be used by beginners without considerable clarification and amplification. Therefore, Agricola prepared an edition of the first book of Philomathes' work together with commentaries by various writers,  

\textsuperscript{52}3d ed. (Wittenberg, 1530) reprinted in 1531 and 1532; 4th ed. (1535) reprinted in 1536, 1538, 1546, (posthumously) 1551, 1552, and 1553; fol. A iii.
and to this he added appropriate examples. This book, *Scholia in musicam planam Venceslai Philomatis* . . . , appeared in 1538. Because Agricola felt an understanding of the eight church modes to be most essential, he added an appendix, *Libellus de octo tonorum regularum compositione*, which included musical examples in each mode for his pupils to learn together with commentary in rhymed verse similar to that of Philomathes.

Although the name of the printer is not known, the *Scholia* was not printed by Georg Rhau, probably as a result of a wish by Agricola to give the project to Michael Lotther, the local printer in Magdeburg. The attempt was apparently not very successful because of the difficulty in setting the type for the elaborate musical examples, the most valuable portion of the book. In a letter to Rhau, Agricola said that he had to delete the most extensive examples and dictate them to his pupils directly. Even those examples that were printed have not come down to us; the two known copies of the book are incomplete, lacking title page, tables, and examples.53

By the late 1530s, the school had reached a high point both in size and renown, producing many alumni who would later become famous. More students were showing an

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interest in music and performing to Agricola's satisfaction.54 These happy conditions were cut tragically short early in 1539 by a catastrophic plague apparently brought on by a flood of the Elbe river. Many of the students were struck down by the raging pestilence; the rest fled. Although all school activity was suspended, Agricola remained in Magdeburg and planned the best way to help his students upon their eventual return. Working together with him was Joachim Woltersdorf, the rector of the school since 1537. A less demanding music instruction book would now be required for students whose schooling had been interrupted. Agricola started over from the beginning, reducing the art of music to its most basic fundamentals, and prepared a little book only thirty folios in length, *Rudimenta musices, quibus canendi artificium compendiosissime complexum* . . . It was printed by Georg Rhau in the same year, 1539.

Following the title page comes a dedication by Agricola to his brother-in-law, the attorney Dr. Georg Klocken (Glocke) of Schwiebus, who had praised his previous works.55 Agricola here explained the need for the book after the plague, and then, as in the books written in German, he asked for help in defending himself against

54 *Agricola, Rudimenta musices ...* (Wittenberg: Georg Rhau, 1539), fol. A ii.
shameful slander. Next is found a preface by Woltersdorf, the rector, urging the students to make diligent efforts, especially in the art of music set forth in such admirable brevity by Agricola. A colleague, Vincent Ceddin, also praised the work's concise format in verses immediately after Woltersdorf's preface and again at the end of the book.

During the next two years Agricola was preparing another book in order to fulfill two further needs in the period after the plague. The first was the need of the laity--for whom Agricola again used the German language, since many were unlearned in Latin--for a book of the briefest and most basic music fundamentals, like the one he had written for the schoolboys. To this end, Agricola prepared a German version of his *Rudimenta* to be the initial part of a new book. The second need--a continuing one--was for suitable Protestant sacred music. For this purpose, Agricola composed a collection of melodies and of rhymed German texts from the gospels arranged according to the readings for all the Sundays of the church year. This was the first time that Protestant songs were so organized, the beginning of a long line of such collections. The book was printed in Magdeburg by Michael Lotther in 1541. Its complete title is *Ein Sangbüchlein aller Sontags Evangelien.*

Eine kurtze Deudtsche Leyen Musica / mit sampt den Evangelien durchs gantze Jar / auff alle Sontage / für die
In the preface Agricola states that, in contrast to his previous works, the present book is intended expressly for the layman:

So that anyone for whom the other music books may be too difficult can learn to ... sing a common song easily ... and be led to sing such Christian songs in an artistic manner ... 56

He gives reasons for putting the gospels into song and rhyme, keeping church, school, and home use in mind:

First, so that our schoolchildren might read or sing them all the more easily in church, and make them more understandable than before for the listeners. Second, so that laymen, in singing these songs, do not grow tired as

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quickly as when reading prose, but come to have all the more desire for them, through the noble [art of] music. And so we all might in time learn them by heart together, as we do the Lord's Prayer, believe and act upon them, and finally be blessed.57

The preface also affirms that these verses, which adhere closely to their scriptural models, may be sung in the religious services using the already common practice of alternation:

On these melodies one may have the following gospels sung, both in Vespers after or in place of the Magnificat, and in place of the Epistle in masses, either by the laity alone or with the choir on alternating verses. And one may let the organ play in between in the same mode, in order that this most noble song be carried on all the more splendidly in praise of God.58

The thirty-page preface begins with a verbose letter of dedication to his great benefactor and patron, Chamberlain Heinrich Alemann. It contains many biographical references. As mentioned earlier, it is here that Agricola stated that he received free room and board for fourteen years, for which he expressed his thanks. A letter of thanks to Heinrich's son, Agricola's "honorable former disciple" Ebeling Alemann, is also verbose. As usual, references to his adversaries are found. He said that he sometimes had to suffer scorn and ridicule behind his back for his efforts, for when one cast pearls before swine, they would trample them with their dirty feet. All the more, therefore, did he value the understanding and support of the aristocratic families that provided the stipend and

57Ibid., p. 71.  
58Ibid., p. 72.
benefits of his position and freely opened their homes to him.

The preface also demonstrates Agricola's familiarity with the writings of Luther. He provided a German translation of Luther's Latin preface to the 1538 motet collection of Georg Rhau, in which Luther extolled music as an excellent divine gift. Finally, Agricola added an extensive discussion of the usefulness of the schools, which shows the influence of Luther's writings about this subject— the Missive of 1524 and the School Sermon of 1530, That One Should Keep the Children in School. Still, Agricola also departed considerably from Luther, taking into account the conditions at Magdeburg and his own conception of the purpose of the school. 59

The Magdeburg school had in the meantime recovered from the terrible blow it had been dealt by the plague of 1539. The number of students and the level of instruction returned to their previous high point. In 1543 Luther spoke of the school as "our Lord God's wellspring of youths in the land of Saxony." 60

The position of music instruction within the school had also reached a new peak. Music served as a subject for the formal public school debates, which dealt with fundamental questions concerning the seven liberal arts.

59 Ibid., pp. 73-75.
60 Wolter, Magdeburg, p. 168.
Agricola prepared a book for these disputations in which he arranged the materials of music in question-and-answer form. He may have been inspired by the model of Spangenberg's 1536 Quaestiones, whose contents admittedly had been based on Agricola's previous works. Agricola's book in this format, Quaestiones vulgatiores in musicam (The More Common Questions on Music), was published in Magdeburg by Lotther in 1543. The preface of this work deals principally with the musical opinions and practice of the ancient world, giving particular emphasis to the works of Macrobius and Quintilian. According to Funck, Agricola shows a greater familiarity than most Protestant music teachers of his time with the writings of the ancient and medieval theorists—not just from citations, but from having studied their works himself. As regards the body of the text, Frederick Sternfeld says "Martin Agricola's Quaestiones vulgatiores shows how, in the computation of intervals, proportions, et cetera, the combination of music and arithmetic existed in textbook and classroom."

Agricola now turned to a complete revision of his Musica Instrumentalis Deudsch, whose popularity and widespread influence were indicated by the appearance of four printings of the first edition in 1529, 1530, 1532, and 1542.

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61 Funck, Agricola, p. 76; see also p. 120.

Agricola had not remained silent on this subject during the intervening years. His special interest in instrumental music, which he ranked on an equal plane with music that is sung (as his contemporaries did not), was demonstrated not only by the treatise of 1529 and by his pioneering introduction of instrumental instruction into the school, but also by the favorable pronouncements on instrumental performance that are found in his other treatises. In the foreword to his Rudimenta, for instance, he reaffirms that instruments can be used just as well as the human voice to the glory of God; they were praised in this way by Moses, David, and others mentioned in the Bible. In the Sangbäuchlein he gives special praise to the organ: there could be nothing better in churches than an organ that is well designed and installed (zugericht). In his Quaestiones he makes references to famous instrumentalists of antiquity.  

Through Agricola's efforts, the Magdeburg city school had been the starting point for the instrumental instruction that spread to many other Protestant Latin schools of Saxony. He maintained this school's role as the academic center of such activity with the revised 1545 edition of Musica Instrumentalis Deutscher, for which he drew upon fifteen additional years of practical experience. He clarified portions of his original work that

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63 Funck, Agricola, pp. 76-77.
were more difficult for the students to grasp. The principal changes in the revised edition are the deletion of detailed tablature explanations and the addition of very detailed tuning explanations for fretted instruments with the monochord used for demonstration. Both editions were intended for students as well as amateurs—anyone able to read only German; both made use of rhymed verse to help learning through memorization.

Once again the work was dedicated to Georg Rhau. The preface is largely directed against the adversaries to whom Agricola had referred in many previous prefaces. At last they are identified as those who adhered to the Church of Rome and followed the hated Pope—above all, the clerics of the Magdeburg Cathedral, who continued to oppose the Reformation until the cathedral was closed by force in 1546. In the preface, the cantor went on to say that he would have been discouraged from publishing his treatises by their great scorn for him and his program of instrumental instruction in the school if he did not know that they in their isolation were not knowledgeable in the field of instrumental music, whereas both Luther and the Bible supported Agricola's position. These personal attacks against him only served to strengthen his hatred for the Papacy and all that surrounded it, which he now equated with the Anti-Christ. When after a hundred verses of diatribe he seemed to exhaust his supply of invective, he
directed the Pope to look for a "powerful storm of condemnation" in the writing by Luther that had just been published: Against the Papacy—a Title Instituted in Rome by the Devil.

Magdeburg's Successful Struggle Against Religious Tyranny

Agricola's flood of anti-papal invective was only one reflection of the serious dimensions that the religious strife assumed during this time. Another was the forcible closing of the Magdeburg Cathedral by the city council in 1546 at the request of the citizens, mentioned above. In 1531 the Schmalkaldic League had been formed, with Magdeburg and Bremen as its first members, to offset the coalition of Catholic princes. When this league was broken up by Emperor Charles V's campaign in 1547, Magdeburg proudly refused to surrender and was excommunicated. With high spirits and strong feelings, the city held out against the "Interim"—a compromise statement of faith that the emperor dictated and established by force in 1548. Becoming a haven for the enemies of the Interim, Magdeburg found more and more of the persecuted clergy taking refuge behind her walls, including former Superintendent Amsdorf—who had founded the municipal school—and other confederates of Luther. As the Protestant center of hostilities, Magdeburg was the point of origin from which most of the caricatures,
woodcuts, mocking poems and songs, and other propaganda against the Interim spread to all parts of the land.  

Although Agricola left little autobiographical information after 1545, there is evidence to support the supposition that he was a strong opponent of the Interim. Two compositions by him in opposition to the Interim survived the destruction of the Thirty Years' War. This was a fortunate result of their having been printed in the 1557 Melodiae scholasticae. They include a responsory on the siege of the city and a four-voice setting of satiric verse; the latter is the only polyphonic work in opposition to the Interim known to exist.

Under the high command of Moritz of Saxony, Catholic forces besieged Magdeburg in 1550-51 in an attempt to enforce the bans against the city. The citizens' alliance with an enlisted army (the Alemann family was able to muster 2000 troops) gave them strength to withstand the siege with patience. A political change of mind by the Elector Moritz made a compromise possible: as long as he did not interfere with their religion, the citizens of Magdeburg were willing to recognize his authority.

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64 Funck, Agricola, pp. 81-82.
66 Wolter, Magdeburg, p. 110.
Agricola's Productive Last Years

Martin Agricola retained his position as cantor of the Magdeburg school throughout his life, despite trials and vexations during unstable times. He was never able to achieve financial independence; in 1545 he still had to approach the parents of his students for a larger stipend or some kind of supplement. Nevertheless, he was well provided for by the Alemanns, with whom he lived; his lot, moreover, was no harder than that of any other Protestant educator, including the rector. Minimal monetary compensation was the normal lot of such public servants.

Only a few reports by his contemporaries after his death in 1556 give us any information about the last decade of Agricola's life. One additional publication by him has recently come to light: Musica ex prioribus a me aeditis musicis, excerpta, pro primisque, Parthenopolitanae Scholae, tyrnonibus digesta (A Music Book Edited from Prior Music Books by Me, Excerpted as a Digest for the First Beginners of the Magdeburg School). Printed in Magdeburg by Michael Lotther in 1547, it is forty-eight folios in length.67 Judging by the title, this Latin "digest" by Agricola of earlier treatises may well be similar to, or identical with, the first part of the posthumous Duo libri musices.68

68 Wittenberg: Georg Rhau Erben, 1561.
Agricola apparently composed much music for the growing needs of the Lutheran movement, but little of it survived the ravages of religious strife. Ten of his works appeared in the 1552 collection of Georg Thymus, *Hymni aliquot sacri*. Thymus, rector of the school at Zwickau from 1548 on, had come to Magdeburg as a teacher in 1544; he may have studied music with Agricola. Two of Agricola's closest friends and associates spoke about the musical activity and productivity of the cantor's last year of life. Gottschalk Praetorius was the rector of the Magdeburg school who in 1553 revised the curriculum that had been drawn up by Georg Major two decades before. At the end of June, 1556, three weeks after Agricola's death, Praetorius said that they had been working together to assemble a collection of hymns for Georg Fabricius. The collection, *Melodiae scholasticae*, was published by Georg Rhau's successors the following year, 1557. It contains many compositions by Agricola, some of which had already appeared in the Thymus collection. Siegfried Sack was the first Protestant pastor of the Magdeburg Cathedral, editor of Agricola's posthumous works, and later rector of the Magdeburg school after Praetorius. Sack wrote an

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69 Zwickau: Goslar, 1552.
71 Ibid., p. 84.
72 Ibid., p. 137.
introductory letter of dedication for Agricola's *Duo libri musices*. There he reports that the work was put together by Agricola in the winter of 1555-56.\textsuperscript{73} Sack sent this tripartite work to the successors of Georg Rhauc, who published it five years after Agricola's death. It includes concise Latin instruction in *musica choralis* and *musica figuralis* as well as several dozen pages of instrumental pieces.\textsuperscript{74}

Martin Agricola died early in the evening of June 10, 1556; this was reported by his trusted friend Siegfried Sack in the letter mentioned above. His loss occasioned much sadness throughout the city on the part of many who had shared with him experiences from the 1524 emergence of the Reformation in Magdeburg through such ordeals as the 1539 plague, the 1548 imposition of the Interim, and the 1550-51 siege to the preservation of their religious freedom.

Beyond the city, voices continued to be raised after his death in praise of Agricola the teacher, writer, and organizer of Protestant school music, as well as Agricola the composer. Georg Fabricius, renowned director of the royal school at Meissen, praised his merits as a composer, naming him first in a series of "*viri ingeniosi et clari*

\textsuperscript{73}Agricola, *Duo libri*, folios A ii-A iiiii.

\textsuperscript{74}New edition of the instrumental pieces by Heinz Funck, *Martin Agricola, Instrumentische Gesänge* (Wolfenbüttel: Kallmeyer, 1933).
musicici," a list of composers that continues with Walther, Scandellus, and Le Maistre. Fabricius also wrote an epitaph for Agricola's gravestone, a eulogy asserting that no one could compare with Agricola in merit. Others who expressed admiration included Wolfgang Figulus, cantor of the Lübben municipal school and a student of Agricola, as well as Praetorius, Sack, and some of the city fathers.

Although a complete edition of Agricola's works was proposed by Sack in the introductory letter to Duo libri musices, no further publications of such a project appeared. Agricola's manuscripts were carefully stored with copies of his printed works in the little house that came to be provided for the cantor on the school street. They were known to his successors there; Friederich Weissensee, the fourth cantor of the Magdeburg school, mentioned them in 1602.

The destruction of the city in 1631 during the Thirty Years' War put an end to these unpublished works and very greatly diminished the stature of their creator. Even Agricola's grave and its monument were lost from view.

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75In the preface to the fourth and fifth books of hymns in a later edition of Georgii Fabricii Chemnicensis, viri clarissimi, Poematum Sacrorum Libri XXV (Basel, 1567).

76Funck, Agricola, p. 62. For a discussion of Figulus' new editions of writings and music by Agricola, see below, pp. 49 and 52.

77He referred to them as "manuscripta monumenta" in the preface to his Opus melicum (Magdeburg, 1602), as cited by Funck in Agricola, p. 87.
Agricola's Influence on His Contemporaries

Beginning in his own lifetime, Agricola's fame as both composer and author reached far beyond the walls of Magdeburg. As early as 1533 Ortholf Fuchsperger, a Swiss judge who was writing his own discourses in German, gave Agricola praise for bringing music's "most hidden secrets" into clear German. Manuscripts containing compositions by Agricola could be found in Leipzig and Zwickau. Some of his works were included in printed collections of music. In addition to Hymni aliquot, the 1552 collection by Georg Thymus mentioned earlier, these include the famous 1544 collection by Georg Rhau in Wittenberg, Neue Deudsche geistliche Gesenge fur die gemeinen Schulen, as well as collections by Stephani in 1567 and Figulus in 1575. Also, further editions of Agricola's own influential collection of 1557, Melodiae scholasticae, were published not only in Magdeburg in 1567 and 1612, but also in Mühlhausen in 1578, supporting Frederick Sternfeld's assertion that

78 Funck, Agricola, p. 47, n. 15.
79 Ibid., pp. 137-145, 149.
81 Clemens Stephani, Suavissimae et iucundissimae harmoniae . . . (Buchau, 1567); Wolfgangi Figuli Numbergani [sic] / Hymni sacri / et scholasticae . . . (Leipzig: Michael Lantzenberger, 1604), the only surviving edition, listed as 1604 in RISM, B VIII:150. See Funck, Agricola, pp. 130, 136.
the collection served students "well outside" the area of Magdeburg. As we have seen, Georg Fabricius had high praise for Agricola as a composer. Not only did he mention Agricola first and Johann Walther second in a list of composers, as mentioned above, but also, in the preface to an early Christian poetry collection, he mentions Agricola second after Ludwig Senfl in another list of composers.  

The influence of Agricola's German treatises was already evident within the 1530s. In addition to the 1533 compliment by Fuchsperger mentioned above, Georg Rhau had praise for the first two of these works in the preface to revised editions of his Enchiridion utriusque musice practice, beginning with that of 1530. The great extent of the influence of Agricola's Musica Instrumentalis Deudsch is shown by the fact that five editions of it were published from 1529 to 1545. Many books similar to those of Agricola except for their use of Latin were written for the use of Protestant schools in many places. Some of them show evidence of that most sincere form of flattery, imitation. Revised editions of Georg Rhau's Enchiridion utriusque ... from 1530 onward are modelled chapter for chapter on Agricola's 1528 treatise, as is the Musica Nicolai Listenii published by Rhau in 1537. Johann


83 Poetarum veterum ... (Basel, 1564). See Funck, Agricola, pp. 60, 85-86, 135.
Spangenberg acknowledges in a laudatory preface to his *Quaestiones* of 1536 that he has put the works of Agricola into question-and-answer form.\(^{84}\) Sternfeld says "Spangenberg's and Agricola's *Quaestiones* and similar publications are the only printed remains of a widespread practice."\(^{85}\) Some writers do not mention their source. One is Georg Donat, whose unpublished student notebook of circa 1543 is based entirely on the Agricola treatises.\(^{86}\) As early as 1533, in his *Rudimenta musicae*, Nicholas Listenius took many charts and tables from *Musica Figuralis Deudsch* as well as the practice of using canonic musical examples. A 1546 tract by Basilius Amerbach of Basel is essentially a question-and-answer digest of both the Agricola and Listenius works. Unpublished materials also may be found that reveal the influence of Agricola.\(^{87}\)

Evidence of the continued influence of Agricola's works may be found in various publications from the second half of the sixteenth century. The 1571 treatise of Gallus


\(^{87}\) Funck, *Agricola*, p. 120.
Dressler, his successor at the Magdeburg school, included music by Agricola. The 1541 Sangbüchlein with its small prefatory book of rudiments was revised by Wolfgang Figulus for his own students and published in 1560, 1563, and 1568. Musical examples by Agricola were also used in a treatise by Friedrich Beurhusius published in 1573. References to Agricola are made by Friedrich Weissensee in his 1602 treatise and by Michael Praetorius in 1619 in the second volume of his Syntagma Musica. A grim silence follows the destruction of the Thirty Years' War; there is no further mention of Agricola until the end of the century.

A Survey of Later References to Agricola

The extent to which Agricola's reputation diminished after the Thirty Years' War may be observed by comparing the many words of praise given him in the sixteenth century with the brief and often cursory references found in most lexicons of the last three hundred years. He is

88 *Musicae practicae elementa* (Magdeburg: Wolfggang Kirchner, 1571), e.g. fol. N vi.


mentioned only as the writer of *Musica Instrumentalis Deudsch* by Wolfgang Caspar Printz in 1690; his example has been followed by a number of minor music dictionaries. Johann Gottfried Walther gave more attention to Agricola's biography and bibliography in his 1732 lexicon. The first monograph devoted to him is a twenty-two-page study by a rector of the Magdeburg school, Elias Caspar Reichard. Written in 1758, it appeared three years later in the fifth volume of Friedrich W. Marpurg's *Historisch-Kritische Beiträge zur Aufnahme der Musik*. Sir John Hawkins expressed the opinion, in his 1776 *General History of the Science and Practice of Music*, that Agricola completely revised his *Musica Instrumentalis Deudsch* because of the self-admitted incomprehensibility of the first edition. J. N. Forkel provided more thorough biographical and bibliographical treatment in his 1792 lexicon. Further biographical details were provided by E. L. Gerber in the


expanded 1812-14 edition of his lexicon. This material was taken into many other nineteenth-century music dictionaries, including the *Biographie Universelle* by François J. Fétis. Fétis expanded the discussion of Agricola's theory writings and also considered his compositions. A. W. Ambros, however, followed the practice of many histories of music in giving only passing references to Agricola as the author of *Musica Instrumentalis Deudsch*. As an early Reformation composer, Agricola was briefly discussed in the landmark studies of Reformation music by Carl von Winterfeld, Edvard E. Koch, and Rochus von Liliencron. In Friedrich Blume's 1931 study *Die evangelische Kirchenmusik* and its 1974 revised edition in English, *Protestant Church Music*, Agricola once again was only mentioned briefly in passing references.

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school musician, Agricola was discussed in studies by A. Prüfer (with a modern edition of *Melodiae scholasticae*), F. Sannemann, and G. Schünemann. Notational aspects of Agricola's music are treated in passing references by Johann Wolf in both volumes of his *Handbuch der Notationskunde*, while Agricola's theoretical writings about notation are compared with those of Gafurius and others in studies by Ernst Praetorius and J. A. Bank.

Important studies focusing upon Martin Agricola have been written in the twentieth century. They include "Musikalisches aus unseres Herrgotts Kanzlei" by Bernhard Engelke from the book *Aus unsres Herrgotts Kanzlei: Magdeburg in Vergangenheit und Gegenwart*; Alt-Magdeburger Musikschriften, "Alt-Magdeburger Musikstätten," and


105 Ed. Friedrich H. Danneil (Magdeburg, 1924).

106 Magdeburg, 1932.
"Musikgeschichte Magdeburgs" by E. Valentin, the last two articles from the Magdeburger Geschichtsblätter (1932-33); and other studies—especially those by Engelke and Valentin—appearing in various issues of that periodical. Most extensive and still the central study about Agricola is the dissertation by Heinz Funck published in 1933, Martin Agricola: Ein frühprotestantischer Schulmusiker;¹⁰⁷ it has served as a frequently-cited point of departure for this introduction. More limited in scope is the 1972 dissertation by William Hollaway, Martin Agricola's Musica Instrumentalis Deutsch: A Translation.¹⁰⁸ Of particular value is an enlightening discussion in which Agricola's 1529 treatise is compared with other sixteenth- and early seventeenth-century writings on instrumental music, including Musica getutscht by Virdung and the 1545 revised edition of Agricola's own work.

Some music survey books, such as those by H. J. Moser, appear to have incorporated new findings and new viewpoints rapidly;¹⁰⁹ others continue to mention Agricola in passing references only in connection with his writings on instrumental music and a few of his Protestant songs.

¹⁰⁷Wolfenbüttel: Georg Kallmeyer Verlag, 1933.

¹⁰⁸Ph.D. dissertation, North Texas State University, 1972. Published on demand by University Microfilms, Ann Arbor, Mich., No. 72-24,188.

This is largely true of *Music in the Renaissance* by Gustave Reese, and even of so recent a tome as the 1968 fourth volume of *The New Oxford History of Music*, although the article in this volume by Gerald Hayes, "Instruments and Instrumental Notation," gives more extensive coverage to Agricola's writings on instrumental music.

Until recently, the only thorough bibliographic study of Agricola's works was the *Biographisch-bibliographisches Quellen-lexikon* by Robert Eitner from the turn of the century. During the last two decades, however, a monumental series of international musicological projects under the title *Répertoire International des Sources Musicales* (RISM for short) have been undertaken to update and replace the Eitner work. Four of these series provide as complete a listing as current scholarship permits of Agricola's printed books and music, together with pertinent bibliographic data such as the name of each library known to possess a copy of a particular work. They are: A I, alphabetical list of publications of individual composers; B I, chronological list of collections of more than one

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composer; B VII1, printed writings concerning music; and B VIII1, the German church song—each of these from a period of time including the sixteenth century.113

Although some current lexicons—certain large encyclopedias of general knowledge, for instance—continue to rely on information largely following the precedents of Gerber and Fétis, most current music lexicons have modified and expanded their coverage of Agricola in the light of findings and reevaluations found in some of the studies mentioned above. This is true of Riemann's music lexicon (since the 1916 eighth edition), the music lexicon of Hans Joachim Moser (since the 1931 third edition), and Grove's Dictionary of Music and Musicians (the 1954 fifth edition).114 In 1949, Bernhard Engelke contributed a major article on Agricola to the initial volume of Die Musik in Geschichte und Gegenwart; there he gives a full


and balanced presentation.115 Finally, the article on Agricola in the sixth edition of Baker's Biographical Dictionary of Musicians (1978), although quite brief and not precisely accurate,116 does describe Agricola as a "very important German theorist and music writer."117

The significance of Agricola's work and the extent of its influence on sixteenth-century Protestant musicians in Germany—once widely proclaimed and evident—appears to be receiving new recognition in the twentieth century.


116 It describes Agricola as "cantor at the Lutheran Church" instead of at the municipal Protestant school. All of the churches in the city were "Lutheran," including even the cathedral after 1546.

PART ONE

TRANSLATION OF MUSICA CHORALIS DEUDSCH:
NON-FIGURAL MUSIC [BOOK] IN GERMAN

Mart. [Martin] Agricola, 1533
To the Reader the Grace and Peace of God

It is true that many have previously written copious descriptions of the precious and necessary art of music (in which young people should be required to learn both the chorale and figural song, just as they are educated and instructed in the other true arts). Since they have generally done so with long books and many words,

1Musica Choralis is a term used by early sixteenth-century German theorists in reference not only to plainsong, but also to hymn-like homophonic music of simple texture—free of mensural complexities, with only a few values for notes and rests—exemplified by Bach chorales and by the examples in this treatise by Agricola.

2The brief music example here appears on the title page—a standard woodcut used by Rhau for other theory treatises also, including Agricola's Musica Figuralis... (see pp. 60 and 152).
however, and since I was concerned that the young (who above all must be instructed just as briefly and clearly as possible in all the arts) were probably more frightened away than taught thereby, it was my thought to bring these matters into our own German mother tongue in the very shortest and easiest way possible, just for the use and benefit of young people in all the German lands. And I am sending them forth into print together with sixty-three fine contrapuntal pieces that will doubtless please everyone to hear and sing with particularly keen delight. This is in order that the young might have something to practice with persistent diligence for the praise of God and for their own profitable use. For without much practice, diligence, and effort, no art—particularly music—can be learned or mastered at all.

Marti. Agricola

[A ii\(^v\)] To the Honorable Georg Rhaw, Bookprinter at Wittenberg, I. Martin Agricola. Do Wish Good Fortune, Health, and Happiness

Whereas all other arts, through a special arrangement of God, have now come to light in as fine, short, plain, and clear a way as though they were born anew, without any digression or error (like well-threshed wheat without any chaff or husks);\(^3\) only the noble art of music

\(^3\)This view reflects the humanism then prevalent.
(which indeed is rightly considered by all sensible and learned people to be one of the most distinguished of the arts, being not just very useful for young people but also necessary for all the other liberal arts—especially poetry) has lain hidden like a light under a bushel up to the present time. Therefore I was prompted to bring it into German as concisely and clearly as possible, according to my understanding, so that music also (as other arts) might with time come forth more brightly and clearly to the light of day, through constant practice and use, and in order that young people might thereby be given an introduction and instruction in such a praiseworthy art.

For there are so many German spiritual songs and psalms to the praise and honor of God being composed, put together in four voices along with the German mass, and released in print at various places in all the surrounding lands, and especially by you [people] in Wittenberg; they are still being added to daily. And so [with this book] such Christian songs and others like them may be quite easily learned and artistically sung by them [the young] all by themselves without the assistance of an instructor—not just superficially according to custom, as formerly, but according to the exact and correct way of music.

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4 Since Rhau did not begin to publish his important collections of Protestant church music until 1538, it would have to be other publishers in Wittenberg to whom Agricola is making reference here.
It was my wish to dedicate and entrust this little book of music instruction put into German to you, my dear Mr. Georg Rhau, as a friend and patron especially favorably inclined toward me, and also as one especially devoted to this kind of art. I amicably ask that you would arrange to have this printed most cleanly and neatly in your own shop with care and diligence, as you have taken pains to do previously with other books; it is for the use and benefit of the poor young people (whom we are all rightly obliged to help). And if it becomes necessary, I ask you to help correct it and diligently to defend, protect, and maintain it against calumnious gossips, begrudging enviers, and shameful defamers.\(^5\)

Now I will make the observation that young people indeed want to be involved in the praise and exaltation of the almighty God through singing, the making of poetry, and the playing of all kinds of string instruments (in addition because the art is especially created and given by God). And as you will further desire it from me, I intend to put together a work on mensural music as well, as concisely yet plainly and clearly as possible, in a special little book, and to send it over for you to print also. Finally I want to deliver to be printed also a work

\(^5\)Agricola spoke of these malicious opponents repeatedly in the prefaces of his writings, eventually identifying them as adherents to Roman Catholicism, particularly clerics of the Magdeburg Cathedral. For further discussion see above, pp. 23-24, 38, and 42.
with several fine illustrations, dealing with flutes, little Swiss pipes [transverse flutes], and also a new tablature for lutes and bowed string instruments, all to be used by young people for the praise and honor of God.\[^6\]

[A iii\(^v\)] No more for this time, except may God grant that nothing be praised and glorified by all our being and doing other than His Divine Majesty. God help us in that, Amen. Dated at Magdeburg on the fifteenth day of April, in the twenty-eighth year [1528].

\[^6\]The 1533 edition is virtually unchanged from the original treatise of 1528, Ein Kurtz Deutsche Musica, apart from change of title (in order to parallel Agricola's Musica Instrumentalis Deudsch and Musica Figuralis Deudsch) and an additional set of Magnificat settings at the end. This is why in the unchanged preface Agricola expresses his intention of writing books on instrumental and figural music at some later time, even though by 1533 both works had been written and published.
THE FIRST CHAPTER
CONCERNING THE DESCRIPTION OF MUSIC
AND HOW MULTIFARIOUS IT IS

Music (according to its common description) is a liberal art through which we come to a correct understanding of song. And although elsewhere it is usually described as having many various divisions, nevertheless for the sake of brevity I wish to speak of two kinds of music only.

The First Is Called

Musica choralis; this is the one in which all of the notes hold an equal importance or an equal measure of time. That is, one note is sung as long as the others,

7Agricola's definition of music is similar to the often-cited definition given by St. Augustine in his De Musica, whereby music is the art of modulating well (ars bene modulandi). The text is found in J. P. Migne, Patrologia cursus completus, Series Latina, 221 vols. (Paris: Garnier, 1844-1904), 32:1081.

8This is too simple a definition of musica choralis. Agricola contradicts it only three pages later by adding that notes with thin stems added, comparable to the minim, have only half the value of notes without stems or with thick stems. He then introduces four different rests, borrowed from mensural music, with time values comparable to the long, breve, semibreve, and minim. This kind of stylized gothic choral notation, called Gotische Choral-schrift or Hufnagelschrift, was used in Germany from the
no longer or shorter; namely, this note ♦ is not sung any shorter than this ♮, and vice versa, as follows in the example below. 9

Discantus

Altus

Tenor

Bassus


9 For the editorial practices used in transcribing the music, see pp. v and vi of the Preface, above. Final notes of each example, indefinite in length, are transcribed by various note values according to context.
The Second Is Called

Musica figuralis or mensuralis; this is the one in which the notes hold an unequal measure, duration, or importance, according to a variety of symbols. For this kind of song has many note shapes of various kinds, and one always contains more beats than another. For example, this is called a long ‖ and is worth more than this breve ‖.

Furthermore, the semibreve ⏯ is worth more than this ⏯; it is also worth less than this ⏯, and so forth.

Now, it is called figuralis because its notes are written or made with many kinds of figures. I wish to say more about this (God willing) in another little book.
THE SECOND CHAPTER

CONCERNING THE KEYS AND SIX

VOCABLES OR SYLLABLES

Inasmuch as no song may be rightly understood or sung without cognizance of the keys [the twenty notes of the gamut], it is necessary to know what clavis or key means, and how it is understood here in music.

Clavis is a letter placed together with one or more vocable names [solmization syllables]. For, the beginning of every clavis or key is a letter and what follows immediately after it, or the end, is a vocable name. For example, $g\ sol\ re\ ut$ is a clavis; its beginning is the letter $g$, and after that—the end, also—are names of the vocables—$sol$, $re$, and $ut$. Do this with all the others also.

Now, they are called keys because, in the same way that one opens up closed chambers with iron keys and comes to an understanding of the things that lie enclosed within, just so through these keys in music one comes also to an

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10 Agricola uses the German word Schlüssel and the Latin word Clavis to indicate any one of the twenty notes of the gamut. In translation of Schlüssel, the use of the literal English equivalent key, underscored to help to distinguish it from modern uses of the term, clarifies Agricola's analogy with keys that open locks.
understanding of those things—that is, the notes—which lie enclosed among the lines and spaces. Therefore, no one can rightly sing or understand a song unless he knows the kind and property of the keys quite exactly.

There are twenty keys in common use, then—\textit{f} \textit{ut}, \textit{A} \textit{re}, \textit{h} \textit{mi}, etc., as follows subsequently in the \textit{ladder} [scale].\textsuperscript{11} For by this much height and depth the human voice is encompassed. In addition, one may use more of them in figurai music and—especially—on instruments, not only below \textit{f} \textit{ut} but also above \textit{ee la}.

But you shall see in the \textit{ladder} that is to follow what the arrangement of the keys is, how many vocables or syllables each one in particular has, and moreover, which ones belong on the lines or in the spaces.\textsuperscript{12}

\textbf{Concerning the Six Vocables}

There are only six names of vocables—\textit{ut}, \textit{re}, \textit{mi}, \textit{fa}, \textit{sol}, \textit{la}. With these six short syllables the melody or accent of every song is expressed. Concerning this there follows an example.

\textsuperscript{11}The literal English equivalent \textit{ladder}, underscored to emphasize its special meaning, is used to translate the German word \textit{Leiter} as it applies to Agricola's illustrations of the lines and spaces with the keys of the gamut upon them. This preserves the clarity of Agricola's analogy between these lines and spaces and the rungs (with spaces in between) of a ladder.

\textsuperscript{12}This \textit{ladder} or musical scale appears only several pages later; see below, p. 75.
Before we sing the following examples, however, it is to be noted that these notes are equal, and each one is worth as much as . However, this is worth as much as one like this . A like observation is also to be made concerning the rests. For each rest is worth as many notes as follow it, as you see before your eyes here.

13This example and the following one both require the use of syllable mutation, which is not explained until the fourth chapter. Fortunately, Agricola has at least been thoughtful enough to write the syllables in beside certain of the notes.
Concerning the Division of the Six Vocables

Some syllables of the vocables are called the undermost—namely, ut, re, mi; some are called the uppermost—namely, fa, sol, la. And this distribution suffices for solmization.

Concerning the Distinction Among the Vocables

Of the six vocables mentioned above, two are called b soft—namely, ut and fa—because they are sung quite
finely, softly, gently, pleasantly, and smoothly. They are of one nature and property, then; therefore, wherever one is sung, the other may be sung also.

Re and sol are called average or natural vocables; this is because they emit an average sound, not quite too soft nor too hard.

Mi and fa are called hard—that is, sharp and harsh syllables. For they should and must be sung more boldly and valiantly than the soft or the natural ones.

This distinction, when well observed and rightly kept in song, makes all melody sweet and lovely. That is why it should be one of the foremost points that one first impresses upon the boys. They should be made accustomed to it, so that they become precisely sure of this distinction.14

14 The division of the six solmization syllables into soft, natural, and hard categories is found in the writings of many sixteenth-century theorists including Cochlæus, Ornithoparcus, Georg Rhau, and Seybald Heyden as well as Agricola. It arises, as does the closely-related division of hexachords, from the difference in shape between the smooth round b which is sung as fa and the hard angular k which is sung as mi. Glareanus says "I do not know which writers teach [this distinction]...," preferring to make only the simple division between high and low syllables. Dodecachordon (Basel, 1547), bk. 1, chap. 2, trans. C. Miller as no. 6 of Musicological Studies and Documents ([n.p.]: American Institute of Musicology, 1965), 2 vols., 1:42.
An Example of the Distinction of the Syllables

[A vii]

Dissonat

Alta

Tenor

Bassus

Ut, fa: Softly. Re, sol: medium. Mi and la should be sung

in a hard manner.

You will find examples similar to this one also in the eighth chapter, below, concerning the diatessaron [perfect fourth].

Now Follows the Ladder Which Is Called Scala\textsuperscript{15}

\textsuperscript{15}The clarity of graphic figures by Agricola such as this illustration of the gamut exerted influence on later writers. For instance, in the 1520 edition of his Enchiridion utriusque musicae, fol. b iii, Georg Rhau displays an illustration of the gamut which appears rather cluttered and does not use horizontal lines to represent
This figure is made in the shape of a ladder because in the same way that one climbs up and down on a ladder made of wood, always from one rung to the next, in the same way also in song it happens that one always climbs from one key to the next, also from one line to the next, etc.

Hence this ladder also leads us into a correct understanding of which keys belong on the lines and which
in the spaces. Also the boys see from it how many syllables each key has. For instance, F\textit{ut}, A\textit{re}, \textit{mi}, and \textit{la} have only one vocable each. D\textit{sol re}, E\textit{la mi}, F\textit{fa ut}, etc., have two vocables apiece; and G\textit{sol re ut}, a\textit{la mi re}, etc., have three each.

\textbf{A Brief Rule About the Octaves}

All the keys that have the same letter at the beginning stand an octave apart from each other— that is, an eighth— such as F from G, A from a, and in like manner throughout.

The letter F is placed at the beginning as a special token of honor toward the Greeks, who invented this kind of art (as one reads).

\textbf{Concerning the Clefs}

These are five in number— namely, F\textit{ut}, F\textit{fa ut}, c\textit{sol fa ut}, g\textit{sol re ut}, and dd\textit{la sol}. They are called clefs (gezeichnete Schlüssel) because they are plainly placed or written at the beginning of every song.\textsuperscript{16} F\textit{fa ut} and c\textit{sol fa ut} (also g\textit{sol re ut}, usually in the discantus) are the clefs commonly used; the others, quite rarely.

\textsuperscript{16} Agricola uses the term gezeichnete Schlüssel, literally "key written in as sign," for the modern English term clef; of the five clefs that he mentions, only the three he calls common are still used.
The Ladder of the Five Keys Used as Clefs

These five keys are all found on the lines, and each stands a fifth from the one next to it except for the $\sharp$, which stands a seventh below $F_{fa\ ut}$. 
CONCERNING THREE KINDS OF SONG

Song is nothing other than a proper and suitable arrangement of the six syllables—ut, re, mi, fa, sol, la. This takes place with a sound of the human voice, or perhaps on an instrument such as a lute, pipe, or organ. It is when one sings from ut to la, but in such a way that one does not sing mi where fa should be sung or vice versa.

Now since the six vocables are used in three different ways, as mentioned, song is also spoken of as threefold in the same way—that is, duralis [hard], naturalis, and mollis [soft].

The first is called duralis—that is, hard or sharp—and is the one in which ut is sung on $\text{f}', \text{G},$ and $\text{g}$ at all times in the ascending of the song unless this sign $\text{b}$ (which signifies $\text{fa}$) is found there. It comes to an end, then, on $\text{E}, \text{e},$ and $\text{ee la}.$

It is called duralis because it ascends from $\text{A}, \text{a},$ and $\text{a}$ to $\text{[B-natural]}$ in a steep or hard way—that is, from re to mi and vice versa—which makes a whole tone or complete second. Two syllables are particularly suited to this duralis song: mi and la.
Concerning Natural Song

Natural song is that in which ut is sung on C fa ut and c sol fa ut. It comes to an end on a and aa.

This song is differentiated from the other two as one which needs no b fa b mi; it does not touch upon it. That is why it is called natural.

The two syllables re and sol are particularly ascribed to this song.
Concerning b Soft Song

That song is called $b$ mollis—that is, $b$ soft—in which $ut$ is sung on $F$ and $f$, and $fa$ on $b$ $fa$ $b$ $mi$. It comes to an end on $d$ and $dd$.

Now, it is called $b$ mollis because it alone is supposed to be sung softly on $b$ $fa$ $b$ $mi$ and its octave by

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17 This musical example and the one on page 82 provide instances of a complete triad and a crossover of bass and tenor parts at the final chord; both are quite rare in the music of Agricola and of this period.
means of the vocable fa that is indicated by the b. This \([B \text{ ii}^v]\) should be sung more smoothly and pleasantly than mi. Ut and fa are appropriate for this song.

Concerning This There Follows an Example

\[\text{Dis
d\text{antus}}\]
\[\text{Al
tus}^\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{
b soft, and so on in similar fashion.

[B iii] An Example of Cantilena [Song]

Vincitus Here the natural [song] is mixed with the hard.

Alarius The hard is transformed into natural.

Tenor Here the natural [song] is mixed into hard and hard into

Bassus Natural [song is mixed] into hard and vice versa.

b soft. Further, b soft [is mixed into] natural.
We have now told about the six vocables—ut, re, mi, fa, sol, la—and have given an explanation of them and their differences, together with the three kinds of song. In view of the fact that there are too few of these vocables for the highest and lowest notes of every song—since no vocable was invented above la nor below ut—therefore the need must arise, whenever the song is to ascend above la or descend below ut, for one vocable or syllable to be changed into the other.

The mutation of syllables, then, is nothing other than an alteration of one syllable into the other with the same sound, as you see in the example.
Here you sing la on D as well as d, and also re on ut, mi on A re, even as the second rule will teach you.¹⁹

There Follow Two Rules Concerning
the Mutation of Syllables

The First Rule

When a song is hard, then the changes generally come on three keys: D, d; a, aa; and E, e, ee. Sometimes it occurs also on G, g, but rarely.

That song is called hard, then, which has ut on G and its octaves and mi on b fa h mi; indeed, all modes other than the fifth and sixth have mi on b fa h mi when they are not transposed.²⁰

¹⁹This instruction confirms that B-flat is used throughout the music example just presented even though it is missing from the key signature of both the discantus and bassus parts. The second rule to which he refers may be found on folio B v⁵, translated below on p. 87.

²⁰Here Agricola indicates that the Lydian and Hypolydian modes (untransposed, with finals on F) normally have fa on b fa h mi—a B-flat—requiring a key signature
No mutation should occur except where it is necessary. Furthermore, in the mutation of syllables one generally uses two vocables, re and la--re in ascending, la in descending. In this way, then, each change occurs a third away from fa.

In ascending, \[ \text{D d} \]

take re on \[ \text{a aa} \]

In descending, la.

of one flat. Gafurius admitted the possibility of fa on b fa mi in the sixth mode in the last musical example of Bk. 1, Chap. 13 of his Practica musicae; Agricola indicated that it was the norm for the fifth and sixth modes in the early 16th century. Glareanus expressed doubts about this practice in the ninth chapter of his Isagoge in musicen [Introduction to music] (Basel, 1516), transl. F. B. Turrel in Journal of Music Theory, 3/1 (April 1959): 97-139. Twenty years later he extended the entire system to twelve modes in his Dodecachordon. There, the mode ending on F with a B-flat in the key signature would be reclassified as transposed Ionian.
This Ladder Indicates How Mutation Happens on the Keys Named

The Mutation in the left half of the diagram correctly shows how mutation takes place in ascending when sol or la is replaced by re. The right half should correspondingly show how mutation takes place in descending when re or mi is replaced by la. As this part of the diagram stands, the four places where mutation takes place are marked by the appearance of la side by side nonsensically; for this reason, the syllable that is replaced by la has in each case been added beside the duplicate la as a correction--within editorial brackets, of course.

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21The left half of the diagram correctly shows how mutation takes place in ascending when sol or la is replaced by re. The right half should correspondingly show how mutation takes place in descending when re or mi is replaced by la. As this part of the diagram stands, the four places where mutation takes place are marked by the appearance of la side by side nonsensically; for this reason, the syllable that is replaced by la has in each case been added beside the duplicate la as a correction--within editorial brackets, of course.
An Example of the First Rule, in Which It Is to Be Noted Where Re or La Should Be Sung

[Ex.]

But when a song ascends only a second above la and soon falls back to F fa ut, then one always sings fa on these notes [a second above la], unless one of these signs \* which signify mi should be found beside them, particularly in figural song.

[Ex.] The Second Rule

When a song is b soft, then one takes the change of syllables on three keys also: D; F, G, g; and a, aa.
But then, it is called \textit{b soft} when \textit{ut} is on $F$ and $fa$ on $b$, just the way it happens in all songs of the fifth and sixth modes. This will follow in the last chapter.

In ascending, $\text{C, G,}$ take $\text{re on: D, d }$ $\text{In descending, la.}$

Now here it is to be observed that every octave is the same as the next nature and essence, and what is said about one should also be understood for the other; the same pronouncement applies to both. Therefore, just as \textit{ut} is sung on $F$ it should also be sung on its octave that lies below in the space just below the $G$. Likewise, $\text{re on G, mi on A, sol on C, and la on D}$—just as such vocables are found in every octave. In the same way also, where the need arises in figural song, one then sings $\text{la on A and sol on G in descending.}^{22}$

$^{22}$By stating that a note in any octave has the same essence as that note in any other octave, having the same syllables, Agricola contributed to the transition from the Guidonian system—in which each note or key is unique, with a certain set of syllables and a certain place in particular hexachords—to the system used today whereby all notes having the same letter (and accidental, if any) are considered to be in the same pitch-class, whatever the octaves may be within the audible spectrum.

$^{23}$Agricola here indicates that the range of figural song may exceed the range of the gamut by as much as a fifth below $G$. This reflects Renaissance practice and theory from the early fifteenth century, the time of Dufay (see Reese, Music in the Renaissance, p. 35) and Ugolino de Orvieto, writing in Declaratio musiceae disciplinarum, no. 7 of Corpus Scriptorum de Musica (n.p.: American Institute of Musicology, 1960-62), 2 vols., 2:49-50.
Such deep descents, below T ut, are common for the finals [played] on instruments.

For simple chorale song, however, it is not permissible to descend below T nor to ascend above ee la. That is why each of these keys has only one syllable.

[B vi] There follows the scala.

This Ladder of b Soft Song Indicates on
What Keys Mutation of Vocables Occurs

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<th>Descending</th>
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<td></td>
<td>dd — la</td>
<td>la[sic]</td>
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<td>la ——</td>
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24 This diagram has peculiarities on both sides. On the left, the placement of ut beside ut at the bottom of the gamut and la beside la at the top may have been for the purpose of emphasizing that mutation does not take place at the extreme ends of the gamut in chorale song. On the upper right, the displacement of mi by la is shown correctly (the right column should have been labeled "Mutation in Descending," not "Ascending" as the left column is labeled). At the middle right, la is placed beside la instead of the displaced re (shown within editorial brackets), as in the diagram on page 86, above. At the
Concerning This There Follows an Example

\[ B \text{vi}^\text{v} \]

How the Mutation Occurs in Large Leaps

In the large leaps of the song, such as fourths,

bottom right, the displaced syllables (added within editorial brackets) were not shown at all, as was true throughout the diagrams of other theorists—for instance, Johannes Cochlaeus, Tetrachordum musicæ (Nuremberg, 1511), transl. C. Miller as vol. 23 of Musicological Studies and Documents (n.p.: American Institute of Musicology, 1970), p. 44; and Georg Rhau, Enchiridion utriusque musicae practicae, 6th ed. (Wittenberg, 1538), Chap. 3, transl. J. K. Waters, "Handbook of Two Musical Practices" (Ph.D. dissertation, University of Washington, 1970), p. 33.
fifths, and octaves, one usually moves from one syllable to another that is the same [from one key to another with the same syllable]—that is, from re into re, from mi into mi, from fa into fa, from sol into sol, from la into la, as the bassus in the following example indicates. 25

[B vii]

Concerning the notation in large leaps

25 Agricola's general observation that most large leaps—since they are fourths, fifths, or octaves—are between notes having the same syllable (unless they remain within the same hexachord between a lower and a higher syllable, as is also found in the present example) is not an immutable law but only a helpful rule of thumb.
THE FIFTH CHAPTER

CONCERNING FICTIONAL SONG

Fictional song is that which is sung with fictional or foreign vocables. Now, those vocables or syllables are called foreign which are sung on a clavis [key] or its [B vii"] octave on which they are not [normally found], as for instance when I sing fa on E or a and la on G or e. For there is no fa to be perceived on E or a, nor on any of their octaves. There is also no la to be found on G or c, nor on any of their octaves, regardless of whether they be upper or lower octaves. You may speak in this way of all the others as well, as when one sings mi on F fa ut or fa on G sol re ut. Observe this [rule] about that:

Rule

In fictional song, take re on F fa ut and c sol fa ut and in their octaves when ascending; in descending, however, take la on c sol fa ut and G sol re ut, and likewise

26 This example of fictional song and the rule given as the next paragraph both produce hexachords on B-flat and E-flat, requiring also the use of A-flat.

27 In this case a hexachord is produced on D and an F-sharp is needed. Gafurius, in his Practica musicæ, bk. 3, chap. 13 (transl. C. Miller, p. 146), goes so far as to speak of a hexachord on A, and also mentions the use of C-sharp and G-sharp in certain instances of musica ficta.
with their octaves.

ThereFollowsand Example of All That Has Been Said

[B vii\(^{v}\)-B viii]

---

The three lowest voices evidence a hexachord on A-flat—not mentioned by Agricola—through the use of four flats, the most required by any theorist of the period to my knowledge (only three flats are used in the discantus). The use of A-flat and E-flat as a key signature in three voices is singular; in the tenor, the use of \( \sharp \) on the beginning note, G, designates mi and indicates a hexachord on E-flat, with A-flat and B-flat. In all voices the use of B-flat rather than B-natural is understood and required by the context, although nowhere notated.
[B viii] But if a syllable is sung on a key on which it is not found, but in whose octaves the syllable is to be found after all, then it is not called a fictional syllable but a proper and natural one, as for instance when one sings la or mi on A re, sol or re on C, and similarly, for these are found in their octaves.
THE SIXTH CHAPTER

CONCERNING SOLMIZATION

Solmization is nothing other than an expression of the melody of the song through these six syllables: ut, re, mi, fa, sol, la. There follow some rules about this.

The First Rule

Whoever wishes to find the correct solmization for each and every song should first see to which mode the song is assigned. For all modes except the fifth and sixth have mi on b fa h mi where they are untransposed. Just what constitutes a mode (tonus), and how many of them there are, will be taught in the last chapter.

The Second Rule

He should also pay assiduous attention to the b and h [or]. For the first signifies fa wherever it is placed; the other two signify mi.

The Third Rule

He should also look at the beginning of the song--

29Concerning the use of B-flat in the fifth and sixth modes, see above, p. 84, n. 20.
that is, on which key [note] it begins, and how many vocables it has. 30

The Fourth Rule

In solmization, one commonly uses the two vocables: re in ascending and la in descending. 31

An Example of All the Rules, Which Has Fa on b Fa k Mi 32

[B viii\^-C]

---

30 By "how many vocables it has," Agricola no doubt means "the total range of the song."

31 This is the basic rule of mutation—shown in the diagrams of syllabic mutation on pages 86 and 89—that in ascending, one of the higher syllables—sol or la—is replaced by re (from a higher hexachord); whereas in descending, one of the lower syllables—re or mi—is replaced by la (from a lower hexachord).

32 While other examples have evidenced a certain amount of free imitation, here the discantus is derived from the tenor in strict canon at the upper octave after two beats.
A Second Example, Which Has Mi on b Fa & Mi
The Fifth Rule

In fourths, fifths, and octaves, one sings from fa into fa at all times, as follows:

A Second Example

---

33 This rule reveals extraordinary implications when applied to the first example: the leaps progress inexorably through the circle of fifths to F-flat! The rule may at first appear to contradict Agricola's observation, as
THE SEVENTH CHAPTER

CONCERNING THE TRANSPOSITION OF KEYS

This is nothing other than a displacement of the clefs from one line to another, up or down.

Now, it occurs when the song [staff] has only three or four lines. It is often found in chorale song; in figural, seldom. For the singers would rather make use of six [staff] lines—sometimes seven as well—as follows:

---

found on pages 90-91 above, that in large leaps one usually moves from a note to another with the same syllable, such as re to re, mi to mi, fa to fa, sol to sol, etc. In the present case, however, Agricola's rule applies only to those leaps that begin with fa.

This isolated example of figural music illustrates the use of ledger lines; Agricola took advantage of each opportunity to include another attractive composition.
[C ii\textsuperscript{V}] A Rule Concerning Transposition of the Keys

As high as the key \texttt{[clef]} is moved upward, that is how much lower the next note which follows it is to be sung. And vice versa: As far as the transposed key \texttt{[clef]} descends, that is how much higher the note which follows it is to be sung.

\underline{Example35}

\texttt{Discantus}

\texttt{Altus}

\texttt{Tenor}

\texttt{Bassus}

\texttt{35} Four-line staves are used with numerous shifts of C and F clefs. The discantus is followed canonically by
the altus at the lower octave after one beat for slightly more than half the piece; the tenor, however, is in canon with the discantus throughout—also at the lower octave, but after two beats.
[C iii] The intervals or *spacia* from one note to the next are called in Latin *intervalla* or *modi*, and always take place between a high and a low sound, such as *ut*—*re*, *ut*—*mi*, *ut*—*fa*, etc. And although musicians generally talk about only nine intervals, we would like to speak of fifteen, as if to an overflow.  

36 "Interval" is not an ordinary meaning for the Latin word *modus* (literally "measure," "manner," or "mood"), although theorists of Agricola's time often used the term in this way. For "mode," the Latin *tonus* was always used.

37 Actually, no theorist from the period closely preceding Agricola speaks of exactly nine intervals, to my knowledge. Tinctoris discusses seven—major and minor seconds and thirds, perfect fourths and fifths, and major sixths—in the eighth chapter of his *Expositio manus* (ca. 1475), trans. A. Seay in *Journal of Music Theory* 9/2 (Winter 1965): 225-29. Here Tinctoris also notes that there are many other intervals, discussed in his *Speculum musices*. Gafurius speaks of as many as twenty intervals at various places in his *Practica musicae* (Milan, 1496). For instance, in bk. 3, chap. 2, he gives space to deal with intervals larger than an octave, up to the twentieth (trans. C. Miller, pp. 119-24). A number of theorists give virtually the same presentation as Agricola, listing the major, minor, and perfect intervals from unison to octave, plus such forbidden intervals as augmented fourth or tritone, diminished fifth, octave, etc. These include Cochlaeus (*Tetrachordum*, pp. 25-27), Glareanus (*Isagoge*, pp. 122-23), and Zarlino, in bk. 3 of *Le Istitutioni harmoniche* (Venice, 1558), trans. G. Marco and C. Palisca, *Music Theory Translation Series* (New Haven: Yale University Press, 1968), pp. 6-48.
1. Unissonus

In German this means an identical sound (ein gleicher Laut), when two, three, or more notes are sung the same [in pitch], whether it be on the line or in the space, as the tenor [of the following example] indicates.

\[ \text{Discantus} \]
\[ \text{Altus} \]
\[ \text{Tenor} \]
\[ \text{Bassus} \]

2. Semitonium

[This] is an incomplete [minor] second, which emits a soft sound and ascends from mi to fa and vice versa.\(^\text{38}\)

\( ^\text{38}\)It is the sound of the melodic (not the harmonic)
Concerning this, see the following tenor, together with the other voices.\footnote{39}

\begin{music}
\begin{tabular}{llll}
\textbf{Discantus} & & & \\
\\hline
\textbf{Altus} & & & \\
\\hline
\textbf{Tenor} & & & \\
\\hline
\textbf{Bassus} & & & \\
\end{tabular}
\end{music}

\textbf{3. Tonus}

\textit{This} is each and every second except for [that between] \textit{mi} and \textit{fa}. It is called a complete \textit{major} interval that Agricola could describe as "soft."

\footnote{39}The upper two voices have a key signature of only one flat; the lower two voices, two flats. In the \textit{altus}, there is an additional \textit{D} required at (a) in the eighth measure according to the context (a group of three notes on \textit{D} instead of the two found in the original).
second, which sounds harsh and hard. When these two intervals are well heeded, the others are easy to understand.

Concerning This, There Follows an Example

There is no clear reason why the (melodic) interval of a whole tone should be considered harsh and hard, or why that of a semitone should be considered soft. The only other intervals given subjective descriptions by Agricola are the "harsh and difficult" augmented fourth (tritone) and the "bad, unusable" diminished octave.

It seems evident in these examples, in view of the methodical construction of the tenor (here, with all
[C iii\textsuperscript{v}]

4.42 Semiditonus

[This] is put together from a tone and semitone. It is an incomplete [minor] third, such as re—fa or mi—sol. For re—mi is a tone and mi—fa a semitone. Now take re and fa together; then a minor third (semiditonus) arises from it. Do the same thing also with mi and sol.

Concerning That, Sing This Example\textsuperscript{43}

the major seconds of the hexachord on F illustrated in a series of ascending sequences), that the discantus, altus, and bassus parts were written to go with the tenor part. They employ a considerable amount of imitation, particularly at the entrances, further illustrating the use of the major second.

\textsuperscript{42}This was misnumbered as 3 (iii) in the original.

\textsuperscript{43}The discantus follows the tenor canonically at the upper octave after two beats for all but three or four notes at the end. This supports the conclusions that what looks like a breve rest in the third measure of the tenor part at (a) must be a semibreve rest from context and that an E missing from the original discantus part at (b) in the fifth measure is needed in the context. Also, the bassus part must have a G, not A, as its final note, at (c).
5. Ditonus

[This] contains two tones within itself and ascends from ut to mi, or from fa to la, and vice versa. It is named a complete [major] third. Concerning this, there follows a fine example.\(^\text{44}\)

\(^{44}\) Agricola gives the effect of canon with skillful use of free imitation, exhibiting the major third at every opportunity. In the bassus part, a rest is required by the context at (a) in the fifth measure; it is missing in the original.
6. Diatessaron

[This] is a fourth (quarta); it goes up from ut to fa, from re to sol, from mi to la, and back down from fa to ut, etc. This interval is put together from two tones and a semitone, as you see in all four voices of the following example.45

45 In this example, as in the example illustrating the minor third (on pp. 105-6, above), the bassus has a key signature of two flats while the upper three voices have a key signature of only one flat. This is the last example of partial key signatures in this treatise.
If** r' C r
i
r ^ &
' r i i  r ^
[This is] a perfect fifth (quinta); it goes from ut to sol, from re to la, mi to mi, fa to fa, in ascending and descending. And it is made from three tones and a semitone.

Example
This is an incomplete minor sixth, comprising three tones and two semitones. It goes from mi or from re up to fa through a sixth and vice versa, as follows.

Example

This was misnumbered as 5 (v) in the original.
9. Tonus cum Diapente

[This is] a complete [major] sixth, comprising four tones and a semitone, as the example indicates.
[C vii\textsuperscript{V}] 10. Semiditonus cum Diapente

[This is] an incomplete [minor] seventh, which has within it four tones and two semitones. All of this you will find in the example.
11. Ditonus cum Diapente

This is a complete major seventh, which is put together from five tones and one semitone, as appears in the following tenor.

\[ \text{Discantus} \]
\[ \text{Altus} \]
\[ \text{Tenor} \]
\[ \text{Bassus} \]

In contrast with the many illustrations—in all the voice parts—of common intervals like thirds in other musical examples, there is only one illustration of the major seventh to be found here, at the beginning of the tenor part. However, there appears a variety of other intervals, including a remarkable leap of a tenth, from a to c", in the fourth measure of the discantus part.
12. Diapason

This is a perfect octave, which contains within itself all the intervals named above; it is put together from five tones and two semitones. Also, it occurs at all times between two letters which have an identical name, whether in ascending or descending, as when you count from f up to G, from A to a, from C to c, etc.
Concerning the Forbidden Intervals

These are thus named because they are not found in common use within song.

13. Tritonus

[This] is a harsh and difficult [augmented] fourth, which sounds bad. It comprises three tones, and goes from mi to fa and vice versa. It is almost exactly the melody that the cuckoo sings, as in the example.\(^{48}\)

\(^{48}\)To my knowledge, only Agricola attributes a tritone to the poor cuckoo, which sings a fourth in Mahler's
14. Semidiapente

This is an uncommon or imperfect [diminished] fifth; it is made from two tones and two semitones, and ascends from mi to fa through the fifth and vice versa, as follows in the tenor.

First Symphony, a third in "Sumer is icumen in," Martini's Missa Cucu, Jannequin's Les Oiseaux, and Bennet's "Thyr-sis, sleepest thou?" The music example shows all three forbidden intervals through a technique of putting rests between the component notes, resulting in what are called dead intervals. In the bassus part, a long rest at (a) in the fifth measure equals four beats; the context requires a breve and a semibreve rest to equal three beats.
15. Semidiapason

[This is] a bad, unusable octave that has no pleasantness at all; therefore, it also is forbidden. And it is put together from four tones and two [three] semitones. [D ii] It is found at all times between two letters that are identical, such as E and e, F and f. except that in one place mi is indicated and sung and in the other fa, as follows in the tenor.
Although these three last intervals are forbidden and have a bad sound, we have composed an example of each nevertheless, because they are occasionally found in figural [music] (although separated by rests).
First of all it is to be noted here that this little word *tonus* has three kinds of meanings. First it means a complete [major] second, as was said in the eighth chapter. Second, it is taken as a sound, resonance, or melody, as when one says that this bell has a good or bad tone or sound. But third (as will now serve here), *tonus* is a certain rule that clearly indicates the height and depth of each and every song, whether at the beginning, middle, or end. For the kind, nature, melody, and solmization of any song cannot be recognized unless one knows in advance precisely to which mode each song is ascribed.

**Concerning the Number of Modes**

The Greeks had only four modes, as one reads—*proturn*, the first; *deuterum*, the second; *tritum*, the third; and *tetardum* [*tetrardum*], the fourth. They sounded

49 Agricola expands on this definition to include the final, reciting tone, and melodic characteristics as well as range. He does not mention species of fourths, fifths, or octaves—perhaps for the sake of brevity—as theorists of the time often did.

50 Agricola consistently uses the spelling *tetardum*, as did Georg Rhau in his *Enchiridion utriusque musicae* (the correct Greek ordinal).
lofty and glorious as well as powerful. The Latins looked at these modes of the Greeks (according to their height and depth) and divided each into two parts. Namely, from the first they took the second also; from the second they made the third and fourth; from the third, the fifth and sixth; and from the fourth, the seventh and eighth.

[D iii] Thus eight modes were now brought forth, and it is clear and evident that those of uneven count—the first, third, fifth, and seventh—were invented by the Greeks, and those of even count—the second, fourth, sixth, and eighth—by the Latins.51

Four Modes of the Greeks

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<tr>
<th>Tetardos (Tetrardos)</th>
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<td>Tritos</td>
<td>7</td>
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<td>Deuterros</td>
<td>6</td>
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<td>Protos</td>
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Which the Latins divided into:

Invented by the Latins

[Invented] by the Greeks

51 There is no historical basis for this simplistic but persistent tradition connecting authentic modes with the Greeks (or sometimes St. Ambrose) and plagal modes with the Romans (or sometimes St. Gregory); for, as Willy Apel points out in the Harvard Dictionary of Music (2nd ed., 1969), p. 167, the modal system very likely did not originate until the ninth century.
Concerning the Differences among the Eight Modes

Four of the eight modes are called lordly or uppermost—namely the ones of uneven count: the first, third, fifth, and seventh. And they are thus named because of their similarity to the lords and mighty people who reign over servants and subjects all the time and are always inclined to rule and be superior. In this way also these four modes rise upwards at all times and are situated above the other four, which are called subjigated (subjugalects)—that is, the subjects.52

There Follows an Example

52 The relationship of authentic to plagal modes as lords to servants is an old tradition; Byzantine authentic modes are kyrios (Reese, Music in the Middle Ages, p. 73). Agricola connects the concept to melodic range: lordly modes rise above the lower subordinates. Tinctoris considers plagal modes subordinate because they are later additions to the modal system, in Concerning the Nature and Property of Tones (ca. 1480), trans. A. Seay, 2nd ed. (Colorado Springs: Colorado College Music Press, 1976), p. 6.
A Rule Concerning the Course of the Uppermost Ones

The lordly ones—the first, third, fifth, and seventh—have the power and might to rise above their bases (stūla) an octave, even a tenth at times, and below them only a second, as follows.\footnote{There is general agreement among theorists in allowing the range of authentic modes to exceed an octave by a note or two above and a note below. In this example as usual the editorial B-flats are for the avoidance of tritone implications.}
Concerning the Subjects

[D iiiiv] The subjects are of even number—the second, fourth, sixth, and eighth—and are so named because they fulfill their course beneath the uppermost ones. For just like servants to their lords, these modes likewise are subject and subjugated to the ones that are lordly.

A Rule Concerning the Undermost Ones

The even-numbered modes, the second, fourth, sixth, and eighth, have the power to climb a fifth above their final and a fourth below it. Thus they complete an octave in their courses also, just as the uneven-numbered ones do, as follows.54

54 Here Agricola does not follow the majority of theorists who allow the range of plagal modes also to exceed an octave by a note above and a note below. For instances, see Cochlaeus, Tetrachordum musices, bk. 3, chap. 3 (trans. C. Miller, p. 49); and Gafurius, Practica musicæ, bk. 1, chap. 9 (trans. C. Miller, p. 54). In Agricola's musical example, the tenor follows the dis­cantus at the lower octave after three beats in a canon that is strict for all but the last few notes.
But it must not be understood by this that every mode must always have its complete proper course as was just described, but only that they have the power to do so, in accordance with the requirement of the song, as in the example. 55

The tenor range is from d to c', a seventh. As with many of Agricola's examples, other voice parts also illustrate the point; in the second mode, the altus has a range of a seventh; the bassus, only a sixth (the range of the discantus is a full octave in the first mode).
It often happens that each mode does complete its octave entirely, but not all the time. The uppermost ones sometimes fill only a sixth or seventh, and the undermost ones at times climb only a fourth above and a third below themselves [their finals]. The same thing is seen also in the immediately preceding example.56

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56 Here the discantus follows the tenor in canon at the upper octave after two beats (their range is a sixth within the seventh mode). The altus (as well as the bassus) has a range of a seventh within the eighth mode.
One often finds also that the lordly modes rise above their octaves to a tenth, eleventh, or twelfth. Such modes are called plusquamperfecti—that is, more than perfect. Furthermore, the lowermost modes also move below their fourth to the fifth, sometimes even to the sixth. Concerning this, see the example. 57

57 The discantus has the range of a ninth, from $g$ to $a'$, in the fourth mode. The bassus extends below the range of the gamut by two notes, in violation of Agricola's rule for simple chorale song, on p. 89, above.
Concerning the Intermixing of the Modes

One often finds also that two modes are intermixed with each other at the same time within one song, such that the courses of both modes are found in the same song, as follows in the tenor [below].

In the original, the altus part (still in its usual position just below the discantus) is mislabeled as "Tenor" and vice versa. Both the actual tenor and the bassus parts illustrate the complete course of both fifth and sixth modes, from the fourth below to the octave above the final.
[D vii] How the Modes Are to Be Recognized in Intermixed Song

First of all [they are recognized] according to the melody, or according to its clausula or repercussio, as will follow.59 Secondly, when they descend to the final from the fifth above it is a lordly mode, as in the antiphon Fidelis sermo [I preach to the faithful]. But where such songs ascend to the final from the third or fourth below they are classified with the subject modes, as in the responsory O preclara [Oh splendid (or shining) one].60

59 By melody Agricola seems to mean the patterns and direction of notes characteristic of a mode, with motion to and from a reciting tone (repercussio). In an unusual usage, he associates clausula with the interval between the final and reciting tone of a mode. These are further discussed below on p. 135.

60 Neither chant is used in the current liturgy; they are not found in the Liber Usualis (New York, 1961) nor the Antiphonale sacrosanctae Romanae ecclesiae (1949). Fidelis sermo is listed in the index at the end of the first volume of Corpus antiphonale officii, 3 vols. (Rome: Herder, 1963-68).
Concerning the Incomplete Mode

An incomplete mode is the name for one that does not fully complete its course—that is, a full octave—as follows in this example.
An Affirmation

The songs of the uppermost modes should be kept low when singing, since they generally ascend to the heights. [D viii] But the subject modes should be kept higher when singing, for they always tend to move downwards more than upwards. The incomplete modes should be started at a medium level, not too high and not too low.62

62 This very practical suggestion for performance dramatically demonstrates that, for Agricola, pitch was relative and variable when singing without accompaniment.
Concerning the Finals of the Eight Modes

There are four final keys, as reported above. They are: D sol re, E la mi, F fa ut, and G sol re ut. They are so named because every correct and regulated song, whether it be chorale song or figural song, should end on one of these four keys.

Now, any song that places its final notes on another key, outside of these four, is called a transposed song.

It is also to be observed that every lordly mode has a subject mode with it in its final. For instance, the first and second modes both have their lodging on D. For it is not inappropriate that a lord should lodge in a shelter with his servant. It happens this way also with the third and fourth, the fifth and sixth, etc.; yet in such a way that the uppermost one completes its octave above its final at all times, and the undermost one a fourth below and a fifth above, as was said before.

The Four Untransposed Bases (Stüle)

A song which ends on D is of the first or second mode; on E, the third or fourth; on F, the fifth or sixth; and on G, the seventh or eighth mode.

Concerning Transposed Song

Any song that ends on another key, outside of the four named, is called a transposed song. Therefore a song
which has fa on b fa h mi and ends on G is of the first or second mode; on A, of the third or fourth; on b fa h mi, of the fifth or sixth; on C, of the seventh or eighth mode.

There Follows an Example of Transposed Song

\[\text{Discantus}\]
\[\text{Alta}\]
\[\text{Tenor}\]
\[\text{Bassus}\]

Transposed from the second mode

A song which has mi on b fa h mi and ends on A is of the first or second mode; on C, of the fifth or sixth.
There Follows an Example in Which the First Mode Is Transposed into a la mi re

Discantus

 Alto

 Tenor

 Bassus

[Ev] But when a song comes to an end on A and has fa on b fa i mi, it then belongs to the third or fourth mode, as follows in the example.
Concerning the Courses of the Eight Modes

To each mode there are permitted no more than ten [E ii] notes with which to complete its course, although at times [there may be] eleven.

Concerning the Three Ways to Recognize the Modes

Firstly, the mode is recognized at the beginning of the song—that is, if it soon moves a fifth above its base, then it is reckoned as the uppermost mode of the final key on which the last note is found. But if it soon falls a
third or fourth below, then the song belongs to the lower mode, as appears above in the bass of the incomplete mode [pp. 125-26].

Secondly, in the middle: When in the middle the song moves an octave above its final, then it is an uppermost one. When it moves a fourth below and a fifth above, however, then it is a lower one.

Also, they are recognized by the melody. For every mode has its own melody or clausula, which it generally follows and uses. For instance, the first mode has the fifth re--la; the second mode has the third re--fa, etc. These clausulæ are clearly indicated in the following example.63

63 The interval from the final of a mode to its reciting tone is a rarer meaning for the term clausula (literally "clause" or "close"), whose three definitions in the Harvard Dictionary of Music (rev. ed., 1969) are: (1) Cadence, as in sixteenth-century polyphony. (2) In Ambrosian chant, name for the terminations (differentiae) of the psalm tones. (3) A large repertory of polyphonic compositions of the late twelfth and early thirteenth centuries (Notre Dame school). Agricola seems to use this term synonymously with melody. However, from its use in other contexts (see above, pp. 119, 124 [the lower example], and 128), melody more likely refers to the melodic motion—characteristic of a given mode—to and from the reciting tone. The reciting tone is really found only in the reciting formulae for psalms and certain canticles.
This piece is quite a remarkable creation, giving for each mode an illustration of characteristic range, melodic configuration, opening interval from final to reciting tone—all in just a few notes—and blending all into a musically harmonic fabric. In the altus part at (a) in the seventh measure, what looks like a breve rest in the original must equal only a semibreve rest from the context.
But thirdly, each mode is recognized at the end, as indeed is commonly said: *In fine videtur cuius toni* [at the end is seen which is the mode]. Such recognition appears in all the examples placed above.

There Now Follow Some Short Rules Concerning the Modes

The First Rule

Every song that ends on *re* is of the first or second mode; on *mi*, of the third or fourth; on *fa*, of the fifth or sixth; on *sol*, of the seventh or eighth.

The Second Rule

The first mode together with the second in untransposed song always has *mi* on *b fa i mi*, unless such song moves upwards only a second above the *la* that is on *a*, as is found above in the example of the incomplete mode
in the discant and tenor.  

In the same way, all songs of the third, fourth, seventh, and eighth modes in untransposed song also have \textit{mi} on \textit{b} \textit{fa} \textit{k} \textit{mi} unless the sign \textit{b} be found there, as is said above in the second rule concerning solmization. 

\textbf{The Third Rule}  

The fifth and sixth modes have \textit{fa} on \textit{b} \textit{fa} \textit{k} \textit{mi} at all times unless the \textit{k} or this sign \textit{¥} signifying \textit{mi} be found there, as appears above in the example of intermixed modes. 

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\textit{65} The example of incomplete mode to which Agricola makes reference (first and second modes) is found on pp. 124-25, above. 

\textit{66} This rule is found on p. 95, above. 

\textit{67} The example of intermixed modes to which Agricola makes reference (fifth and sixth modes) is found above on pp. 127-28.
INTONATION OF THE SMALL PSALMS

The First Mode

Discantus

Alto

Tenor

Basso

The Second Mode

Discantus

Alto

Tenor

Basso

68 Agricola here means the recitation formulae for psalms as compared with those for canticles such as the Magnificat, which he labels "the large psalms," although they are not actually psalms at all. Agricola has put the opening text of each psalm (often abbreviated) used for the example under each voice part, but not precisely.
underlaid. In underlaying the text, I have been guided by Agricola's placement when possible, and by a summary of rules for text underlay from Zarlino's Istitution Harmoniche (Venice, 1558), as found on pp. 377-78 of G. Reese's Music in the Renaissance (rev. ed., 1959). In the example of the second mode found on the previous page, there is an extraneous note--d--directly below the correct note--a-- at (a) toward the end of the tenor part.
The Fifth Mode

The Sixth Mode

The Seventh Mode
The Eighth Mode

Discantus

Altus

Tenor

Lauda Jerusalem Dominum; lauda Deus tuus. Si - - - on.

Bassus
The First Mode

Disceuntus

\( \text{Magnificat animae meae Dominum} \)

Altus

\( \text{Magnificat animae meae Dominum} \)

Tenor

\( \text{Magnificat animae meae Dominum} \)

Bassus

\( \text{Magnificat animae meae Dominum} \)

The Second Mode

Disceuntus

\( \text{Magnificat animae meae Dominum} \)

Altus

\( \text{Magnificat animae meae Dominum} \)

Tenor

\( \text{Magnificat animae meae Dominum} \)

Bassus

\( \text{Magnificat animae meae Dominum} \)

\[ \text{Agricola here means the recitation formulae for canticles, specifically the Magnificat. It is astounding that this entire first set of Magnificat settings by Agricola, as well as several other examples from the last chapter of this treatise, appear with no credit given in editions beginning with that of 1530 of Enchiridion utriusque musicæ by Georg Rhauf!} \]
The Third Mode

The Fourth Mode

The Fifth Mode
[F iiV]

The Sixth Mode

Discantus

Magnificat a-ni-me a-Domin-um, Do-min-um

Altus

Magnificat a-ni-me a-Domin-um

Tenor

Magnificat a-ni-me a-Domin-um

Bassus

Magnificat a-ni-me a-Domin-um

[Fi III]

The Seventh Mode

Discantus

Magnificat

Altus

Magnificat a-ni-me

Tenor

Magnificat a-ni-me a-Domin-um

Bassus

Magnificat a-ni-me a-Domin-um

Magnificat a-ni-me a-Domin-um, Do-min-um, Domin-um, Domin-um, Domin-um, Domin-um, Domin-um, Domin-um.
The printer apparently inadvertently placed the line of music for the bassus (written in the bass clef) as the second part from the bottom under the "Tenor" label, and the music for the tenor (in tenor clef) as the bottom part under the "bassus" label.
In the altus part at (a) the note c' is worth a full beat in the original. Actually the four notes just after the rest would best be replaced by: c' quarter note, a and b eighth notes. In the bassus part there is one d two many at the place marked (b).
In the discantus part, a rest at (a) is worth two beats in the original; from the context, it must be worth only one beat.
The Eighth Mode

73 In the tenor part at (a), a note that was an a in the original must be an e as shown, or possibly a c".
Concerning the Foreign Mode

This unique recitation formula, with reciting tone on a for the first half and on g for the second half, is commonly known by its Latin name, tonus peregrinus.

This handwritten addition is found by itself on the reverse of the last folio in clear bold letters, with an authoritative flourish—possibly a set of initials—just beneath it. It may have been written in by someone at the print shop of Georg Rhau.
PART TWO

TRANSLATION OF MUSICA FIGURALIS DEUDSCH:

FIGURAL MUSIC IN GERMAN

Mart. Agricola

1532
Musica Figuralis, with Its Appertaining Examples,
Together with a Separate Fine Little Book Concerning Proportions, Quite Useful for All Ordinary Singers, Instrumentalists, and Beginners to Know, Composed in German Most Simply and Understandably

To the Wise and Honorable Mr. Heinrich Harsleben, Councilman of the Old City of Magdeburg and My Special Favorably Inclined Patron

The grace and peace of God. first of all. Dear beneficent sir and friend, I know that the treatise on instrumental music (which I published three years ago) may only be understood or learned with considerable difficulty and not thoroughly without mensural music. For this reason I have thought to provide a clearer and easier instructional work in view of the requests of many good friends, particularly since several renowned schools have recently been established at places such as Magdeburg, Hamburg, Lübeck and others. Indeed (may God long grant it), such cities have thereby been of more good use to the citizenry and their descendants than if they had their cities fortified and surrounded by ten ramparts or battlements. For what is a city—fortify it as you
will—if wise and God-fearing people are not found in it, and if the young people are not kept to discipline, honor-\[A ii^v\] ableness and the liberal arts? These arts are undoubtedly given to us Germans from on high, as is the highest treasure, the Gospel, which cannot be without rich blessings.\(^1\) For such compelling reasons, and most of all (as touched on above) to come to the aid of such schools to some extent (according to my small ability, however), I did this with a German book on music first of all. For, when I find the opportunity, I am also willing to have a Latin one published shortly. In addition, I have improved the instrumental music instruction to some extent. And the other part, i.e., figural music, like the other two works on music I have translated into German from the Latin and supplied with useful examples.\(^2\)

Now my dear sir and gracious friend, inasmuch as I have had many dealings and much friendship with you for many years, I have dedicated this work on music to you first of all for this reason: because you have always been fond of me on account of this art, which is really very small within me, and have drawn me to you and still like to be in my

\(^1\) Even to philologists, passages such as this may be unclear, according to Dr. Wolfgang Fleischauer of the German Department, The Ohio State University, in an interview on August 20, 1975.

\(^2\) Agricola means that he has based this German book on Latin models (primarily Practica musicae by Gafurius).
company daily, having shown me very much friendship and good will. Therefore, I desire to show myself thankful toward you with this small token gift of honor, since nothing greater is within my power at present, in order that you may understand [A iii] that it is not good will that is lacking, but only ability. Secondly, I have not seen many who have such a desire and love principally for the noble art of music as you have. For you have dedicated yourself to this art like Socrates in your days of old age (of which you do not yet have many). Therefore it is fitting also that such art show itself thankful to you in return. For all liberal arts are such that they do not leave unrewarded their devotees, bestowing upon them especially great profit and honor. Lastly, I have dedicated to you this book on mensural music for these reasons: You have taken upon yourself the practice of both kinds of music, and especially the instrumental such as bowed string instruments and pipes. You have desired further instruction in this from me, in order that you might now keep at this undertaking, and that you might gain all the greater pleasure and delight by it as well. Also, in order that you might lead your dear son Joseph to continue further as he has begun; if God be willing that he live and persevere in it, he will become not one of the most unskilled in this art. Please be willing to accept these good intentions of mine gladly and amicably, and please help to defend me against the slanderers who interpret these efforts of mine in the worst way.

Also, once again I would quite amicably ask those who
best understand this art and are renowned in it to let my
diligence and good intentions please them if they wish.

And if things not in accordance with art be found in
it, whether it be with the translation into German or some­
ting else, they should remember to take into consideration
the fact that I have had no special teacher in music to speak
of, apart from God, in my entire life, but rather I came to it
directly from the plow, as I may say. Therefore it is no won­
der that a farmer errs from time to time, since indeed such a
thing often befalls many intelligent and learned men. And
thus I want to have given an example and an incentive once
again to those who are accomplished in this art, that they
should also consider it quite a shame that a village peasant
should take it upon himself (since they themselves would not
do it) to do some writing and instructing in such a refined and
noble art, a task which belongs only to the most accomplished.
Therefore I still assiduously ask of all experienced musicians
and composers who are still to be found, that they ought not
to busy themselves with their shameful texts, such as writing
lustful songs, as they have done till now, whereby they blot
and spoil much good paper unprofitably, and have accomplished
nothing good but instead have given the young an example of
many vices and shameful things. But rather they should want
to publish and impart this art for the praise of God and the
benefit of their neighbor--each according to his ability, how­
ever. For what help is it after all if we had the arts and
possessions of all the world but did not make true
Christian use of them, and finally went to the devil because of this? Therefore, since I am quite insignificant and simple in this matter, let someone who knows more than I produce something on the subject also, for the sake of God. I gladly want to make my own contribution to this (as much as is possible for me). May someone else do this also, in order that one may help the other; thus the subject may be improved, and help may come in such arts to the children and others who desire it, to the praise of God. I really cannot accomplish everything boldly and most skillfully by myself (principally since I have had no teacher), for I deem myself far too insignificant for that. Therefore let each one bear in mind that which is assigned for him to do by God.


Mart. Agricola

[A iiii\v] An Admonition and Encouragement to Music and Other Good Arts

To the Reader

In view of the fact that such a great scorn of all good arts, manners, and honorable intentions is to be found in our times, among rich and poor alike, it is highly necessary to put down in writing a good strong admonition and forewarning to these insolent scorners, in order to do away with such derision and to keep children studying all the more diligently.
But since this is beyond my knowledge and ability, I want quite assiduously to ask others who are better suited and have more understanding to do this with choice words. And here, in place of a short preface, since a lot of chatter is not well endured, yet in order that the matter may not be passed over in silence altogether, it is my intention to impart a little about such harmful and improper scorn, yet without belittling anyone.

[A v] Now the fact is that both rich and poor not only take the position of slovenly laziness and carelessness with regard to the great necessity for the youth to be instructed and taught in good arts, Christian discipline, and honorableness, but also are completely scornful, as though it did not amount to anything. And this is truly quite dreadful and indeed pitiable, since it really concerns the usefulness and prosperity of ourselves and the entire land.

Why, among the rich there are some who are so inept, that when they are warned by pastors, preachers, and other capable persons to submit their children to study at once, they may say with no shame whatever that they do not wish to have their children knock their brains out with studying, since there are enough possessions and money for them to be imperial bigwigs and rich gentility without any learning.

Aye, dear friend, go slowly and do not deceive yourself. On account of money they may become real imperious fatheads, perhaps; but so far as learning and wisdom is concerned, they will continue to be badly spoken of. Besides
that, God the Almighty can let your possessions be reduced to nothing quite quickly, perhaps by means of a thief, at times through a little spark of fire, or by some other accident. Also, it is unheard of that great possessions remain for very long where learning, good upbringing, and honorable-ness are scorned.

In like manner also most of the poor people let it [A v Y] go unheeded in the same way, throwing it to the wind and scorning this necessary thing, that the children be kept at school and well raised. They think to excuse themselves by their poverty, alleging that they would have their children in school right away from the start if it were not quite impossible to carry this out—just as if God the Almighty had denied them all help and assistance.

These people doubt the generous goodness of God, who graciously offers to help them every day in this and other things through his holy Gospel. And this is powerfully proved by deed as well, and especially in regard to the children, if one allows them to study according to God's counsel.

As one then experiences and sees before his eyes every day, the children of these same poor people, if first kept at school, will in large measure grow up through God's gracious help and become great people such that oftentimes the good fortune and welfare of an entire city—indeed, sometimes even of an entire land—is dependent on such a man.

But there are very few of them who heed and take this to heart. For the rich man counts on his possessions, which
are so great in his eyes that by comparison he pays little attention to knowledge and virtue. The poor man would probably like to keep his children at it, but since he lacks firm determination to carry it through, he forgets the promise and gracious help which God gives us in this matter, and leaves [A vi] it neglected on account of so much despair.

This is such an abominable thing to observe that it augurs little good for us all, collectively, as those with compassionate hearts might well decide.

Now I wanted to describe this a little by reason of my good intentions—since in so many doings scorn and negligence are now getting the upper hand to such an extent—in order that some good-hearted people might yet of necessity be moved by the notable harm and disadvantage for the entire land which may come to arise out of this, and have the desire to keep their children—for whose use and benefit also I have written this little book—in the schools to gain learning and culture.

It must be kept in mind that it truly advances the pressing need of the entire land to a high degree, so that in future times there may not be found a lack of pastors, preachers, schoolmasters, and other learned people. For where this is prevented from occurring, it is impossible to maintain either God's word or any kind of good discipline in a country. May the Almighty God give us His holy grace. Amen.
There Follow Fifteen Fine Stories,
In Which the Praise of This Art
Is Quite Masterfully Depicted

It is easy to grasp (as reported below)
How much honor to this art the ancients did show,
By princes, by lords, and by kings was it shown,
To so great an extent, as the stories make known.
For their highest efforts on it they'd bestow,
Not only in youth, but in old age also
And (unlike now) they did not scorn it a bit,
But rather devoted their old age to it.
Therefore it is called of all arts the mother,
At the same time it keeps the upper hand as no other.
From it all good morals and customs arise
All kinds of arts flow from it likewise.
What other art, indeed, just say to me,
Has ever been loved and desired to the highest degree
By animals of all kinds as has this one?
Aye, as will be proven later, none!
For just where is a man, say to me openly,
Who doesn't make use of a plain melody
To soften his work and make himself gay,
As experience reports to us every day?
For the blacksmith sings, as does the shoemaker,
Also the furrier and cabinet maker,
Glazier, glover, miller, painter and fisherman,
Coin-minter, miner, rider and ferry-horseman.
Lathe-turner, the brewer and baker, cloth-weaver--
The cloth-dyer doesn't want to stop singing either.
The spinner and seamstress with music will prick,
The rascal will too, as he's playing a trick.

[A vii] To the cook and the keeper of wines that are stored,
To the maid and her mistress, the knave and his lord,
This art in the best way does pleasure afford.
Yes, the peasant at plow takes it in and does sing,
And also the shepherd with pipes does let ring,
By which the little sheep quite well do graze;
Therefore, no creature can flee from its ways.
The bird of the air does sing and rejoice,
Yes, the threat of death gives to the wise swan his voice.
The frog in the water his croaking emits,
The cricket does chirp in the grass where it sits.
To sum it up, all animals that live
And with a voice some kind of sound can give
Do sing, each one according to his own,
Depending on the way his snout has grown,
Although they know no skill or art at all,
But only practice by their natural call.
How is it then that man has so forgotten
When he from God all that he needs has gotten?
Having art, skill, and wisdom, as a rule,
He values this no more than roguish fool,
And as then often happens, cannot raise
His voice more artfully than donkey brays.
Yes, it is exceedingly great shame,
In all the land, if one may dare proclaim,
That not one man his voice should rightly raise
And learn to use it well for God's own praise.
Therefore no man of sense should be so wrong
As not to rightly use his voice in song.
If he does not apply himself there some,
He's well compared in that case with the dumb.

[A vii^
] In sum, who after all could hatred bear
For such a maid [Musica], toward all friendly and fair,
And who would not embrace her lovingly
When with a sweet tone she sounds forth proudly?
Therefore in this way is Music gifted
Whereby the saddened spirit refreshed is lifted.
It drives out care, strengthens limbs weakly-born;
It also removes envy, hate, and scorn.
It nourishes the arts and kindness makes,
Gives joy whereby it softens labor's aches.
It holds back calumnious gossiping and vice,
When it is rightly used to make things nice.
So I with no deceit may have it said,
It also calms the child in its wee bed.
It gives good manners and also concord,
Therefore, it truly proceeds from the Lord,
And is of such a nature in its features
As to be loved not just by human creatures,
But also by the animals large and small,
such as the snakes, the birds, whales, seals and all,
And held to be of worth, by them, you know
As said about Arion by Guido. ³

The First Story
Arion through the art his life preserves,
Sitting on a whale, which as shield serves.
About which, in the Instrumental Book,
It's found in Chapter Five, if you will look. ⁴

[A viii] The Second Story
Likewise as true favor, I say unto you
That the sound of this art can incite humans to
either brashness, strife, anger, and unpleasantness,
or again to meekness, peace, and joyousness;

³ Arion is not mentioned by Guido in his Micrologus nor in the treatises translated by Oliver Strunk in his Source Readings in Music History (New York, 1950), pp. 117-25. Arion and many other ancient musicians, who are the subject of frequent humanistic references, are discussed in bk. 1, chap. 1 of Theorica musicae by Gafurius, who drew upon Virgil's Eclogue 5:56, according to Irwin Young in The Practice musicae of Franchinus Gafurius (Madison: The University of Wisconsin Press, 1969), p. xxvi.

And so they are moved by the sound of this art. Of this, ask me of Timothy to impart, Who taking his instrument rightly in hand, Provoked one called King Alexander to stand, Who, seizing his weapon, from eating refrained, And revealed the bold heart for fighting he'd gained But when Timothy then began to expound On a song with entirely a friendlier sound. The king was content to put weapon away, Joy and kindliness thus were created that way. On that account, as we do read about him, He was the most distinguished one who ever With music has provided a display, And thereby won himself a good report. For at that time he was the kind of fellow Who gained a lot of pleasure through this art. When it pleased him, he could oppress people, and with a serious melody anger them. This happens in the third and seventh modes, If the melody is practiced artfully. When it did please him, on the other hand, He would let a mournful song sound forth [A viii\textsuperscript{V}] Of which a soft and gentle melody And sounds quite meek and humble were the signs.

\footnote{While Agricola continues to use rhymed verse, my translation henceforth uses only unrhymed verse for Agricola's rhymed portions.}
Therewith he could move them away from wrath,
And freely they would tend to cheerfulness,
And thus be free of all that's sorrowful.
About that, music study teaches us
That melodies of this kind only arise
Out of the second, fourth and sixth modes.

The Third Story
Also, as Martianus Capella says,\(^6\)
It did please those of Rome and Lacedemon
to make their people (in the needs of war)
Undismayed and of good heart for fighting
By means of pipes, horns, trumpets and sackbutts.
And thus they all forgot their deepest grief,
Also they became bold and wholly serious
Seeing the enemy coming from afar.

The Fourth Story
Also the Lacedemonians were accustomed
To putting on red clothing altogether
When traveling into war was their intent.
And they contrived to keep the victory
by concealment of their wounds, and tint of blood.
The reason that they started such a thing
Was that they gave the enemy no cause
For boldness which combat is wont to have,

\(^6\)De Musica, in Antiquae musicae auctores septem,
ed. Marcus Meibom, 2 vols. (Amsterdam, 1652; reprint ed.,
But rather overcame them oft with cunning,
As was the usual practice in such places.

[B] The Fifth Story
Likewise the ancients have allowed this art
To prevail quite assiduously in times past.
Within the courts of kings and palaces too,
Within the taverns, likewise at the feast,
Upon harps, pipes, and other instruments
One would perform to praise and honor men
Who in the fight great efforts did display
Or somewhere else achieved a manly deed.
Smartly one would play after the other
At their table where they sat by one another,
and not, as nowadays, swilling and gobbling.
Such honorable deeds were spread abroad thereby;
It also gave the young good inclination
to seek with keen desire the noble arts.
Among which music is the loveliest.
Also thereby the young were moved to hold
old people in esteem before their eyes,
As had those of the Lacedemonians done
Who drew the aged quite close to themselves,
And held them in great honor and respect.
But with us it is held as foolishness.
Also at present honor, discipline,
And virtue are nothing but mockery,
And modesty by death is carried off.  
That which in times past was called honorable  
Is now regarded as the worst disgrace,  
Both by the old and also by the young.  
For all of them have sung adieu to shame.  
[B^v] Now, if we might discuss the matter further,  
The ancients used to walk most honorably  
Together with their children of young age  
Whom they to every virtue did hold fast.  
When death upon the parents did close in  
Then did the children lead an honorable life.  
Thus honor was in fashion at that time,  
As well as discipline and modesty,  
Virtue and awe, without any coercion.  
Too they submitted to authority,  
As God commanded through his only Son.  
O God, how has this so completely vanished?  
With us at present, in the final hours,  
The parents should (as only would be right)  
be training and accustoming their children  
In God's word and likewise in good instruction.  
But they are like so many cows themselves.  
This makes it truly, as one now must say,  
"As is the father, so also the son."  
As is the mother, so the daughter too.  
The servant's wont to have his master's ways.
As is the mistress, so the maid would be.
Therefore they all run toward the pain of hell.
The devil too will rightly bring them shame,
If they still have not turned away from sins.
But rather (as does happen every day),
Are satisfied with gobbling, guzzling ways,
Also with gaining money and possessions
And ruining their neighbor totally.
Of this they know more than enough already.
However, it is just their plow and wagon
[B ii] With which they gather all unto themselves,
And often touch upon their neighbor's field.
Well, now, it should be no one's but their own.
Whether they think of oxen or of calves,
They bring them in and fill their own house full.
Then someone else comes in to thresh the grain.
Therefore it is themselves that they deceive,
For from their neighbor they have taken it.
Also because they don't know how to care
For their own children (as the ancients told),
Yet all the more they scorn the schools as well,
Of which they know as much as would a cow.
Within the schools the children are well kept
At liberal arts and disciplined behavior,
From which (provided they are God-fearing)
There come forth wise and understanding bishops.
Good preachers here on earth come from the schools,
Wise mayors and officials, goodly rulers.
Whoever you may be—subordinate citizen
Or common peasant—you must look for them
To come out of the schools, for if it were
Some other way, you'd better hide yourself.
To sum it up completely, there one learns
The scriptures, and all things that have to do
With God's own word, in full accord with which
All those who live must regulate themselves.
Therefore may everyone well muse on this,
And quickly urge their children on to school;
They should be rooted in God's word besides.
Yes, they say, as the school is, so one learns;
And so my son should go to the right school.
[B iiV] If he can read and write and calculate
Then he should lack for nothing after that.
If he can make secure his ledger balance,
Then he is dearer to me than a priest.
If God wishes to give him sense and wisdom
That he can full well make known without school.
Oh, yes, just wait around for this to happen
And take no measures to accomplish it.
If you don't bake until the Holy Spirit
Comes from above to teach your boy in person,
You'll eat bread slow indeed, or starve to death.
The Sixth Story
Also, an old man might convey these words:
"I cannot study now that I am old,
For there has been delay now much too long
Since I have spent my youth quite foolishly."
Aye, that's your shame; yet hear what I advise,
And take note of wise Socrates who first
Began learning to play string instruments
In days of his old age. Find out about it!
In old age it is better to grasp something
Than filled with shame to give up everything.

The Seventh Story
We also read about Pythagoras,
So thoroughly experienced in this art,
Who on a journey came upon a bunch
of brothers foul who always were debauched.
[B iii] Receiving the award of "senseless people,"
They ran around, as happens still today
With Carnival Tuesday's ghoulish masks and fools.
Well, maybe I should carry on more gently.
Yes, really, pardon me, I have misspoken,
And could not do it better at this time.
At any rate, Pythagoras saw all this
And told the piper, or whatever player,
To make a change from the preceding tune
And treat it as a song of warm compassion.
This kind arises from the lowest modes,
And sounds quite simple, also melancholy.
And thereupon, I tell you without lying,
It happened that it moved those curs to blushing.
Each one of them perceived his own misdeeds.
They quickly tore the garlands from their heads,
And soon they also did go home in shame.
Pythagoras brought all of that to pass.\(^7\)
How very needed such a song is now
Among our crowds of carnival carousers.
But I would judge, and you may well believe,
In those times they would not have been so wild,
Nor drink themselves, as now, out of their senses.
Excuse me if the truth is hit upon,
Because indeed they are so freely moved
By melodies of common instruments,
That if one were to move them this way nowadays,
Then he would have to pipe a lot more sweetly.
\(^{[B~iii^v]}\) Because when they are fully wild and senseless
They're properly compared to coarsest pigs.
Also, since they're divested of their reason,
And raving in their brains with drunkeness,

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\(^7\) This version of the story is close to the one told
by Cicero in his *De consiliis*, in which the wanton youths
were about to break into the house of a modest woman. Cited
by Boethius in the Introduction to his *De institutione musica*,
There would not be a one of them to grasp it
Even if God himself piped personally—
As through the Gospel He in fact does do.
Take hold of that and lock it in your mind.

The Eighth Story
In order that this art have greater praise
Hear what I further tell you free of charge.
We read a story and believe it true
Of Caius Graccus, certainly a youth
Of quite a noble and wise understanding,
Such as may still be found within our land.\(^8\)
In his time, for the use of everyone,
When with his rhetoric he hit the mark,
In saying something proper for the people,
What he composed had to be based on music.
This servant had a real ivory-tusk pipe
On which he had worked long and diligently,
Whenever his lord led his voice too high,
Or else too low, the servant had to use
His little pipe always to show his lord
The way to bring his voice to the right path
On which he had at first begun, in fact.
Thus did the servant shine rightly as hero.

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The Ninth Story

Therefore this art was held in such great honor
And worthiness among the ones of old,
And also by the Hebrews and Italians,
The Germans, and indeed, the Franks as well--
All nations' powerful kings, princes, and lords,
Who did not want to be deprived of music,
But wanted rather (as expressed above)
To play on harps and pipes themselves, without
The slightest shame. And anyone who could
Hold sway upon these instruments was held
In very high esteem within those parts.
At that time King Themistocles therefore
Was thoroughly derided at the banquet
Because he could not play upon the harp;
So everyone did point a finger at him
And he was held to be an unwise man.
Therefore he had to suffer shame and scorn
For where shame is, scorn is not far away.
Therefore keep this in mind, and be prepared
Always, in trouble, scorn, misfortune, shame,
And grief, that you don't soon allow someone
To take away your cows, because it is
A shame, contemptible, and not becoming
That someone else should drive away your cows.
The Tenth Story
Lastly, in case one wants to disbelieve
The words of these reports as human gossip,
I now wish to relate, briefly but smartly,
Stories that come from the Old Testament,
[B iii] Which we have to believe as God's own word.
One hears the praise of this art in them too,
As when Moses himself was told by God
To use it now and always (as will follow). 9
When from King Saul departed the Lord's spirit
And soon the evil spirit crept upon him,
Then Saul sent out and had with lively step
The son of Jesse, named David, called for.
Because David stepped forward with his harp,
He found great favor in the king's own eyes,
For now the spirit of God came over Saul
As quickly as David took up his harp
And with his hand played quite delightfully.
Thereby was Saul refreshed and well behaved;
The evil spirit left at once quite suddenly,
For David was a chosen man of God. 10

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9Numbers 10:1-10; see the Twelfth Story, below.

10I Samuel 16:14-23.
The Eleventh Story
Then also when into Jerusalem
The Ark of God was brought with glorious spendour,
David went dancing with a joyous soul,¹¹
And with the entire house of Israel
Before the Lord did play string instruments
Of every kind made from the fir-tree's wood.
And there were many instruments they had
Like harps, psaltries, trumpets and little bells,
Likewise cymbals, trombones, and kettle drums.¹²

[B v] The Twelfth Story
And thusly did the Lord instruct Moses:
Construct two trumpets out of thick silver
And use them just for calling the community
And also for the army to break camp.¹³
Now, hear that which I further instruct you—
Thus runs the text within the same account—
When you go into battle in your land
Against your wholly unknown enemies,
And do not wish to tolerate their pride,
Then you should blow these trumpets so that you

¹²Psalm 150.
Before the Lord will be remembered, and
Thus be released out of your enemies' power.
Likewise the same thing when you stand with joy
And celebrate your festivals and new moons:
Then should you let the trumpets blow resounding
Above your burnt and mortal offerings,
That it may bring you to God's recollection.
I am the Lord your God,\textsuperscript{14} both now and always;
Therefore, my dear folk, pay heed to these gifts,
So you will not have any foreign gods.

The Thirteenth Story
Also the knowledge of this art not only
Is useful for the one proficient in it,
But also gives great help and inspiration
To those who practice all the other arts,
As has been told above about the ancients,
[B v\textsuperscript{v}] Who did produce from music nothing less
Than to have captured truly good art from it
(As they acknowledge by their own assertion)
Also, no other art (if this is lacking)
Can be accomplished rightly and completely.

\textsuperscript{14}Numbers 10:9-10; the last two and one-half lines of the Twelfth Story were added by Agricola.
The Fourteenth Story

Herewith accordingly Pythagoras

Gave his disciples a command, early

And late, that they should go to sleep with song

And thus the same way also rise again.¹⁵

To sum it up, music does not wish praise

But rather at all times praises itself.

Hence I cannot write praise sufficient for it,

But wish to leave it thus alone for now.

Also I do not mean such music as

Is used at present without any shame

In taverns, ale-houses, and wayside inns—

The kind everyone wants to learn just now.

They really blaspheme through their shameful texts,

As in lewd songs, today as yesterday.

It us has come entirely to misuse,

And is compared with other loose foul smut

Through which pure virtue and good moral customs

Are not brought forth but rather cut to pieces.

I mean instead that kind of music which,

As mentioned, pleased and suited best the ancients.

And moderately, with honor and all diligence,

In order to praise men whose deeds were great,

[B vi] At tables of the king and other lords

They played music themselves, with great honors.

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¹⁵ Boethius, Introduction to De institutione musica, trans. O. Strunk, Source Readings, p. 83.
The Fifteenth Story

Also as David did present his psalms
And played upon the harp with courtly show,
To this we Christians should direct ourselves
So that we seek only the one God's praise
In singing, playing, and poeticizing.
This we are told within the Holy Texts
Through which we are instructed by Saint Paul
Within Colossians. There he tells us this:
Permit God's word richly in you to dwell.
Admonish one another, in all wisdom.
With hymns of praise, psalms, and religious songs—
The kind that spread the word among all brothers—
Sing purely to the Lord within your hearts.
Both word and deed should be in the Lord's name.
In all you do, be called thankful to God
Through Him Who is our Saviour, Jesus Christ.
Lastly, because the ancients placed this art
Upon the highest peak, as often mentioned,
Where it was loved and praised above all measure,
Although it was more simple and less clear,
How much more fitting should it be for us
To do this inasmuch as we know well

16 Except for this line, a parenthetical remark by Agricola, the passage cited is from Col. 3:16-17.
That of the arts, it is the oldest one
[B vi\^] And generally considered the most prominent.
Also, it now is better and more finely
Practised and taught than previously, and is
Described in writing with more understanding.
Also, since it is treated of so briefly,
And yet by many studied with no master,
Now let us therefore in these golden times
Be working on it, and not waiting long.
For now all arts go begging after bread;
They suffer shame, great trouble, grief, and need.
Also no one desires to let them in,
But rather they must lie upon the street
Where (by your leave) each wipes his shoe on them.
Look out that hail does not thresh them away.
Therefore adapt yourself to current times
So you will not be left to stand in shame
On this day or the morrow when the arts
(As should cause great concern) are taken from you.
For God will surely punish us severely
For sleeping at this time so absolutely
And so entirely scorning and refusing
The word of God, with the exalted gifts.
Well now, I wish to leave it to each one
And of each good companion I would ask
Where something not in good form here be found
That he would bear in mind at that same hour:
Ah, well, it is not any wonder if
Agricola does not put down all items
With skill and learning, since he had no master
To give him understanding of the art.
[B vii] For many an artist probably has failed
In that he too stepped out of the right way.
Well, let enough be said of it at present.
God grant that we be undismayed to say:
Ah, Lord, work something good just as Thou wouldst.
So may we then please Thee all of the time.
And undertake all things in Thine own name.
Help us in that, our Saviour God, Amen.

There Follows Who It Was Through Whom Music
Was First Invented Before the Flood

Music is commonly considered to be the oldest among
all the liberal arts, and quite a number of inventors of this
art are variously recounted by musicians. And although there
are many various forerunners over such a long period of time
whose cases are uncertain and above all not fundamentally
proven, nevertheless for their sake we are supposed to give
credence to every one, whether or not they are all inventors
and founders of this art, which is not really possible. I
[B.vii] do grant, however, that each one of them distinguished
himself in writing about it, explaining, improving, increasing,
and describing it with more understanding—some better than
others, however, according to the grace each had from God. Also, on account of the loveliness and fineness by means of which not only people but also unreasoning animals are led on to remarkable joys, everybody desires to be called an originator or inventor of music (if that were possible). But in order that we may now become free of doubt and certain of the facts, we would like to begin with the very first and foremost inventor, named Jubal, a son of Lamech. The first book of Moses (which we must believe without any doubt) tells us this in the fourth chapter, with expressive words that read thusly: Now Lamech took two wives; one was called Ada, the other, Zilla. And Ada bore Jabal, from whom came those who dwelled in tents and had cattle. And his brother was called Jubal, from whom came those having to do with harps, pipes, etc.\[B\,\text{viii}\] Now this Jubal thought about the prophecy which he had heard from Adam, the first father, that the world would perish and be destroyed by means of two kinds of calamities or judgments of God: fire and water. For that reason, in order that this lovely art given by God should not pass away so absolutely and be completely extinguished, he wrote it down upon two tablets. One was made of brick in order that it would not be destroyed on account of fire. The other tablet, in order that water should not harm it, was made of marble. And these (as some have written) are said to be

\[17\text{Genesis 4:19-21.}\]
still on hand among the people in the land of the Syrians. Therefore music was first of all invented and originated by Jubal as has been shown, and afterwards improved, increased, and described in writing by Moses among the Hebrews, by Pythagoras among the Greeks, by Boethius among the Latin-speaking people, and subsequently by many others.
CONCERNING THE DESCRIPTION OF MUSIC

THE FIRST CHAPTER

[B viii'] Mensural or figural music is an art from which we thoroughly learn all that is necessary for measured song. And the reason why it is called figural is that its notes are made with many kinds of figures and characters, as follows, or that it has to do with many kinds of figures. But the reason it is called mensural, or one that is measured, is that all its notes are not of one kind (as they are in the choralis [non-mensural music] where they all have the same value); rather, each one in particular is measured as being larger or smaller in significance according to the evidence of the mensuration levels and signs, as is clearly shown in the fourth chapter, concerning the three mensuration levels. Also, each song of this kind is properly weighed and measured together and with exactly the same beat or value in all voices that belong together, such that in one voice is found not one little note nor even one little dot more or less than in the others, if it is done correctly. Therefore it often happens that if this kind of song, which is sung with two, three, four or more voices, is held one little dot more or less in one voice than in the others, the song soon goes astray from its proper value and does not sound right at all, as experienced composers.

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and singers would have to admit. Concerning this measuring [C] of beat and moving together of song I want to say more—and something more thorough—in the German study of composition, if God grants me grace.18

18 Agricola apparently intended to write such a treatise, but there is no surviving record of its accomplishment. See above, in the Introduction, p. 27.
THE SECOND CHAPTER

CONCERNING NOTES AND RESTS

To the extent that song, which is produced by living voices, exists in and of itself, it can in no way be written down or otherwise grasped. Therefore, in order that such a song or melody should not entirely perish or be forgotten in this way, but nevertheless may be performed and used with living voices or musical instruments in its own form again and again, as often as desired, musicians have here invented several forms of notes. Now for each one they quite artistically secured a particular quantity of its own, by which the quantities of the voices in all intervals are measured and the up- and down-motion of the song is clearly indicated according to the evidence of the numbers 1, 2, 3, 4, 5, 6, 7, 8, etc. And thus this figural song is measured by musicians with various forms of notes just as a poem is measured by poets with various poetic feet, as is clearly shown in the fourth chapter.

Now note here signifies a form or shape by which the up- and down-motion of each and every song and its measurement is noted down, in accordance with which the living voice and instrumental melody or resonance is conducted and expressed. Eight different kinds of these notes are used in this kind of music, as follows.
The Names and Forms of the Notes

The number of these per 1/2 tactus

The number of half-tactus that each of these is worth

[C ii] With the unbound notes the meaning is the same whether the tail or stroke goes up or down.

19 Although the three kinds of tactus are not defined until the Sixth Chapter (below, p. 251), Agricola introduces the notes with two signs of diminution. The breve, for instance, is worth two half-tactus (each one a rapid up- and down-motion of the hand) and thus represents the basic beat here.
Concerning the Three Fast Measured Notes

Furthermore, just as the ancient musicians used no more than five notes in this kind of music, having prescribed and set up only three levels of mensuration together with their effects (as reported in the fourth chapter), so the newer succeeding musicians further engaged in an appropriate increase and greater adornment and loveliness of song; they invented these three little notes (which are called small and slight not on account of their shape but on account of their quickness of measurement), placing them after the other original notes and adding them in an appropriate order. It is also to be observed that the melody of the song is very much ornamented by them, especially by the fusa and semifusa on musical instruments; they make the melody sound lovely in passages of fitting little runs like scratchwork or pointwork, etc.

Furthermore, in the ordering of their notes, the ancient musicians began not with the greatest—the maxima—but instead, just as with numbers 1, 2, 3, 4, etc., with \( \text{[C ii^v]} \) the littlest note—namely, the minim, thusly: minim, semibreve, breve, long, maxima.\(^{20}\) Their successors, however,

\(^{20}\) It is not clear to which ancients Agricola is here referring. For instance, Franco of Cologne presents notes in the order long, duplex long, breve and semibreve in his \textit{Ars cantus mensurabilis}, chap. 4, trans. O. Strunk in \textit{Source Readings}, p. 142. Agricola is probably referring to a discussion by Gafurius in \textit{Practica musiceae}, bk. 2, chapters 2 and 3, in which note values from minim to long are related to Greek symbols for one through five \textit{tempora}. 
have nearly followed the example of the Jews and begun at the end, thus changing the hindmost to the foremost—namely, maxima, long, breve, etc., as may be noticed with the notes in the preceding figure. 21

Also at times one finds notes with two tails, or a tail with a little stroke drawn through it. One also finds black notes with two little strokes written under them like this: ij. And you must understand that none of these notes should be made intentionally (except for incorrect notation); for instance, when a note that should be white is made black, then mark underneath it in this way, etc., as follows.

[C iii]

This one is equal to one like this.

21 Agricola apparently expects the preceding figure to be read from the bottom up, with the maxima as the foundation or starting point.
Concerning Rests

A rest is a figure drawn upon the lines and spaces to indicate an artistic cessation of song. For just as the notes are used in singing, the rests are used in being silent. Therefore each note (except for the maxima) has its own rest; whatever length of time we sing a certain note, we observe its corresponding rest by keeping silent for the same length of time. And they are used for six different reasons.

First

In order to refresh and strengthen the voice of the singer. For long singing without stopping brings weariness of voice, which cannot be changed without the use of rests.

Second

For the sake of the canonic imitation (Fugen)—that is, when one voice is to follow the other in the same phrase or melody, certain rests must be mixed in with it.

Third

For the sake of change and variety in the voices of the song. For, a song with six, eight, ten, or more voices cannot rightly be done in a lovely way without rests. Therefore it provides variety to be now singing, now keeping silent. And the more variety anything has, the more pleasing it seems to the listeners. For nature always
rejoices in change and variety. Therefore the more a song is made with an appropriate intermixing of rests and beautiful passages and counterpoint, the more dearly and finely it is valued.

Fourth

Also, rests are often used in a composition when it is hardly possible to put down any note.

Fifth

Also, the unsingable or prohibited intervals, such as the tritone, semidiapente, semidiapason, etc. (as reported in the book on musica choralis), are thereby done away with and avoided in composing.

Sixth

Similarly, one often used them as an intermediary in the moving up and down of two perfect consonances, which in composing are never permitted to move together without intermediary notes or rests (as composition demonstrates).

A Useful Instruction Concerning Rests

Rests correspond with their notes in all things—such as augmentation, diminution, and proportions (as indicated in the seventh, eighth, and twelfth chapters)—except for imperfection and alteration. For only notes, and not rests, are altered and imperfected (as the tenth and eleventh chapters show).
There Follow Two More Kinds of Rests

The first, which touches upon four lines and three spaces, signifies a perfect long or three breves. Also, it is found in no other mensuration signs except these: $O_3 \ O_2$. Hence it is also called a modal rest, as seen in A [below].

The other rest, which touches upon five or all of the lines and four or more spaces, is a general rest for the reason that all voices thereby finish and come to an end together. But it is not counted in with the notes [C v] (as are the other rests): rather, it is always found at the end of the song, as is evident in all the following examples. To be sure, one generally finds the characters used for it now as follows in B.
Here it is also to be observed that the rests are placed in a song in three different ways.

First of all, essentially—which that is, when they indicate a keeping of silence (as spoken of above).

Secondly, indicatively—namely, when they indicate not the keeping of silence but only the perfect modus \(O_3\) or \(O_2\). In this case they are always placed in front of the signature or clef sign at the beginning of the song, as may be seen below in the discant of the second example in the fifth chapter and in the tenor of the first example concerning internal signs [below, pp. 246 and 240].

Thirdly, in both ways—that is, when they signify the keeping of silence and the perfect modus at the same time, in which case they are always placed after the signature or clef sign at the beginning or in the middle of the song, as may be seen in the tenor of the first and second examples concerning alteration in the eleventh chapter.

There follows an example of the use of notes and rests in the common sign \(\mathcal{O}\), in which a semibreve signifies half a tactus and a breve signifies a whole tactus, as pointed out in the eight chapter.\(^\text{22}\)

\(^{22}\)"Canon at the lower fourth after three tactus." The altus part is derived from the discantus. Four errors in printing are noted by small letters within parentheses in this transcription. In the tenor part at (a) a semiminim in the original must be a minim. In the discantus (and the canonically-derived altus) at (b) a minim in the original must be a semiminim. In the tenor at (c) the semibreve is lacking a dot; at (d) a semiminim on \(g\) is superfluous.
[C v- C vi]
The last two notes—fusa and semifusa—as well as their rests are used quite seldom (except upon musical instruments and in augmentation, the making of the song larger) because they must be sung quite quickly (which is too difficult for the human voice). Nevertheless they may also be noticed in certain proportions, but with a different meaning; for example, in subquadrupla this note is made equal to this one and the is made equal to one like this. So they appear in many other proportions where they are sung slowly also, as will be told later. In like manner also, as it often happens, they are mixed into non-mensural song; this is described in the book on musica choralis.

23 There are no fusas or semifusas in Musica Choralis Deudsch.
How the Ancients Marked the F fa ut, c sol fa ut, and b fa In Non-mensural Song

The musicians of old marked the line or space where F fa ut or f fa ut is found in red at all times in non-mensural music;\(^24\) the C fa ut, c sol fa ut, and cc sol fa they marked in yellow (as often found in old choralis books, and as related in the book on choralis music), and the B fa, b fa, and bb fa with sky-blue coloring. In this way they were indicated and recognized.\(^25\)

\(^24^\text{These colors would have been marked on a line, not in a space.}\)

\(^25^\text{A handwritten addition to the Library of Congress copy at this point reads Vide Sebs. Virdung. There is no discussion of such coloring in Musica getuscht, however.}\)
A ligature is a binding together of notes by means of suitable little strokes. It is mostly found on account of the applying of the text to the notes. For just as one normally applies one syllable of text to one unbound note, so two, three, four, five, six, or more bound notes are often sung to one syllable of text, as is also reported in the book on choralis music.

It is to be observed that the right side of notes is more powerful than the left with regard to the placing of a tail. For if a tail is made on the right side of this note \( \boxed{\text{ }} \), either upwards or downwards, it immediately becomes a long. But where it is provided with a tail on the left side, upwards or down, it is immediately changed into a semibreve or else retains its own name [breve]. Thus the tail on the right side is always considered to be of greater strength and significance than that on the left.

**An Instruction About Ligatures—**

**First of All, About the Long**

The long is to be placed only at the beginning and at the end of ligatures, and not in the middle. For those
in the middle are all breves (as the fifth rule affirms). This is now often violated, however.

Secondly, About the Maximas, Breves, and Semibreves

The maximas, breves, and semibreves may properly be bound at the beginning, in the middle, and at the end, as is made known in all the following rules.

There Are Four Bindable Notes

Maxima 1

Longa 2

Brevis 3

Semibrevis, 4

These Four Remain Unbound

St. fecit

Susa

Semi

Print

26 Agricola is referring to the rules concerning middle notes (following the four rules about initial notes), found below on p. 200.
In addition, each ligature, with the exception of the maxima, is made with two different shapes: either four-square—which is called quadratic—or bent, which is named oblique. This latter one is not made exactly square like the other one; rather, it is made somewhat slanted, askew, or uneven. And this is why it is also called oblique, as is seen in the following examples.

Furthermore, each bound note is placed either at the beginning, in the middle, or at the end, as follows.  

Concerning the Initial Notes, the First Rule

The initial note without a tail is a long if the next one to which it is bound hangs below it, as follows.

The Second Rule

The initial note without a tail is a breve if the second one (bound to it) goes upward, like this:

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27 Handwritten additions at this point (and passim) in the copy from the Library of Congress are not found in the facsimile published by Olms in 1969. These include the helpful numbers indicating how many semibreves each note equals and the word "Fludd," presumably a reference to the early 17th-century physician and theorist whose treatise, Uttriusque cosmi majoris . . ., includes discussions of musical phenomena. See H. G. Farmer, "Fludd, Robert," in Grove’s Dictionary of Music and Musicians, 5th ed. (1954), 3:165.
The Third Rule
The initial note with a tail going down on the left side is a breve, like this:

The Fourth Rule
The initial note with a tail going up on the left \[D^\] side is a semibreve, together with the very next note, whether ascending or descending.

Concerning the Middle Notes, the First Rule
Every note placed between the first and last is called middle note.

The Second Rule
All notes placed in the middle are breves, with the exception that one which immediately follows a note having an upward tail on the left side is a semibreve (as touched upon in the fourth rule, above), as follows.

\[\text{The ascending quadratic ligature shown after the second rule is the normal form. The use of both of these}\]
Concerning the Final Notes, the First Rule

A final descending square note is a long, except for a ligature of two semibreves, like this:

[D ii]

The Second Rule

A final ascending square note is a breve, except for a ligature of two semibreves, like this:

The Third Rule

Every final oblique note is a breve, whether it ascends or descends, except for an oblique ligature of two semibreves, as follows.

The Fourth Rule

The maxima is never changed but retains its full value and substance, as follows.

There Follows a Fine Example of All the Rules Mentioned Concerning Ligatures

29 Some upward tails on the left of ligatures are ambiguously short. The last note of certain two-note
semibreve ligatures is filled in, a partial coloration indicating, in context, the removal of one quarter of the note value. Cf. Apel, Notation, pp. 126-30, 142-44. Small letters within parentheses placed in the example indicate the location of the following: (a) This note is missing in the original; the custos at the end of the previous line reveals that the note was to be B-flat, while the context requires an additional semibreve. (b) A blur in the original at this point looks like a semibreve rest. (c) This black note is missing its tail in the original.
[D iii] Everything that happens to unbound notes may happen to bound ones also, namely imperfection, alteration, etc., as is clearly indicated in the tenth, eleventh, and twelfth chapters. Concerning these rules, see the fourth chapter of the book on instrumental music, in which is made another clear presentation that is more detailed in some respects.  

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30 Agricola, Instrumentalis, fol. C viii - D.
Since those who are experienced in this art have set down so many different types of notes to be used in this kind of music, they have also rightly provided along with them certain bases by which each note is to be recognized—namely, three gradations: modus, tempus, and prolation. And each gradation has its own notes. For modus only effects maximas and longs; tempus, breves; and prolation, semi-breves; as follows:

Concerning Modus

For present purposes, modus is nothing other than a measuring of maximas and longs. Therefore the content of these notes is here called modus, as is further explained.

Concerning the Division of the Modus

Since modus has an effect on two kinds of notes, as mentioned above, there are two kinds of modus also: a greater which effects the maximas; and a smaller, which effects only the longs. Each kind is twofold—either perfect or imperfect—as follows.
Concerning the Great Modus

The great perfect modus is that in which a maxima contains three longs. Such a maxima, as well as every note signifying three [of the next lower note value], is called perfect in this kind of music, as is set forth more clearly below in the discussion of perfect tempus.\(^{31}\)

Also, each gradation has a special sign by which it is recognized. For instance, in our present day this modus is indicated externally [at the beginning of a piece or section] by means of a complete circle put together with the numeral three, like this: \(0_3\). Internally, however, it is indicated by means of two rests touching upon four lines and three spaces. Since one rest of three breves is used in song in order that the small perfect modus may be recognized (as will be seen below), it is not unreasonable, says Franchinus, for the great perfect modus to be indicated by two such rests internally, as musicians say, and recognized in that way.\(^{32}\) Now, it is to be observed that the ancients rarely used other signs for the identification of the modus [D iiiii] besides these aforementioned rests. In our own times, however, the modus is generally indicated by the whole or the half circle together with the numeral 3 or

\(^{31}\)See below, p. 216-18.

the numeral 2; one or another of these signs or ones like them are generally placed at the beginning of the song, as will be seen in the fifth chapter.

It is to be observed that this particular modus is now used very seldom in our songs (since, as in the following example, the notes are sung very slowly in it, which is tiresome). For that reason I do not want to write anything in particular about it here, but only about those things used by us at present.

A Lesson Concerning Modus

When the maxima is found in any sign other than $O_3$, it always signifies two longs. In this way also a long in any sign other than these—$O_3 O_2$—always signifies two breves, as is clearly seen in the resolutions of the notes. Therefore, the maxima is reckoned as a great perfect modus in the perfect sign because of the number three; where it is deprived of the sign, however, it is reckoned as a great imperfect modus by musicians because of the number two. In the same way, the long in its perfect sign is called a small perfect modus, and if it is deprived of the sign it [D v] is called a small imperfect modus. And the same way also with the tempus and prolation, etc.

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33Agricola is referring to the diagrams showing how many notes each note of the next higher value is worth.
Cum autem in metrorum dispositione Poetae ipsi longis syllabis modum quasi maiorem in vocis quantitate terminum imponerent, quem nullatenus altera excederet temporis mensura, longam ipsam notulam musici modum appellarunt.34

Minor \[\text{Longa}\]
Modus
Maior \[\text{Maxima}\]

Significance of the Notes in the Great Perfect Modus and Perfect Tempus

Chapter: 5

Internal Signs

34 "Since poets in their meters gave long syllables the term modus, as if indicating a longer duration of sound which never exceeds two tempora, musicians have given the long the name modus." Gafurius, Practica musicae (Naples, 1496), transl. Clement Miller, Musicological Studies and Documents, no. 20 (Rome: American Musicological Society, 1968), p. 74.
This instruction confirms that $O_3$ does not imply diminution. See below, p. 256. In the incipit, the figures above the maxima indicate a value of 27 semibreves (the 7 is reversed).
36 In the discantus at (a) a minim in the original must be a semiminim.
Concerning the Great Imperfect Modus

The great imperfect modus is that in which a maxima is measured with two longs—that is, when only two longs are sung to one maxima. Its sign is the incomplete circle, joined together with the numeral three, like this: $C_3$.

The Multiplying of the Notes in the Great Imperfect Modus, With Perfect Tempus and Imperfect Prolation³

![Diagram of notes]

Or, in perfect tempus, like this:

![Diagram of notes]

³The figure shows that the circle or semicircle indicates perfect or imperfect tempus when there is no number beside it; when there is, the circle or semicircle applies to the modus, and the number to the tempus.
[D vii\textsuperscript{V}]

Discantus

Alta

Tener

[Bassus]

Canon after 4 breves at the upper octave]
Concerning the Small Modus

The small perfect modus is a long containing three breves. It is recognized by means of this external sign: \( \text{o}_2 \). Internally, however, it is recognized by means of a rest touching upon four lines and three spaces, as indicated in the part of the fifth chapter that concerns internal signs.\(^{38}\)

Values of the Notes in the Small Perfect Modus and Imperfect Tempus\(^{39}\)

With the ancients [it was] like this: \( \text{...} \).\(^{40}\)

\(^{38}\) See below, p. 245.

\(^{39}\) The small example at the bottom of the page presents the most common internal signs of small perfect modus: the rest covering three spaces, three longs with coloration, and points setting off long with breve or two breves. In traditional notation, the next-to-last note should be an altered breve, not an imperfected long.

\(^{40}\) Philippe de Vitry used a similar sign, \( \text{...} \), in his Ars Nova, ed. G. Reaney et al. as no. 8 of Corpus Scriptorum de Musica ([n.p.]: American Institute of Musicology, 1964), p. 27. Prosdocimus de Beldemandis used a sign closer to that shown by Agricola, \( \text{...} \), in his Tractatus practice
De musica mensurabili, ed. E. de Coussemaker in Scriptorum de musica medii aevi (Paris, 1864-76), 4 vols., 3:214-15. Gafurius says that the sign shown by Agricola, ..., was used by "early composers," in Practica musicae, bk. 2, chap. 7 (trans. Miller, p. 84).
Concerning the Small Imperfect Modus

The small imperfect modus is that in which a long is measured with two breves— that is, when two breves are sung to one long. Its sign is the incomplete circle placed together with the numeral two, like this: $C_2$.

Resolution of the Notes in the Small Imperfect Modus With Imperfect Tempus and Imperfect Prolation

[Canon after two breves at the upper octave]
Concerning the Second Gradation, Called Tempus

The measured time that is held on the breves by the voice is here called tempus, as when three or two semibreves are sung to one breve. And [as with the modus] it is also of two kinds—perfect and imperfect—as follows.

The Perfect Tempus

[This] is when three semibreves are sung to one breve. Its external sign is the complete circle, like this: \( \circ \), or the numeral three placed by the complete or incomplete
circle, like this: $0^2_3 \underline{\mathcal{C}_3}$. Concerning its internal signs, see the fifth chapter. Now, since this gradation has effect only on the breves, it often happens that breves are called tempora, as one generally notices in all canons.

Look for the Values of the Notes Above
In the Multiplying of the Notes
Of the Great Imperfect Modus

\[\begin{array}{c}
\text{Discantus} \\
\text{Altae Canon at octave}
\end{array}\]

\[\begin{array}{c}
\text{Tenor} \\
\text{Bassus}
\end{array}\]

\[\text{Haece quod tactum integra modulatur}^{41}\]

\(\text{This [semibreve] is measured according to the whole tactus.}^{41}\) The music example bears all the evidence of a canon—marks of congruity, a fermata part of the way through as well as at the end of one part (the discantus), and no altus part. There is no canonic inscription given, but the piece is successfully resolved by deriving an altus part from the discantus at the lower octave, commencing two breves (tempora) after the discantus. The resulting part is in the appropriate range for the altus, as the discantus part remains high until after the canonic imitation by the altus has ceased, beyond the fermata. For the internal signs of perfect tempus, see below, p. 237. For the value of notes in the great imperfect modus (mentioned in the caption above), see above, p. 211.

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\(^{41}\)
The Imperfect Tempus

[This is when two semibreves are sung to one breve. And it is called imperfect for the reason that the breves are not measured into three parts but into two. This twofold number is considered imperfect and the threefold perfect (as mentioned above in the fourth chapter).] The imperfect tempus is the incomplete circle C or the numeral two placed beside [E iii] the complete or incomplete circle as follows: O₂ C₂.

^See above, p. 206.
For the values of the notes, see the solution of the small imperfect modus above.\(^{43}\)

Furthermore, this circle \(C\) is not spoken of and valued as a half circle (as some say) but as an incomplete circle. For wherever the sign \(C\) appears, the breve is robbed only of a third part through imperfection (as appears in the tenth chapter),\(^{44}\) namely of a semibreve, and not of a half part, which would be a semibreve and a minim according to the complete circle \(O\). Thus it is called imperfect (unvollkommen). In the same way, this \(C\), being a sign for the breves—speaking only of tempus—should also be called not a half but an incomplete circle. And having been robbed of a third part, by rights it should only be written in song with two-thirds of its previous quantity. But this is hard for those who notate song to hit upon; they may not always have it exactly to the line or exactly to the circle. And so not just a third part is taken away by the scribes, but sometimes more and sometimes less. That is how you will find it drawn in almost every song, if you will notice. To understand this correctly, divide a complete circle into three equal parts and take one away; then you will see the size and extent of the incomplete or diminished circle.

\(^{43}\)See above, p. 219.

\(^{44}\)See below, p. 215.
Concerning This Digit: 2

Since the number two (as Pythagoras says) is considered weak and imperfect, just like a wife compared with her husband, so too every note measured with this number is here valued as imperfect. For this reason the imperfect tempus is externally indicated by musicians and recognized by means of this digit 2 (meaning two) placed beside the circles, as mentioned above and in the fifth chapter.\(^{45}\)

[Canon Terminology]

Since there have occurred up until now and will occur hereafter many different examples containing fine canons, and since these canons are commonly indicated at the beginning with Greek names, I would like to put down a small clarification of these in order that the young students of this art may not be frightened away.

| Epidiapason | Octave Above |
| Subdiapason | Octave Below  |
| Epidiapente | Fifth Above  |
| Subdiapente | Fifth Below  |
| Epidiatessaron | Fourth Above |
| Subdiatessaron | Fourth Below |

Furthermore, tempus generally signifies a \(\square\), as was said in the fourth chapter in the part about tempus.

\(^{45}\)See above, p. 218, and below, pp. 233-35.
An Example Concerning The Imperfect Tempus

46

"Altus part derived from the discantus at the lower fourth after one tempus [breve];" "Tenor from the bassus at the upper fourth after four tempora [breves]." This double canon is straightforward with all imperfect mensurations.
Concerning the Third Gradation, Called Prolation

Prolation, which always appears in the semibreves, is a measuring of them. For it is from this gradation that we recognize how many minims are sung to each semibreve. And it is of two kinds, perfect and imperfect.

The Perfect Prolation

[This] is when a semibreve contains three minims. And it is recognized externally by means of a dot enclosed within a complete or incomplete circle, like this: O C. Internally, however, [it is recognized] as indicated in the fifth chapter.

Furthermore, when the dot does not appear in the circle, then a semibreve always has the value of only two minims in all signs (except for proportions and alteration), as is seen in many examples throughout [this book].

Moreover, since this gradation has its effect on small notes, for the sake of measurement, so too musicians
have agreed on quite a small sign to prescribe for the recognition of the perfect prolation—namely, the little dot placed within the complete or incomplete circle. When the little dot does not appear in the circles, however, it is easy to conclude that the semibreves are measured with two [E v^v] minims, after the manner of imperfect prolation—except for alterations and proportions—and are thus considered to be imperfect, etc.

Solution of the Notes in Perfect Prolation and Perfect Tempus

Internal Signs of the Perfect Prolation

[E vi] In addition, it is to be observed that both signs Θ [and] θ have identical note values with the exception of the breves, each of which signifies three semibreves in this [sign] Θ and only two in the other [one], as is seen in the
two neighboring figures, above and below.\textsuperscript{47} It is also clearly shown in the neighboring bassus, tenor, and discantus above [below].\textsuperscript{48}

Resolution of the Notes in Perfect Prolation

And Imperfect Tempus

\[E vi^{v}\] An Example of Perfect Prolation and Perfect Tempus \textsuperscript{49}

\textsuperscript{47}See directly below and the middle of p. 223 above.

\textsuperscript{48}Agricola is referring to the following musical example where perfect prolation is found. By \textit{oben}, he may mean the discantus above the bassus and tenor parts.

\textsuperscript{49}"Canon [--altus from tenor--after one] breve at the
upper fifth." As referred to in the preceding discussion, the example displays imperfect tempus—in the discantus—as well as the perfect tempus indicated in Agricola's caption heading for the example. The breve in the bassus at (a) loses four-ninths of its value. There is a blur in the original at (b) that looks like a superfluous semibreve rest.
There are three minims or one perfect semibreve sung to the proportioned tactus throughout [this example].

Another Example of Perfect Prolation and Imperfect Tempus

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50"Canon [tenor derived from bassus] after one perfect semibreve at the upper fourth."
Throughout this and the previous example there are three minims, or one perfect semibreve, sung to the
proportion tactus. Concerning this tactus see the sixth chapter and the part of the twelfth chapter concerning tripla. 51

[E viii] The Imperfect Prolation

[This] is a semibreve measured with two minims. And (like the imperfect tempus) it is indicated by means of the single complete or incomplete circle without a dot, like this: O C. 52 Now although this prolation and the imperfect tempus have one kind of sign [one sign in common], nevertheless they have two different natures with regard to their effect on the notes—as was said in the fourth chapter, above—for the tempus acts upon the breves, and the prolation acts upon the semibreves.

Concerning This, Look At an Example 53

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51See below, pp. 254 and 315–17.

52This parenthetical remark is not accurate. Only the incomplete circle indicates imperfect tempus.

53"Tenor from bassus at the upper fifth after a semibreve."
Concerning this, see the solution of the notes in the small imperfect modus, above.\textsuperscript{54}

\textsuperscript{54}See above, p. 215.
Another Fine Example of the Three Gradations All Together, But in Such a Way That the Prolation Is Used For Augmentation or Enlarging Of the Song, As Shown In the Seventh Chapter.55

The Latin rubrics read as follows: "Perfect minor modus, imperfect tempus" (discantus). "In perfect tempus, imperfect prolation" (altus). "Perfect tempus" (tenor). "In augmentation [with] perfect prolation, perfect tempus" (bassus).
CONCERNING THE EXTERNAL AND INTERNAL SIGNS

THE FIFTH CHAPTER

Since the notes are not recognized in any way other than through the signs of the gradations (which are many and varied), it is necessary to know the kinds of signs and their characteristics. Therefore, in order that they may be comprehended, we would like to give some brief instruction about them, beginning with what a sign is, as follows.

A Sign

[This] is a figure placed before the song through which the meaning of the three gradations and of the notes is clearly brought to light, as though a seal were affixed to it.

Division of the Signs

Furthermore, the aforementioned three gradations are recognized by means of two kinds of signs: external and internal. The external ones are those expressed and drawn visibly before the beginning of the song—such as circle, number, and dot enclosed in the circle—without which no note is correctly recognized and sung externally [at the outset].
Concerning the External Signs

The First Rule

The [complete or incomplete] circle placed alone—that is, without number or dot—always signifies tempus and the imperfect prolation. If it is joined together with a number, however, then the circle signifies modus and the number tempus.

The Second Rule

The circle next to the number 3 signifies the great modus, and the number signifies the perfect tempus. Beside the number 2, however, [the circle signifies] the small modus, and the number the imperfect tempus, as the following figure shows. 56

The Third Rule

The dot enclosed inside the circle indicates the perfect prolation, and the circle the tempus.

The Fourth Rule

Furthermore, the number 2, wherever it is next to the complete or incomplete circle, over and above the fact that it indicates imperfect tempus, also signifies a diminution of the song. For the song is sung twice as fast (noch so bald) in these signs $\odot_{2} \odot_{2}$ as in $\odot \odot$. 57 Therefore a semibreve is

56 See below, p. 235.

57 Noch so ____ , whose modern equivalent is noch einmal so ____ , "again as ____ as." Obvious in this context, the
worth a half tactus in the first two signs and a full tactus in the others, as indicated in the fourth and eighth chapters.

[F iii^v] The Names and Forms of the External Signs, As Presently Used

An external sign

O₃ of the great perfect modus and perfect tempus.
C₃ of the great imperfect modus and perfect tempus.
O₂ of the small perfect modus and imperfect tempus.
C₂ of the small imperfect modus and imperfect tempus.
O of the perfect prolation and perfect tempus.
C of the perfect prolation and imperfect tempus.
O of the perfect tempus and imperfect prolation.
C of the imperfect tempus and imperfect prolation.

Thus it is easy to conclude that with these external signs one cannot indicate in song the great modus without the small one, the small one without the tempus, the tempus without the prolation, or the prolation without the tempus, etc.


58 Agricola’s inflexible system permits the external indication of the great perfect modus—and also requires it—when and only when the small modus and the tempus are perfect, in O₃. Gafurius, in his Practica musicæ, bk. 2, chap. 3 (trans. Miller, p. 88), suggests that if the great modus is to be indicated externally at all, three signs would be required; for example, O₂ 3 would indicate great perfect modus, small imperfect modus, and perfect tempus. Compositions were rarely if ever notated with three such signs, however.
Meaning of the Figure

The numbers in this figure always show how many [there are] of those notes standing directly above [the numbers]. For instance, the third maxima [from the left], in the sign Θ, has the value of two longs; the long, of two breves; the breve, of three semibreves; the semibreve, of three minims. Now do the same thing also with the other signs and notes.

How Many of the Notes Standing Immediately Above It Each Note Is Worth

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59 This chart presents for the first time four external signs missing from the previous discussion and examples in the chapter—although they are a logical extension of the system of circle, number, and dot: signs with all three components, indicating perfect prolation by the dot, perfect or imperfect tempus by the number 2 or 3, and perfect or imperfect modus by the complete or incomplete circle. A handwritten note in the Library of Congress copy, "Vide p. 76, p. 82, p. 91," refers the reader to similar
An Instruction Concerning the Last Four Notes

Except for alteration and proportions, a minim in all signs signifies two semiminims, a semiminim two fusas, and the fusa two semifusas. For these notes have no special gradation as the others do. On that account also the ancients hardly used them at all; they were added by their successors, as the musicians write, for the sake of subtlety and loveliness of art and song.

Concerning the Internal Signs of the Perfect Gradations

The internal signs are those which indicate the perfect gradations internally in a concealed manner—that is, not by means of circle, number, or dot, but by something else. And these signs occur only in the perfect gradations; the imperfect ones, however, are generally shown and indicated by means of external signs.

charts; these give note values for signs in the whole tactus, augmentation, and diminution. It is enlightening to compare these charts. See below, pp. 256, 262, and 271.
There Follow Three Internal Signs Through Which the Three Gradations That Were Touched Upon Can Be Recognized Internally—That Is, Without the Placing of the External Signs.

The First
A rest touching upon four lines, three black longs, and a dot with a tail between two breves are internal signs of the small perfect modus.

The Second
The semibreve placed after its two [semibreve] rests, three black breves, and a dot with a tail between two breves are internal signs of the perfect tempus internally.

The Third
A rest touching upon four lines, three black longs, and a dot with a tail between two breves are internal signs of the medium perfect modus.

There Are Three Internal Signs [for each Gradation].
The Third

Two suspiria [minim rests] together with a minim, three black semibreves, and a dot with a tail between two minims are internal signs of the perfect prolation.

[F v^] Interpretation of the Figures Placed Above

When a song containing one, two, or all three of these signs is found for which perhaps no external sign or else a strange sign appears, that song must be reckoned at all times by the same notes of its gradation as is indicated in the figure. For instance, when a rest touching upon four lines, three black longs one after the other, or a dot with a tail between two breves appear, that song must be sung just as if this external sign O2 were standing there. Thus [do] also with the other signs, as the figure and the next example show.
There Follow the Internal Signs of the Great Perfect Modus—Very Seldom Used In Our Times—Touched

Upon Above In The Fourth Chapter

Two rests touching four lines

Three beside each other before the beginning of the song:

Internal Signs

Three black maximas, as:

A dot of division between two longs

Furthermore, wherever three rests touching upon three spaces and four lines are found together immediately before the beginning of the song, the first two always signify the great perfect modus, and the third the small perfect modus. It is also to be observed that if they

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61 See above, p.206. Note that Agricola indicates the great perfect modus with two long rests, not three.

62 It would be easy to presume that the three rests indicate the perfection of the great modus, and that each rest is three spaces in length to indicate the perfection of the small modus, but Agricola here contradicts this idea, as does Gafurius in his Practica musicae, bk. 2, chap. 7 (trans. Miller, pp. 84-85). According to Clement Miller, (op. cit., n. 19), Tinctoris disagrees and requires three long rests to indicate the great perfect modus, in his Tractatus de notis ac pausis (Coussemaker. Scriptorum de Musica Medii Aevi, vol. 4 [Paris, 1876]: 49).
are found in front of the signs or clefs at the beginning of the song (as is seen in the following tenor and in the discantus of the second example), they are not functional rests to be observed but are only placed indicatively, as touched upon above in the second chapter. But when they are placed after the signs, they are always functional as well as indicative; thus they are observed as rests in accordance with their nature. Also, it does not make any difference if they are drawn dissimilarly on the lines and spaces—that is, one higher than the other—as is found visibly manifested in the immediately following tenor.

[F vi] The First Example Concerning the Internal Signs

63 The three non-functioning rests indicate that the perfect maxima has the value of three longs, each perfect long having the value of three breves. The incomplete circle with line through it that is beside the rests, however, signifies imperfect tempus and prolation, in diminution. The rhythm of Agricola's resolution is given beneath the tenor part, beginning at (a). A small mark that looks like an ornament is found in the bassus part at (b).
These three rests [at the beginning of the tenor part] are not functionally observed but are only placed as indicators, as mentioned above in the second chapter.\footnote{See above, pp. 193-94.}

\[F \text{ vi}^\text{v} - F \text{ viii}\]

\[
\begin{align*}
\text{Resolution of the preceding tenor.}
\end{align*}
\]
A Second Teaching

Furthermore, the musicians of old used no more than six signs by which the perfect gradations were to be recognized. For the imperfect ones, however, they used no signs except the one for the imperfect *tempus C*. For this is what they say: when the song is robbed of these signs, one may easily gather that it is ascribed to the imperfect gradations as one robbed of its perfection. For as the philosopher says, *frustra fit per plura quod fieri potest per pauciora* [in vain is done through many that which can be done through fewer].^65

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65It is Aristotle to whom Gafurius attributes this idea in his *Practica musicae*, bk. 1, chap. 3 (trans. Irwin Young, p. 21, n. 24). Young traces the substance of the idea to Aristotle: "It is also a fault in reasoning when a man shows something through a long chain of steps when he might employ fewer steps." *Topics*, bk. 8, chap. 11, trans. W. A. Pickard-Cambridge as vol. 1 of *The Works of Aristotle* (Chicago: Encyclopedia Brittanica, 1957), p. 280.

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A thing takes place through many quite in vain If it through few the same end well may gain. Whatever's short and good is what I praise; Against long chatter your defenses raise. For then mixed in with it are often lies. You should not let that be a big surprise! Take note of it; then you will oft perceive, And from many a gossip take your leave.
Six Signs of the Ancients

- of the great perfect modus
- of the small perfect modus
- of perfect tempus
- of imperfect tempus
- of perfect prolation and perfect tempus
- of perfect prolation and imperfect tempus

66 The only "ancient" that used only two rests to indicate the great perfect modus, to my knowledge, was Gafurius, in Practica musicæ, bk. 2, chap. 7 (trans. Miller, pp. 84-85). See above, p. 239, n. 62
Concerning the Three Internal Signs

Tenor from discantus at the lower octave after three breves. The example has been transcribed with a consistent 4:1 reduction of note values to dramatize the effort with which Agricola's students may have attempted to fit the voice parts of this piece together before learning that perfect prolation signifies augmentation when found in one voice part (see below, p. 258) and that an indication of modus may signal diminution (never clearly stated, but implied by the fact that the number 2 placed by a circle signifies diminution; see above, p. 233-34). The indicative rest at the beginning of the discantus and the dot of division between two longs are internal signs of small perfect modus—hence the diminution giving one beat per breve. In the altus, the functional rests at the beginning and the dot of division between two breves are internal signs of perfect tempus; there is one beat per semibreve. In the bassus, two minim rests side by side, three colored semibreves, and a dot of division between two minims (all found near the middle of the bassus part) are internal signs of perfect prolation; this produces augmentation with one beat per minim. In the altus part at (a) a fusa, probably c', is required by the context although not present in the original; at (b), three semiminims in the original must be fusas.
[G ii] There Follow Still More External Signs

Furthermore, there are still other external signs, ones not having an effect on the notes, as the preceding ones do, but meaning something else instead, as follows.

::||:: Of Repetition

Where this appears, [it] signifies a recommencing of the song and is generally found in the German tenors.
Of Taciturnity

[This] signifies a stopping by all the voices on the same note [at the same time], and is put in place of general pauses, as is touched upon in the second chapter.

Of Coming Together

[This] indicates a coming into agreement; as, when one voice is resting, then generally the note of the singing voice on which the resting voice begins is designated in this way, as is seen in all canons.

Of Softened B, fa

Where this stands, [it] means that the song is sung softly by means of the syllable fa, as is taught concerning the modes in the Choralis [treatise].

[G ii\textsuperscript{V}]  Mi

[This] means that the song that includes it is sharply expressed by means of the syllable mi, as is also indicated in the Choralis.
This singular piece, also transcribed and discussed by Heinz Funck in Martin Agricola: Ein frühprotestantischer Musiker (Wolfenbüttel: Kallmeyer, 1933, pp. 148, 150), is a puzzle canon and the only composition with text in this treatise. Clues such as the inscription "Altus. Tenor. Meeting of the two voices" and the unusual design of the repeat signs above the first note and at the end of the altus part point to the solution: a crab canon at the unison, in which the tenor begins at once with the final note of the altus part and proceeds backwards to the beginning. In text underlay I have been guided by Agricola's approximate placement and by Zarlino's ten rules as translated by Oliver Stunk in Source Readings, pp. 255-61. This music example does not include all of the additional external signs listed in the preceding discussion; the ones missing are the congruency sign (found in the previous example and many others) and either a sharp or a natural sign to signify mi.
Verbum Dei

minimamet in e tertium.
THE SIXTH CHAPTER
CONCERNING THE BEAT OR TACTUS

The tactus or beat, as it is here understood, is a steady and moderate motion of the singer's hand, like a guide-stick, by means of which the voices and notes are correctly directed and measured together in accordance with the indications of the signs. For all voices must be regulated according to it if the song is to sound well. Therefore it is nothing else but a correct and appropriate measuring of the three gradations: modus, tempus, and prolation. Also, since there are so many signs, as was reported above, and since the tactus is directed and caused to change in accordance with them, there is also more than one kind of tactus; and there are three kinds of tactus in song, as follows.

The Whole Tactus

[This] Is that which includes within its motion an undiminished semibreve or a breve diminished by half, as one finds in the examples of the second, third, and fourth chapters and throughout.
The Half Tactus

[This] is the half part of the whole. Also it is called this because it includes half as much as the whole [G iiii] tactus—that is, a semibreve diminished by half or an undiminished minim—in its motion (that is, by the downbeat and lifting up), as is seen in the example of the eighth chapter—concerning diminution or decreasing—and in many others. 69

A Figure Concerning the Whole and Half Tactus

Furthermore, the downbeat and lifting up together always make one tactus. And the half tactus is beat twice as lively (noch so risch) as the whole, as follows. 70

69 See below, pp. 269-71.

70 The figure shows that the semibreve receives a whole tactus in the signs O, C, and C3; it receives a half tactus in the signs Ø, O2, Ø, and C2. The figure and the
The Proportion Tactus

This is the one that includes three semibreves as in *tripla*, or three minims as in perfect prolation.

Concerning this tactus see the third and the last chapters and the following example.\(^1\)

An Instruction Concerning Proportion Tactus

Furthermore, throughout proportion tactus a semibreve is sung almost as quickly as a minim was formerly in half tactus \(\mathbb{1}\), the minim as a semiminim, and the semiminim as a fusa, as follows.\(^2\)

\(^{1}\)See above, p. 226 and below, pp. 316 and 257.

\(^{2}\)This is a revealing instruction. Since there are two minims per semibreve and four per breve in \(\mathbb{1}\), for the semibreve to be sung "almost as quickly" as a minim had been in \(\mathbb{1}\) suggests three semibreves in the place of four minims or two semibreves in \(\mathbb{1}\). This is really a sesquialtera proportion. Since the semibreve in \(\mathbb{1}\) is sung to a half
The Mensuration Or Measuring of the Proportion Tactus

Just as the two numbers three and two taken together have the proportion *sesquialtera* to each other, the proportion *tactus* is so regarded and measured when it is beat slowly against the whole or quickly against the half [tactus]? as for example: The half *tactus* in this sign *\( \emptyset \)* comprises two of these *\( \emptyset \)*, but the proportion *tactus* always comprises three: *\( \emptyset \emptyset \emptyset \)*. Therefore the proportion *tactus* is carried on as much as a minim more slowly than the other two. And since it is appraised according to the *sesquialtera* kind, as compared with the other [two kinds of] *tactus*, and since they are contained within it one and one-half times, it may rightly be called *sesquialteratus* or *proportionatus tactus* (as musicians write). Also, one does not use it everywhere, but only in perfect prolation, as touched upon in the fourth chapter,? or in the proportion

tactus, the semibreves in the sign *\( \emptyset \)* actually stand in a 3:1 proportion to a semibreve in whole *tactus*.

The fact that the proportion *tactus* may be beaten "slowly against the whole or quickly against the half" reveals that Agricola does not consider it to have a set or fixed tempo, but only that the downbeat contains twice the time value of the upbeat. This helps to explain the apparent discrepancies in Agricola's various instructions for rate of speed, which apply to different contexts or mensuration signs.

The sign *\( \emptyset \)* is blurred in the original.

See above, pp. 222-28.
tripla—hemiola—when all voices have it together; and thus a semibreve is sung at all times according to the measure that a minim had before. Now this kind of tactus is used all the time in those melodies on which full-springing dances are formed, as in the old little song "Hast Thou Taken Me," etc. And it is found in the last chapter, concerning tripla and hemiola.

Furthermore, a semibreve is worth a whole tactus everywhere except for the proportion signs—the increasing and decreasing of the song. In the decreasing, a breve signifies a whole and semibreve a half tactus. Therefore, in this kind of sign, with a stroke drawn through it or with the number 2 brought together with it, a breve or two semibreves should always be sung on the whole tactus, and a semibreve on the half tactus, as is taught in the eighth chapter.

76 See below, pp. 315, 333-34. Agricola considers tripla and hemiola to be the same. See below, p. 288, n. 119.

77 This instruction results in a doubling of the rate of speed of the semibreve but in a slowing of the tactus by 50% if the change is from whole or half tactus to proportion tactus.

78 See below, pp. 316, 333-34.

79 See below, p. 269. Note that the number 3 placed by a complete or incomplete circle does not cause any diminution. The figure on the next page is much like that used by Ornitoparchus in his Micrologus (Leipzig, 1517), fol. Gv.
Interpretation of This Figure

The first four notes, before the signs, always signify as many whole tactus as the numbers above them show. But there are always as many of the other four—the ones after the signs—sung on one whole tactus as the numbers above them indicate. For example, the long in the uppermost sign is worth nine whole tactus, and six semiminims in the same sign are worth one whole tactus. Thus understand all subsequent figures done in this way.

80 A hand-written note in the Library of Congress copy gives cross references to figures on folios F iii (External Signs), H (Augmentation), and H v (Diminution), found on pp. 235, 262, and 271. The four signs with dots that signal perfect prolation must be understood to appear in all voices rather than in only one voice (which would be a sign of augmentation; see below, pp. 258 and 262). Nevertheless, they do not really belong in this figure concerning whole tactus, since the three minims constitute a proportion tactus as defined above on p. 253.
An Example Concerning Proportion Tactus

Discantus: canon [from tenor] after one breve at the upper octave.
THE SEVENTH CHAPTER

CONCERNING THE AUGMENTATION OR INCREASING OF THE SONG

The augmentation or increasing always takes place when the notes of the song are sung more slowly and with greater value than they usually are. And it is indicated with four signs, one external and three internal.

The External Sign of Augmentation

[This is when a dot enclosed within the whole or incomplete circle like this O C is found only in one voice, in which case a perfect semibreve is worth three whole tactus and a minim one. Where such a sign appears with all the voices, however, it does not signify an increasing but the perfect prolation, in which three minims or one perfect semibreve is sung on the proportion tactus, as reported above in the fourth chapter in the example of perfect prolation.]

The First Internal Sign

[This includes] two suspiria with one minim, three black semibreves, or a dot with a tail between two minims. When one or more of these signs appear in one voice alone,

\[82 \text{See above, pp. 225-28, and the figure on p. 256.}\]
an increasing of the notes is signified, as the bass clearly shows [in the example] concerning the internal signs in the fifth chapter. 83

The Second Internal Sign

When one finds few notes with no repetition [sign] in one voice and many [notes] in the other [voices], the notes in such a voice must also increase, as is noticed in the bass [in the example] concerning internal signs. 84

The Third Internal Sign

[This] is indicated with a rule or text called [G viii] canon, reading like this: Let the breve be a maxima, the semibreve a long, and the minim a breve, etc. Then the breve is sung at all times as a maxima, the semibreve as a long, and the minim as a breve. Or [it may read] like this: Crescit in duplo vel triplo, etc. [It grows two-fold or three-fold, etc.] Then each note signifies two or three times its own [normal] value, as the following example tells [ pp. 263-65].

83 See above, p. 246. In other words, by the first internal sign of augmentation is meant any of the internal signs of perfect prolation when they are found in one voice part only.

84 See above, p. 246.
Canonica Augmentatio [Rules of Augmentation]

<table>
<thead>
<tr>
<th>Crescit</th>
<th>Quintuplo</th>
<th>Then</th>
<th>Five</th>
<th>Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>In</td>
<td>Sextuplo</td>
<td>Each</td>
<td>Six</td>
<td>Its</td>
</tr>
<tr>
<td>It</td>
<td>Septuplo</td>
<td>Note</td>
<td>Seven</td>
<td>Own</td>
</tr>
<tr>
<td>Grows</td>
<td>Octuplo</td>
<td>Is</td>
<td>Eight</td>
<td>[Normal]</td>
</tr>
<tr>
<td>In]</td>
<td>Nonuplo</td>
<td>Worth</td>
<td>Nine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decuplo, etc.</td>
<td></td>
<td>Ten [etc.]</td>
<td></td>
</tr>
</tbody>
</table>

What Canon Is

Canon is always a printed text or rule placed by the song to generate something not set down or established from something that is set down. For example, Sit Maxima Longa, Brevis, Semibrevis, etc. [Let a maxima be a long, a breve be a semibreve, etc.]. Then I must draw forth a long, which is not set down, from the maxima which is, and a semibreve from the breve; that is, the maxima is sung as a long and the semibreve as a breve [breve as a semibreve], as the eighth chapter teaches.  

---

85 The breve and semibreve should here be reversed to correspond to the others in this canon of diminution. Such canons are further discussed below on pp. 267-68.
There Follow Two Rules

The First

There is no difference between augmentation and perfect prolaction except that an undiminished [augmented] minim always signifies a whole tactus whereas in the perfect prolaction three minims signify a proportion tactus.\(^{86}\)

The Second

The rests are increased and decreased in size together with the notes. For instance, just as three whole tactus are sung for one semibreve,\(^{87}\) so silence is maintained just as long for its rest, as follows in the example.

\(^{86}\) This rule is contrasting the appearance of perfect prolaction in one voice only—a sign of augmentation—with its appearance in all voices, in which case augmentation is not called for—the instance Agricola is labeling as "perfect prolaction."

\(^{87}\) This happens in the augmentation caused by perfect prolaction found in one voice only.
In this table are found the external signs which are for the increasing of the song and which are used only in one voice (as mentioned); the value of the notes for each one of them in particular is also indicated therein by means of the numbers.

---

A hand-written note in the Library of Congress copy gives cross references to figures found on folios F iiiii (External Signs), G vi (The Whole Tactus), and H v (Diminution); see pp. 235 and 256, above and p. 271 below. In the column above the minim (\(\frac{1}{2}\)), the value 1/2 appears in rows 2, 4, 5, 7, 10, and 12, apparently to indicate diminution by one half. It should be corrected to read 1 in each case, because the minim is worth one half tactus.

Notice that the augmented values would be halved when the sign includes one of the following indications of
diminution: the number 2, the slash, or the reversal of the incomplete circle; they would be quartered when two of these indicators appear simultaneously.

90 The normal value of a semibreve (in integer valor) would be a whole tactus, here transcribed as a half note. In the discantus, the canon of triple augmentation gives the semibreve three times this value, a dotted whole note. In the tenor, the external sign of perfect prolation in one voice gives the minim the value of the whole tactus (d); a perfect semibreve comprises three minims. Finally, in the bassus there are two external signs of 2:1 diminution appearing simultaneously: the slash and the number two; these together would cause a quartering of the values, but the canon of duple augmentation (Crescit in duplo) changes this to only a halving of values. The net result is the value of a whole tactus for the breve (d) and the value of a half tactus for the semibreve (d).
Resolution of the preceding Discantus.

Resolution of the Tenor.
THE EIGHTH CHAPTER

CONCERNING DIMINUTION OR THE DIMINISHING
AND HALVING OF THE SONG

The diminishing or halving of the song is a taking away of the original value (ersten Grösse) of the beat and the notes. Also, both of these [diminishing and halving] have almost the same nature in signs that are cut through with virgules or are put together only with the numeral 2; namely, that where they appear, the half of the beat is taken away. For with them there generally are twice as many (noch so viel) notes sung on one whole tactus as before. However, the diminishing (as the musicians write) is used with the perfect signs and notes and more appropriately with the proportions of multiplex genera, and the semiditas or dividing by half with the imperfect ones, as follows. 91

Concerning the Three Signs of Diminution

To begin with, it is indicated by means of a canon placed with the song, like this: Decrescit in duplo.

91 Just two pages later Agricola admits that the slash does not always take away fully half of the value and that "by the ancients" it could be only a third. Cf. J.A. Bank, Tactus, Tempo and Notation in Mensural Music (Amsterdam: Annie Bank, 1972), p. 209.
triplo, quadruplo, etc. [it decreases two-fold, three-fold, four-fold, etc.]; or like this: Let a long be a breve, a semibreve be a minim, etc. And with such a text, only the half, third, or fourth parts of such notes are sung at all times, and the long is sung as a breve, semibreve as the [H iii\(^\text{V}\)] minim. Now, with this sign, as mentioned, it is not the tactus but all of the notes and rests that are considered to be diminished and of less value.

Canonica Diminutio [Canons of Diminution]

<table>
<thead>
<tr>
<th>Decrescit</th>
<th>Duplo</th>
<th>Half</th>
</tr>
</thead>
<tbody>
<tr>
<td>In [It</td>
<td>Triplo</td>
<td>Third</td>
</tr>
<tr>
<td>Decreases</td>
<td>Quadruplo</td>
<td></td>
</tr>
<tr>
<td>In]</td>
<td>Quintuplo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sextuplo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Septuplo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Octuplo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nonuplo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decuplo</td>
<td></td>
</tr>
</tbody>
</table>

Or Like This:

Maxima sit Longa [Let a maxima be a long]

Longa sit Brevis [Let a long be a breve]

\(^{92}\text{This is incorrect (except for duplo); it is only the third, fourth, etc., parts that remain, as is said in the preceding paragraph.}\)
Brevis sit Semibrevis [Let a breve be a semibreve]
Semibrevis sit Minima [Let a semibreve be a minim]

Secondly

[It is shown] by means of numbers, as is clearly indicated above by the four rules concerning external signs in the fifth chapter and by the last chapter, concerning proportions. All the notes and rests are diminished in this sign also.

Thirdly

[It is shown] by means of the virgule or little stroke drawn through the circles, such as \( \frac{1}{2} \). Now it is to be observed that the notes in such signs do not lose their meaning. For a perfect breve in this \( \frac{1}{2} \) is worth three semibreves as in \( \frac{3}{4} \), and the breve in this \( \frac{2}{3} \) is worth two semibreves as in \( \frac{2}{3} \). It is just that the song in the signs that are drawn through should be sung somewhat livelier than in the ones that are not, almost to the one-half. Therefore, it is thus the half of the beat which is taken away by the slash, as is the custom at present, and not the third part as the ancients say, which is difficult.

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93 See above, pp. 233-35 and below, pp. 311-34.

94 Agricola wishes to simplify matters for his students. Thus he instructs them to sing the song "somewhat livelier," "almost to the half," when the slash is used, but shows the values as exactly one half in his figures. Note that
De Semiditate: Concerning the Halving of Song

Halving takes place in the imperfect tempus when the incomplete circle is drawn through [with a slash] or when the numeral 2 is placed by the circles, like this: \( \circ \cdot 02 \cdot C2 \). In this case a breve or two semibreves will always be sung on a whole tactus, as is told in the fourth rule of the fifth chapter. Here, then, it is not the song which is always diminished by half, therefore, but only the tactus, as the following example and the figure indicate.

\[ \text{Example} \]


95 Agricola does not include \( \emptyset \) because it indicates perfect tempus. It does not always denote halving.

96 The marks of congruency in three of the voice parts do not indicate canonic writing, but only show the point at which the altus begins to sound. The dotted note at (a) must be a semiminim in context, not a minim as appears in the original.
[H iv\(^\uparrow\) - H v]
Concerning Diminution a Fine Table

<table>
<thead>
<tr>
<th>(\text{Augm.})</th>
<th>(\text{Dimm.})</th>
<th>(\text{Halfl.})</th>
<th>(\text{Tactus})</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\frac{3}{2})</td>
<td>(\frac{1}{2})</td>
<td>(\phi)</td>
<td>(4)</td>
</tr>
<tr>
<td>(\frac{3}{2})</td>
<td>(\phi)</td>
<td>(6)</td>
<td>(\frac{3}{2})</td>
</tr>
<tr>
<td>(2)</td>
<td>(\phi)</td>
<td>(12)</td>
<td>(\frac{3}{2})</td>
</tr>
<tr>
<td>(2)</td>
<td>(\phi)</td>
<td>(12)</td>
<td>(\frac{3}{2})</td>
</tr>
</tbody>
</table>

A handwritten note in the Library of Congress copy gives cross references to tables on folios F iii (External Signs), G vi (The Whole Tactus), and H (Augmentation), found above on pp. 235, 256, and 262. The signs of perfect prolation are assumed to be found in all voice parts together; otherwise augmentation would be signaled. Agricola consistently gives the value of one half tactus to the semibreve for all signs of diminution except double diminution (\(\text{\(\frac{1}{2}\)}\) or \(\phi\)), where it is given to the breve. In the two cases of perfect prolation, however, the semibreve is perfect; the tactus, therefore, would be proportion tactus.
THE NINTH CHAPTER
CONCERNING DOTS

A dot is always a little mark placed beside or between the notes whereby they are enlarged, kept in their perfection, or separated and sheltered from each other for the sake of the threefold count. And there are three kinds.\footnote{A handwritten note, V. [Vide] Virdung, appears at this point in the Library of Congress copy. Sebastien Virdung, in his Musica getutscht (Basel, 1511), fol. H iii\textsuperscript{v}, describes only two kinds of dots, making the observation that a dot of perfection is really just a dot of division also.}

[H vi] The First: Additionis Punctus [Dot of Addition]

[This is] called a dot of increase; it is placed only on the right side of the [im]perfect notes.\footnote{It is obvious that a prefix essential for the correct meaning has been omitted; see the next paragraph.} And the half part of the notes by which it stands is indicated and added to them by it. Thus it enlarges all notes by half, as though they were thereby put together into their perfection—that is, having the three-fold count—after having been divided, as follows.
Furthermore, although this dot is usually placed beside [im]perfect notes only, as mentioned above, I believe I have found it also beside perfect notes in the songs of certain famous composers (although rarely), as is visibly expressed in this following little figure.

Here the dot always enlarges the perfect notes by half just as it did the imperfect ones; they are sung with increased value.  

[H viⅤ] The Second: Punctus perfectionis [Dot of Perfection]  
[This is] called a dot of perfection because it is found only in the perfect gradations beside the perfect notes—not to increase them but to keep them in their perfection. And at times it is placed for the sake of the uncertain singer, as is clearly expressed in the following figure and also in the tenth chapter.  

100 The required prefix has been omitted again.  

101 Agricola seems to believe that a dot of addition may increase the value of a perfect long from three breves to four and a half, etc., as the left column of notes implies. This further ambiguity in the mensural system is unheard of, to my knowledge. The center column of notes correctly shows the value of imperfect notes increased by one half through the dot of addition: the maxima in the great imperfect modus, the long in the small imperfect modus, and the breve in imperfect tempus.  

102 This figure shows the traditional practice of
The Third: Divisionis Punctus vel transportationis

[This is] called a dot of division because it does not increase or decrease the notes but always separates two notes between which it is standing from each other, such that the first is reckoned backward and the second forward in the putting together of the three-fold count. Also, it is not placed right beside the notes as the other dots are, but somewhat higher or lower with a little tail, [making it a check mark], as is the custom at present. And it is only placed in the perfect signs, as is easily to be comprehended in the tenth [H vii] chapter and from the following figure.

Sunt & qui notulam huiusmodi transportandam duobus utriusque punctis circumveniunt, ut sequitur.¹⁰³

---

displacement syncopation (the imperfection of the last in a series of perfect notes by the preceding smaller note), following the rule that like before like is perfect. In view of this rule, the second dot in each row—the one following the center note—is unnecessary, except "for the sake of the uncertain singer."

¹⁰³ Gafurius, Practica musicae, bk. 2, chap. 12. (trans. Miller, p. 105): "And there are those who surround a note of this kind—to be carried across—by two dots, [one] on either side, as follows". Here, the dot after the second breve is superfluous. Agricola does not fully discuss the punctus transportationis. Translation here is my own.
Alterationis punctus [Dot of Alteration]

Furthermore, there is another dot--rare for us but common among the ancients--found directly below or above the note to be altered for the sake of the uncertain singer; it shows that this note with [the dot] placed below or above it is sung two times [is doubled in value], as shown in the eleventh chapter and as follows.

[Music notation]

[H vii\textsuperscript{v}] An Example of Equals\textsuperscript{104}

\textsuperscript{104}"Discantus from tenor at the upper fourth after six breves." The word "equals" in the caption presumably refers to the different kinds of dots illustrated. The altus part illustrates the dot of addition, the bassus that of division and perfection. The tenor, and the discantus part canonically derived from it, begin with dots of addition to notes of all values from the maxima to the minim. In the tenor in m. 3 and the discantus in m. 4, the semiminim in the original at (a) must be a minim. In the bassus, the incipit reveals that there are three dots over each of the second, third, and fourth breves. The fourth should have only two, because this is the note imperfected by the preceding semibreve through displacement syncopation.
Concerning this dot [of division and perfection] see the following example concerning imperfection and the example concerning alteration in the eleventh chapter.
THE TENTH CHAPTER

CONCERNING THE IMPERFECTION AND DARKENING OF THE NOTES

Imperfecting is here a robbing of the third part of the perfect notes; thus a perfect note is made imperfect. Therefore it is to be understood that no note may be imperfected unless it signifies three of the notes of the next lower value. But such a note is found nowhere except in the perfect gradations; for that reason also these are the ones in which imperfection takes place, and only in four notes, as will follow.

Concerning the Parts of Figures

Near (propinqua) is that part in which its whole is broken up by the next [lower] value, as, long

The Second Part in respect to maxima

Remote (remota) is that part between which and its whole a single value in the natural order

Called: intervenes, as, breve in respect to maxima.

---

Three full pages (folios J through J ii) are written completely in Latin, the only time Latin is used for a passage longer than a paragraph. It closely follows the Practica musicae of Gafurius, bk. 2, chaps. 10 and 11, although, unlike the other Latin passages, it is not a direct quotation. Agricola may have quoted a less well known treatise from the early 16th century, but no source for it has as yet been found.
More Remote (remotior) is that [part] between which and its whole two larger figures remain, as, semibreve in respect to maxima.

Most Remote (remotissima) is that [part] between which and its whole three larger figures are placed, as, minim in respect to maxima.

There Follows the Figure

Concerning the Two Kinds of Imperfection of Notes

Total is when precisely a third part is taken away from such notes, as follows.

Partial is when not a third part, but less—for example, a sixth or ninth, etc.—is taken away from such notes.

[J ii]

Every Imperfection Which Occurs By Means of a

Most Remote More Remote Remote Part is Called Partial

Near Near Near Near Part Is Called Total
Concerning the Imperfecting of the Figures

Another Passive Only, and it is the maxima alone, because it undergoes imperfection but never performs it.

Of The Figures Active Only; it is the minim alone, because it imperfects and is never imperfected.

Active and Passive, and it is that which imperfects and is imperfected, of which there are three—namely, long, breve, and semibreve.

For indeed each of these is able to imperfect a greater [value] and to be imperfected by a lesser one.

Concerning the Four Notes That Can Be Imperfected and The Signs in Which Each One is Made Perfect

106 The term "or its equivalent value" may obscure the meaning of the figure: In the sign 0₃, the maxima may be imperfected a pars propinqua by the perfect long or its
There Follow Three Signs By Which the Imperfection of Notes Is Recognized

The First

When too few or too many of the notes reckoned in the making up of the three-fold count are found, then the perfect note is made imperfect by the preceding or following [note] smaller than itself, and [J iii] thus is robbed of only the third part at all times, as follows.  

\[
\begin{array}{c}
\text{b} \\
\text{n} \\
\text{C D .}
\end{array}
\]

The Second

When the dot of division is found between the notes, then the same note (if it is possible) imperfects the large note preceding or following it, as is told in the second and fourth of the rules that will follow.

The Third

When the perfect notes are made entirely black, whereby they like the others [the white ones] are also robbed and ridded of their third part, then and only then is it

rest (removing a full third of the maxima's value), a pars remota by the perfect breve or its rest, a pars remotior by the (imperfect) semibreve or its rest, or a pars remotissima by the minim or its rest. In the sign 0₂ it is the long which may be imperfected in similar fashion by the imperfect smaller notes or rests, etc.

107 The first breve from the left of the top row and the second breve from the left of the bottom row should each have three dots above them; being "like before like," they must remain perfect.
common and right for the appertaining third part also to be
blackened, which does not make it any smaller or larger but
only shows its proper place—back or forward, near or far—for the sake of the [threefold] count, as is visibly shown
in the fifth and sixth rules and throughout here.\textsuperscript{108}

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{figure}
\caption{Diagram of blackened notes.
}
\end{figure}

It happens the same way also with the longs and
breves in the small perfect modus and with semibreves and
minims in the perfect prolation, as the following figure
concerning all rules of imperfection clearly shows.\textsuperscript{109}

\section*{Some Rules Concerning Imperfection}

\subsection*{The First}

A perfect note is not imperfected by [a note] the
same or larger than itself, but by one smaller, like this:

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{figure2}
\caption{Diagram of perfect note.
}
\end{figure}

Therefore, when a perfect note is followed by one
smaller than itself, it is quickly robbed of its third

\textsuperscript{108} The brackets are to help the reader see how
blackened notes are related to each other in reckoning one
or more threefold counts.

\textsuperscript{109} The figure does not appear until the end of the
chapter; see below, p. 309.
part, as mentioned above, unless a dot of perfection or division appears by it as a protection, thus:

\[\text{J iiii}\]

Franchinus

Non similis similem, nec maior minorem notulam imperficit, nec similis ante similem imperfici potest, ut in Exemplo.110

The Second

Imperfection takes place either from the front or the back—also in both ways at once.

From the front. [This happens] when the imperfecting note or rest goes in front of the note that can be imperfected.

From the back. [This happens] when the imperfecting note or rest is placed after the one that can be imperfected.

110 This seems not to be an exact quote, although its content is taken from the first three pages of Gafurius' Practica musicae, bk. 2, chap. 11. It reads "Like does not imperfect like note, nor greater lesser; nor can like before like be imperfected, as in the example." In the figure, the second long from the right of the top row and the second semibreve from the right of the bottom row should each have three dots above them, because they are "like before like." On the other hand, the center long of the top row and the breve at the far right of the second row are both imperfected and should each have only two dots above them.
In both ways. [This happens] when ones that can be imperfected are enclosed within one larger than they, and two imperfecting ones—one in front and one in back at the same time—are shown together with two dots of division, \( [J \text{ iii}v] \) by which the first and last notes that can be imperfected and which are enclosed in the large one are then imperfected; for example, the longs enclosed in the maxima in the small perfect modus, the breves enclosed in the long in the perfect tempus, \([and]\) the semibreves enclosed in the breve in the perfect prolation, as in the following discantus and tenor.\(^{111}\) Therefore, it often happens that a note enclosed in another is imperfected, as follows.

Here the imperfection always takes place from the front and back at the same time.\(^{112}\)

\(^{111}\)The tenor is canonically derived from the discantus in the musical example cited, found below on p. 286.

\(^{112}\)In the top row, the maxima is considered to contain two perfect longs, both of which are imperfected by the surrounding breves; this principle works in similar fashion with the smaller notes in the other rows.
Franchinus

Omnis imperfectibilis figura, potest vel a parte ante, vel a parte post tantum, vel ab utraque imperfecti.

The Third

A perfect breve in perfect tempus in front of two semibreve rests standing at the same height and a semibreve in perfect prolation in front of two same[-standing] minim rests remain perfect. If one of the rests stood higher or [J v] lower than the other, the notes mentioned would be imperfected, as follows.\(^{114}\)

The Fourth

A perfect note standing in front of a note like itself cannot be made imperfect, as Franchinus says.\(^{115}\)

Therefore the imperfecting does not always take place by means of the adjacent note, but at times by means of the

\(^{113}\)Gafurius, *Practica musicae*, bk. 2, chap. 11 (trans. Miller, p. 93): "Every imperfectible note can be imperfected by a preceding note (\textit{a parte ante}) or a following note (\textit{a parte post}) or by both."

\(^{114}\)This little example shows only the cases where the notes mentioned remain perfect. Therefore at the end of the treatise, fol. N iii, Agricola adds a new example to be used instead of this one; the improved or corrected example includes the cases where one rest stands higher or lower than the other. See below, p. 338.

\(^{115}\)Practica musicae, bk. 2, chap. 11 (trans. Miller, p. 93 and \textit{passim}).
third, fourth, or
fifth note, etc., as follows.116

But this [rule] is often not kept at present, for I have found the opposite in many songs, like this:

And such composers or singers act openly and brazenly contrary to all experienced and well-grounded musicians, musicians who teach that a perfect note may in no way be imperfected if it stands in front of one the same as itself, as touched upon above.

\[ \text{Nec refert si immediate an mediate pars ipsa tertia reducibilis, maiores, tanque suum totum precedat aut sequatur.} \]

\[ \text{Disceps} \]
\[ \text{Teer} \]
\[ \text{Bassus} \]

116 The example clearly demonstrates displacement syncopation; however, the final breve of the middle and right-hand panels should be imperfect.

117 Gafurius, Practica musicae, bk. 2, chap. 11 (trans. Miller, p. 102): "It does not matter whether the third part precedes or follows immediately or remotely the larger value (its total so to speak)." This quotation and the example that follows it are related not to the fourth
Furthermore, coloration takes away the third part of the perfect notes and the fourth part of the imperfect ones. Therefore when perfect notes are entirely black, they are robbed of their third part just as though it were by means of small notes or rests, etc.\textsuperscript{118}

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\textbf{[J vi]} The Fifth Rule

Furthermore, coloration takes away the third part of the perfect notes and the fourth part of the imperfect ones. Therefore when perfect notes are entirely black, they are robbed of their third part just as though it were by means of small notes or rests, etc.\textsuperscript{118}

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\textsuperscript{118}A handwritten note in the Library of Congress copy is again a reference to Sebastian Virdung's Musica getutscht (1511). In his treatment of notation, however, (folios E iii-Gv), Virdung discusses only duple mensuration and symbols for intabulation. Agricola's figure shows, for three mensuration
Sometimes also the hemiola proportion is indicated by means of coloration—namely, when all notes are blackened in all voices at the same time—as the last chapter shows.

At times coloration is also found in notes able to be doubled [through alteration], in which case it means only a preventing of the doubling, as is expressed in the following chapter.\(^{119}\)

**The Sixth Rule**

Imperfect notes in the perfect gradations are often blackened and yet not robbed of their previous value, as for example the breve in the small perfect *modus*, the semibreve in the perfect *tempus*, [and] the minim in the perfect *prolation*. For when one or two perfect notes are blackened, then

\(^{119}\)For the example of hemiola, see below, pp. 333-34;
their appertaining third part is also commonly made black, 
\[J \text{ vi}^\text{v}\] and it happens so that one notices which notes belong together in the threefold count. And these are sung just as though they were white, as is touched upon above concerning the third sign of imperfection. 120

The Seventh Rule

Rests only bring about imperfection; they, however, are never imperfected nor altered. And whatever has once been imperfected cannot be made more imperfect.

The Eighth Rule

When three imperfecting notes appear between two imperfectible ones without the dot of division, then no

the first three lines of this paragraph are underlined in the Library of Congress copy. In his Dodecachordon (trans. C. A. Miller, p. 234), Glareanus states that "many falsely consider" this use of blackened notes to be hemiola.

120 See above, pp. 281-82. In each row, smaller blackened notes, sung as though white, are called to the reader's attention by white notes of the same value below them, except for the last blackened note in each of the upper two rows, whose corresponding white note is missing.
imperfectible one is made imperfect by the three, as also touched upon in the eleventh chapter, as follows.\footnote{121}

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& O & O & C \\
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&  &  & \\
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\[ J \text{ vii} \quad \text{The Ninth Rule Concerning Imperfection} \]

Furthermore, when four semibreves appear between two breves without the dot of division in perfect tempus, then—as the musicians of old say—the first breve is always made imperfect by the semibreve following it if it is possible. However, if there is a dot of perfection placed beside the first breve, or a dot of division between the third and fourth semibreve, then the second breve is made imperfect by the fourth semibreve, and the first breve remains perfect. It is the same with breves and longs in the small perfect modus and with minims and semibreves in the perfect prolation, as follows.

\begin{center}
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& O & O & C \\
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&  &  & \\
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There follows an example of how the perfect tempora [breves] are imperfected by means of blackening, and [how] the semibreves and minims are blackened and yet sung as

\footnote{121}See below, p. 299 (the third rule).
white, only being marked to indicate the place of their lodging, as the following tenor shows.\textsuperscript{122}

\[ \text{\textsuperscript{[J vii\textsuperscript{-}K]} } \]

\textsuperscript{122}By "the place of their lodging," Agricola means the other blackened notes with which these notes are added.
together in reckoning the threefold count. In the tenor, Agricola uses coloration not only to imperfect breves and to indicate groupings of three but to avoid alteration of semibreves, as mentioned at the end of the fifth rule, above; actually, alteration is not discussed until the next chapter. A perfect breve in the tenor at (a) in the original must be imperfect according to the context. Two minims in the original at (b) in the altus must be
[K^y] A Useful Instruction Concerning Imperfection

Perfect notes are made imperfect in five different ways. Firstly by means of a note, as is touched upon in the second and fourth rules. Secondly by means of rests, as is reported in the second and third rules. Thirdly by means of the blackening of the perfect notes, as the fifth rule of imperfection shows. Fourthly by means of proportions, as is found in the twelfth chapter in the tenor, discantus, and bassus of the example concerning tripla proportion. Fifthly by means of a rule or canon running in this way: Decrescit in Triplo [it decreases threefold]. And thus every perfect note is again robbed of its third part as it is described above, as follows: Decrescit in Triplo. 124

semibreves from the context. Breve rests in the original at (c) and at (d) in the altus must be semibreve rests within the context.

123 Gafurius, Practica musicæ (Transl. Young, p. 108; translation is my own, however): "It was in addition the practice among musicians of old to write down all the notes consisting in their own essential quantities as full, and indeed to note down those which happened to be imperfected as empty." This simply refers to the late-medieval practice known as black mensural notation.

124 Agricola is in error here; when this canon is
Concerning the Half-blackening of Notes

Furthermore, in certain mensuration signs the maximas, longs, and breves are also made only half black at times—in the last part of their shape—although this is scorned and criticized by Franchinus in Book 2, Chapter 11, speaking thusly: Black and white, just like full and [K ii] empty, are naturally quite the opposite of each other, such that they cannot mean one and the same thing. For when black and white colors are mixed together in a vessel, they are changed into another form through the blending of both kinds of color together and are in no way rightly recognized. Therefore, he says, it would be better if such half-blackened notes were resolved into other notes, etc. Nevertheless, since I have often noticed them in songs to a considerable degree, it seems not inappropriate for me to place a little figure below by which they may be recognized wherever they are found, as follows.125

Correctly observed, two thirds of the value of every note is taken away, not one third of just the perfect notes. He may be thinking of triple, a type of sesquialtera proportion indicated by the number 3 in all voices; see below, p. 316.

125 *Practica musice*, bk. 3, chap. 11 (Miller trans., p. 103); the sentence about colors mixed in a vessel is an interpolation. Agricola's figure indicates how many semi-breves each of the blackened or half-blackened notes shown and labeled at the bottom is worth in each of the mensurations indicated in the left column. In general, blackening removes one-third of the value of perfect notes but not any of the value of those imperfect notes used to complete the threefold count. It takes away one-fourth of the value of notes in
imperfect mensurations. Half-blackening, as the name implies, removes one-sixth of the value of perfect notes and one-eighth of the value of notes in imperfect mensurations. There are three errors: In $O_2$ and $O_2$ the blackened maxima should be worth eight semibreves; in $O_2$ the blackened breve should be worth two semibreves.

126 Note the augmentation in the bass caused by perfect prolation in one voice part.
This large figure, originally placed sideways, is divided into three sections. The top, middle, and bottom thirds show perfection or imperfection of longs in the small perfect modus (O₂), breves in perfect tempus (O), and semibreves in the perfect prolation (C), respectively. Within each section is illustrated most of the cases discussed above—notably in the rules on pages 282-90—in which imperfection does or does not take place. A note with three dots above it is perfect; two dots indicate that the note has been imperfected. A number above a note shows that the note has been fully imperfected from in front and behind a parte remota by two smaller notes once removed in value. The bold vertical lines in each of the top two rows are breve rests. Errors: The last note of the fifth row from the top should have only two dots over it; the breve in the second row from the bottom (third note from the left) should have the number 4 over it (minims).
Alteration is here always a doubling of notes. For the altered note always has the value of twice itself. And as with imperfection, it happens only in the perfect mensuration signs and only because a note is lacking that is to be reckoned in the threefold count.

There Follow Some Rules

The First

There are only four notes that can be doubled: long, breve, semibreve, and minim. The other four, however, are never altered nor imperfected. Also, alteration and imperfection happen only in the notes and not in rests, as follows.

The Second

When two longs in the large perfect modus, two breves in the small perfect modus, two semibreves in the perfect tempus, [or] two minims in the perfect prolation

\[128\] The two words "nor imperfected" should be deleted as erroneous. The maxima may be imperfected but not altered. Also, while the long, breve, and semibreve may be either altered or imperfected, the minim may only be altered, not imperfected. Only the shortest notes—semiminim, fusa, and semifusa—are never altered nor imperfected.
are found to be left over or between two imperfectible [K iii\textsuperscript{v}] notes, or between notes and rests larger than themselves, without the dot of division, then the second of the two alterable notes is generally doubled— that is, sung two times [its usual value]. Therefore, the doubling always affects the second note, not the first, as is always seen here.\textsuperscript{129}

The Third Rule

When three alterable notes appear between two that are larger than they, without the dot of division, then none is altered and none of the others is imperfected by them, for the threefold count is completed, as follows.

\[\text{[K v]}\] The Fourth Rule

When an alterable note is placed after its rest between two perfect notes without the dot of division, the note is altered; however, in the case where the rest goes

\textsuperscript{129} A single dot above a note signifies alteration, as does the abbreviation al., which is found above or beneath certain notes in the figure. The bold vertical lines within the figure are rests. The third note from the left in the second, third, and bottom rows should more properly be an imperfected long, breve, and semibreve, respectively, since alteration really is necessary and appropriate only in front of the next higher note value.
ahead [appears to the right] of its note, no alteration takes place, as is touched upon in the first rule and here always indicated.\textsuperscript{130}

The Fifth Rule

Often the alteration is hindered and taken away by means of the dot of division and by blackening of the notes able to be doubled, as in the example. Concerning this, look also at the tenor and bassus of the second example to follow.\textsuperscript{131}

\textbf{The First Example Concerning Alteration, Having Three Voice-parts}\textsuperscript{132}

\textsuperscript{130}It should be remembered that three dots above the notes in these figures signify perfection, two dots imperfection, and one dot (as well as the abbreviation al.) alteration. The breve to the right of the tempus perfectum sign (O) towards the center of this figure should have three dots above it.

\textsuperscript{131}For examples of the prevention of alteration by means of blackened notes, see the bassus, mm. 4 and 8, on p. 303, and the tenor, mm. 29 and 32, on p. 306, below.

\textsuperscript{132}Agricola gives a resolution in \textit{g} for the tenor on
fol. K vii; if it were transcribed, it would be the same (except for barring implications) as the tenor part in the score of this transcription. The rest at the beginning of the tenor part—a long worth three breves—signals the small perfect modus (in addition to the perfect tempus). The conclusion of the discantus is a two-note divisi—a unique instance among the examples of this treatise (the example is for only three voice parts, however). The tenor appears to be correct as written, showing agreement with the rules just given by Agricola as well as correct groupings of three. In the discantus at (a), therefore, two semibreves must be minims in the context, and in the bassus at (b) a dotted semibreve with minim must be a dotted minim with semiminim according to the context.
There follows the Second Example Concerning Alteration, In Which the Proportion Tactus Is Beaten Throughout\footnote{Concerning proportion tactus, see above, pp.253-55.}

Concerning proportion tactus, see above, pp.253-55. Again the rest at the beginning of the tenor part signifies the small perfect modus. Hence the second of the two initial breves (in the opening ligature) is altered. In measures 21-24 and 29-30 coloration prevents alteration of the second semibreve and imperfects the following breve. In measures 32 and 42 this principle is applied to the minim and semibreve.
All of the voice parts show external signs of diminution—the slash or the number 2—but the bassus, a single voice part in perfect prolation, exhibits an external sign of augmentation as well as the slash (\(\ell\)), making its minim (the alterable note) equal in value to a semibreve in the other voice parts. Within the sign \(\emptyset\), in the altus, tenor, and the conclusion of the discantus part, there are three semibreves (the alterable notes) per perfect breve. Within the sign \(o_2\) (and the initial long rest of three breves), there are two semibreves per breve and three breves (the alterable notes) per perfect long. Hence Agricola can show alteration on three levels of mensuration simultaneously. Where parts of the original notation are placed above the notes in the transcription, alteration is demonstrated.
The small single little dot placed over or under the notes indicates the notes that are altered.

A Fine Figure Concerning All the Rules of Alteration

135 This large sideways figure shows signs of haste, with unevenly spaced columns and numerous errors. There is
no exact correlation between the columns numbered one to five and Agricola's five rules of alteration. In this form, the figure does not seem clear enough to be useful. Therefore, I have prepared a version of the figure, with rows labeled A through H from top to bottom, in which the following corrections have been made in the panels named: A 3 requires three dots over the first maxima, two over the second. B 3 requires three dots over the first and last long. B 5 requires a dot over the second breve. C 1 requires two horizontal lines dividing the panel into thirds, a dot over the second breve, only one dot over the last breve, and three dots over the long at the right. C 3 requires a dot over the second breve. C 5 requires a dot over the fifth breve. D 1 requires three dots over the last breve. D 3 requires three dots over the first breve and two dots over the last breve. D 4 requires only two dots over the first breve. D 5 requires a dot over the second semibreve. E 3 requires only two dots over the last breve. E 5 requires three dots over each of the two breves. G 1 requires a dot over the last minim and three dots over the last semibreve. H 1 requires a dot above the second semibreve and a dot above the second note of the ligature rather than the first. H 4 requires a dot above the second minim rather than the third. With these corrections, the following panels express each of Agricola's rules as here expressed: 1. Longs, breves, semibreves, and minims may be altered (all panels reflect this rule). 2. The second of two such notes between larger notes is altered (A 1, B 1, B 5, D 1, D 5, F 1, F 5, H 1). 3. None of three such notes between larger notes is altered (A 2, B 2, D 2, F 2). 4. Such a note is altered if it comes after its rest (not before) between larger notes (A 3, B 3, C 1, D 3, E 1, F 3, G 1).

A dot of division or blackening of notes may prevent (or cause) alteration (all of the other panels—wherever a dot of division that looks like a check mark or black notes are seen).

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Concerning Proportions

Proportion in general is always a comparing or a valuing together as equal of two different numbers of notes; namely, when the higher one—whether it be larger or smaller—is made equal to the lower one.\textsuperscript{136} This is indicated below in the final little book concerning proportions. And although five genera of proportions are to be found, nevertheless for the sake of brevity I do not wish to tell about them all, but only about certain ones of them that are absolutely necessary in song. And I wish to give a short instruction about them— as much as possible for me—and afterwards to set forth something more comprehensive in the following little book about proportions.

There Follow Some Useful Rules

The First Rule

The upper number of notes, according to what the figures show, must be made equal to the lower in one kind of sign at all times; and both kinds of numbers of notes must be the same in name and shape. For example, in dupla $\frac{2}{1}$ two longs

\textsuperscript{136} By proportions, Agricola means ratios expressed as a fraction, such as $2/3$ or $3/2$.\textsuperscript{311}
[L v] in the proportion are made equal in value to one long
before the addition of the proportion, two breves to one
breve, two semibreves to one semibreve, etc. The same [is
done] also with tripla $^{3}$ and all other proportions.

The Second Rule

Each proportion is brought to an end by inversion of
numbers or when there follow signs of modus, tempus, and pro-
lation. All of the notes thereby become as they were before
the proportion was added, and they are sung according to the
indication of the signs placed [there]. This is shown in the
examples following.

The Third Rule

The placement of the larger number of the proportion
above and the small one below diminishes all the notes and
rests; when the small one stands above the larger, however,
then both the notes and rests are augmented.

The Fourth Rule

The imperfection and alteration of notes only hap-
pens with proportions placed in perfect gradations; it does
not take place in all the notes, but rather in accordance
with the indication of the signs, as touched upon in the
tenth and eleventh chapters.

Dupla Proportion

Dupla occurs here whenever two notes are made equal
in value to one, or four equal to two, etc. In this proportion
each note of the upper number is robbed of the half part of its value and thus made equal to the lower. The way it is indicated in song is with numbers like this: \( \frac{2}{5} \frac{4}{6} \frac{8}{10} \frac{12}{5} \frac{12}{6} \), as may be seen in the following example. It is also indicated at times by means of a text or rule placed by the song like this: \textit{Decrescit vel diminuatur in duplo} [it decreases or is diminished twofold], as is found in the example in the eighth chapter, or like this: \textit{Maxima sit longa, longa sit brevis, etc.} [Let a maxima be a long, a long be a breve, etc.], or by turning around the signs, like this: \( \text{C} \). By this turning around, each note is made smaller by half, as is touched upon in the eighth chapter.\(^{137}\)

\textbf{Subdupla Proportion}

[This] occurs when the small number is made equal to the large and is included within it two times. In this proportion each note of the upper number has twice its own value. For instance, a long is sung as two longs, a breve as two breves, a semibreve as two semibreves, etc. At times it is indicated by this rule: \textit{Crescit in duplo} [it increases twofold]; generally, however, it is indicated with numbers like this: \( \frac{1}{2} \frac{2}{4} \frac{4}{8} \frac{8}{16} \), etc.

\(^{137}\)See above, pp. 270-71.
There Follow the Resolutions of the Proportions of the Following

Dupla and Subdupla Example

There Follows the Example of Dupla and Subdupla

138 "The discantus [canonically derived] from the tenor, one octave higher, after one breve." Agricola means one breve in the original mensuration (Ø) before the ½ proportion, as the mark of congruency in the tenor part (after two breves in dupla proportion) makes clear. Each voice part has a sign of diminution—a slash or the number 2—but the bassus again has the sign of augmentation as well: the perfect prolation in a single voice part. Therefore a diminished (equal to a half tactus) minim in the bassus equals a diminished semibreve in the other voice parts before the commencement of dupla and subdupla proportions. In the resolution of the tenor at (a), a semiminim in the original must be a minim. In the bassus of the example at (a), a minim in the original must be a semiminim in the context. The mensuration sign in the tenor (and hence the discantus) at (b) is meant to be Ø again, in view
Tripla Proportion

[This] occurs when the large number includes the small one in itself three times. But here, whenever three notes are made equal to one similar to them in name and form, then only the third part of each note of the large number is sung.

of the coloration two measures later that would be unappropriate otherwise. In the bassus at (c) the dotted minim in the original must have the value only of a minim plus one fusa according to the context.
It is also to be understood that when the sign indicating the [tripla] proportion occurs in all voices simultaneously such that none is marked livelier than any other, [L vii\(^7\)] then the proportion tactus—which comprises three semibreves—is beaten at all times.\(^{139}\) And thus in this measurement a [semi-] breve is generally sung as quickly as a minim had been formerly in signs like this: \(\text{C } \cancel{\text{C}}\), as mentioned above in the sixth chapter concerning the tactus.\(^{140}\)

Also this tactus may properly be beat and carried out as the most appropriate in those songs or melodies which are played or performed in the full springing of dances as is presently the custom. Also this proportion and the perfect prolation are of the same nature with regard to the beat, for the proportion tactus is beaten in both if all the voices are marked simultaneously with the same sign. This is also touched upon in the discussion of prolation in the third [fourth] chapter.\(^{141}\)

\(^{139}\)The resultant proportion in this case, therefore, is not actually tripla—threefold—but sesquialtera, in which three are sung as quickly as two had been before.

\(^{140}\)With the correction (the word "semibreve" in place of "breve"), this statement clarifies the passage cited (p. 255, above), which did not specify \(\text{C}\) and \(\cancel{\text{C}}\) preceding the tripla proportion. Since this proportion is a relationship between two quantities within a certain sign, neither sign is a misprint as Arthur Mendel assumed in "Some Ambiguities of the Mensural System"; Studies in Music History: Essays for Oliver Strunk (Princeton, N.J.: Princeton University Press, 1968), p. 150.

\(^{141}\)The reference is to the last portion of the fourth
But where they [the voices] are not marked with it [tripla] simultaneously, then another tactus is beaten according to what the signs show. And it is indicated like this: \[ \frac{3}{1} \frac{6}{2} \frac{9}{3} \] or with the canon *decrescit in triplo* [it decreases threefold]. Also, some indicate *tripla*, some *sesquialtera*, in this way: \[ \frac{9}{3} \], this is observed quite improperly and dubiously, as Franchinus says, since the number 3 may be proportioned to many others. Each proportion, he says, should be indicated in song with its own numbers.\[142\]

[L viii] **Subtripla**

[This] occurs when the small number of notes is made equal to the large and is included within it three times, as for example when a breve is made equal to three breves, a semibreve to three semibreves, etc. And thus each note of the small number has the value of three times its own self. And at times it is indicated in song by means of this canon: *crescit in tripla* [it increased threefold], or with the numbers like this: \[ \frac{1}{3} \frac{2}{6} \frac{3}{9} \].

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There Follows an Example of Tripla and Subtripla

There follows an example of tripla and subtripla. All voices begin in tripla simultaneously, giving three beats of triplets in proportion tactus. In the altus at (a) there is a (perfect) breve rest in the original; it must be two semibreve rests. Notice that in his resolution, Agricola expresses the triplet rhythms in the nearest non-triplet terms: $\frac{3}{2}$ as $\frac{3}{2}$, $\frac{3}{2}$ as $\frac{3}{2}$, and $\frac{3}{2}$ as $\frac{3}{2}$. Although this is as close to triplets as he can come without using proportions, some have believed that a "squared-off" duple performance is intended, including Michael Collins in "The Performance of Sesquialtera and Hemiola in the Sixteenth Century," Journal of the American Musicological Society, 17 (1964): 5-28.
Another Fine Example of the Tripla and the Subtripla Proportions, In the Sign of Perfect Prolation, In Which the Proportion Tactus Is Beat Throughout

In the tenor, the two notes marked (a) are not in the original but are required by the context, both to correspond with the imitation of the bassus a semibreve later and to avoid parallel octaves and other dissonances. The tenor part then fits correctly, except that a breve rest in the original at (b) must be a semibreve. The label subtripla is considerably too far to the right in the original. The three minims just prior to (c) in the altus and bassus parts are inadvertently written twice in the original, as the context clearly reveals.
Quadrupla Proportion

[This] occurs when the large number contains the small one in itself four times. Here however [it occurs] whenever four notes are made equal to one similar in name and value. In this proportion three-fourths of the size of each note of the upper number is taken away and only a fourth part is sung. Its sign is $\frac{4}{1} \frac{4}{2} \frac{12}{3} \frac{16}{4}$ or like this: Decrescit in quadruplo [it decreases fourfold].

Subquadrupla

[This] happens when the small number is made equal to the large and is contained within it four times. Here [it occurs] whenever one note is sung like four, etc. Its indication is $\frac{1}{4} \frac{2}{8} \frac{3}{12}$ or like this: Crescit in quadruplo [it increases fourfold]. And so each note of the small count is worth four times its own self, as follows in the altus.

[M iii]
In the discantus part, the note marked (a) is an F in the original, but must be a G, as it appears in the
This occurs when the large number includes the small one within itself one and a half times. But here whenever three notes are sung like two formed the same way, then each note of the upper number is robbed of its third part. Its sign is $\frac{3}{2} \cdot \frac{6}{4} = \frac{12}{8}$ as seen in the discantus, tenor, [and] bassus of the third example to follow. Also, as Franchinus says, this proportion is recognized and indicated at times without numbers by means of the blackening of imperfect notes alone, as shown in the following tenor.

resolution of the discantus part. In the bassus, the note marked (b) is a semiminim in the original but must be a minim.

146 The third example of sesquialtera below, p. 328.

147 Gafurius, Practica musicae, bk. 4, chap. 5, pars. 10-15. In this example the discantus is derived canonically
from the tenor at the upper octave after seven semibreves. There are two rests missing from the bassus part at (a) in the original, although blank space is found at that point. A semibreve and minim are called for by the context. Since the canonically-derived discantus changes from $\emptyset$ to $\emptyset$ later than the other voices, clearly the semibreve receives the same value in both signs. Both in this example and the next, the blackening causes imperfect notes to lose one third of their value, contradicting the earlier statement on p. 218, that imperfect notes lose only one quarter of their value.
Also Franchinus says further that if this proportion is indicated by the blackening of notes, it should not be indicated by its numbers at the same time in order that in place of sesquialtera there should not arise dupla sesquiquarta, which is immediately perceived if one adds two sesquialtera together: $\frac{3}{2}$ added to $\frac{3}{2}$ becomes the proportion dupla sesquiquarta—that is, $\frac{9}{4}$.\(^{148}\)

Also there are some who write the number three beneath the blackened notes in sesquialtera, as follows in the tenor.

\(^{148}\)Ibid., bk. 4, chap. 5 (trans. Miller, p. 178). Cumulative proportions are actually calculated by multiplying, not adding.
The Second Example, for Three Voices

\[ M v^V - M vI \]

Subsesquialtera

[This] happens when the small number is made equal to the large and is included in it one and a half times. Here [it happens] whenever two notes are made equal to three like them. And thus each note of the upper number has one and a half times the value of itself [its previous value]. It is indicated, then, in this way: \( \frac{2}{3} \) \( \frac{4}{6} \) \( \frac{8}{12} \), as appears in the altus in the following example.

\[ \text{In the tenor at (a) the c' is a minim in the original but must be a semiminim. As indicated, the number 3 appears in the tenor beneath blackened minims to distinguish them from semiminims.} \]
There Follows the Third Example of Sesquialtera

\[ M \text{ vi}^V - M \text{ vii} \]

In the resolution given immediately after the example, Agricola again expresses the triplet rhythms in
the nearest duple terms, as noted with regard to tripla proportion in note 143 on page 329.

The last note of the resolution of the altus at (a) is missing a needed dot.
[M viii]  

Sesquitertia  

[This] occurs when the large number includes the small a single time and its third part. Now here, whenever four notes become equal in value to three like ones, then each note of the uppermost number is robbed of its fourth part. Its sign is \( \frac{4}{3} \frac{8}{6} \frac{12}{9} \), although some indicate it with this sign \( \mathcal{J} \), which is censured by all experienced musicians, as Franchinus says in the fifth chapter of Book 4.\(^{152}\)

Subsesquitertia  

[This] happens when the small number is made equal to the large and included within it one time with its third part. Now here [it happens] whenever three notes are sung to four of the same note value. And it is recognized by these numbers, thusly: \( \frac{3}{4} \frac{6}{8} \frac{9}{12} \), as the following altus shows.

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\(^{152}\)Gafurius, *Practica musicae*, trans. Young, p. 202: "Some musicians have desired that this sesquitertia be understood in music by the sign of imperfect tempus turned backward like this: \( \mathcal{J} \). Prosdocus of Padua, in the presentation of his brief work on Johannes de Muris' 'Quilibet in arte practica,' and Tinctoris, in his tract on proportions, sharply assail this practice." It was commonly used in the late fourteenth and early fifteenth centuries, however.
There Follows the Example of Sesquipartia and Subsesquitertia

[M viii° - N]

153 With the exception of triplets against duplets (see above, the examples of tripla on pp. 318-19 and of sesquialtera on pp. 325-28), Agricola (unlike Gafurius) avoids notes within proportions that do not coincide with any notes in the other voice parts. He sometimes does this by placing two notes of the same pitch close beside each other in the proportion to equal a certain note value outside the proportion. In the altus of this example, for instance, each perfect breve (three semibreves) in the proportion subsesquitertia equals an imperfect long (four semibreves) outside the proportion, and a "note" like this (with a total value of nine fusas) within the proportion equals a dotted semibreve (twelve fusas) outside the
proportion. Also in this example, Agricola makes use of the proportion to give prominence to a theme, first in the tenor, then in an imitative entry in the bassus, and later in augmentation by means of subsesquitertia in the altus. In the bassus at (a) there appears to be a breve rest in the original where the context requires a semibreve rest. the same is true in the tenor at the beginning of the resolution, at (b).
This happens when three semibreves are sung on one tactus, and—as Aulus Gellius says in the fourteenth chapter of the nineteenth book—it is the same thing as sesquialtera.\(^{154}\) For in Greek hemiola is called a proportion whereby the large count contains the small a single time and its half part—that is, \(\frac{3}{2}\). And it is signified, as some say, by means of these signs: \(\frac{3}{2}\). However, [it is indicated] generally by means of the blackening of all notes in all voices at the same time. But as Franchinus states, such a thing should happen nowhere but in the perfect notes.\(^{155}\) And so when all voices have three black semibreves at the same time, as in tripla, they are always sung on the proportion tactus, as the following example shows.

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\(^{154}\)Writers of ancient times were of course speaking of hemiola only as the mathematical ratio 3:2 or the resultant interval, the perfect fifth, and not as a mensural proportion. Aulus Gellius (2nd century A.D.) wrote Attic Nights (Noctes atticae), which was also cited by Giovanni de' Bardi, but for different reasons (See O. Strunk, Source Readings, p. 293).

\(^{155}\)Practica musiceae, bk. 2, chap. 11 (Miller trans.,
[N iiV] But where the blackening of the imperfect notes is not found in all voices at the same time, then those blackened notes must be sung according to the indication mentioned above concerning sesquialtera. 156

p. 104): "Imperfect notes are often blackened and equated with sesquialtera, a procedure which will be demonstrated and opposed in a discussion of sesquialtera in book 4."

156 See above, pp. 324-29.
How the Reckoning Always Takes Place Here

First of all, take a proportion for yourself—whichever one you wish—and observe the sign in which it stands quite precisely, so that the notes are resolved in accordance with its indication, when they need to be. After that, always place the upper number of the proportion in the front, the lower one in the middle, and that which is asked for (frag) behind. After that, resolve the middle number of notes into smaller ones, if it is appropriate—for instance, longs into breves, breves into semibreves, etc. And then if you multiply the middle number, as [ascertained] in the second reckoning, by the one behind and divide them into [by] the one in front, then the answer (facit) will come to you, as follows.

Concerning the Sesquitertia
in the Perfect Tempus ⁰₁⁵⁷

Accordingly, 4 □ against 3 □: what is the value [N iii] of 1 □? Resolve the middle 3 breves into 9 semibreves. It stands thus: 4 breves/9 semibreves/1 breve. Now multiply and divide as was said. From that comes 2 semibreves and 1 semibreve is left over; resolve it into 4 semiminims and divide further. From this comes 3 [2] semibreves

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¹⁵⁷ A small smudge within the circle in the Library of Congress copy looks like a dot of perfect prolation. It does not occur in the facsimile published by Olms in 1968. Imperfect prolation is also indicated by the discussion in the ensuing paragraph.
and 1 semiminim, which is the value of 1 perfect breve in
the proportion mentioned. Do likewise with all other
proportions and notes; then you can easily know—if you are
experienced in reckoning and the recognition of the signs—
what each note is worth in all proportions.

The Reckoning in This Proportion
In the Perfect Tempus

This is then found quite visibly manifested in the eighteen
figures drawn in the following little book concerning pro-
portions.

Agricola's fresh approach—expressing the value
of notes within a proportion in terms of notes not in the
proportion—leads to the numerous tables found in the small
appended treatise on proportions. Multiplying by the lower
number of a proportion and dividing by the upper number a-
mounts to dividing by the fraction that appears when a pro-
portion is expressed with two numbers. In the proportion 3
each note is worth 3/4 of its previous value, just as in 3
dupla 2 each note is worth 1/2 of its previous value. Not
content to say that each breve in the proportion 2 is worth
3/4 of a breve outside the proportion, Agricola "resolves"
into smaller note values. A breve equals 3 semibreves,
6 minims, or 12 semiminims. Hence 3/4 of it equals 9 of the
12 semiminims, or as he says, 2 semibreves and 1 semiminim.
The usefulness of such reckoning may be more mathematical
than musical.

In the figure, clarifying brackets are missing
for all but the last group of notes to the right. Since each
note in the proportion 3 is worth 3/4 of its previous value,
a maxima is worth 3 perfect breves, a long is worth a perfect
Concerning the Description of This Music, the First Chapter
Concerning the Notes And Rests, the Second Chapter
Concerning the Ligatures, the Third Chapter
Concerning the Three Gradations, the Fourth Chapter
Concerning the External and Internal Signs, Chapter Five
Concerning three Kinds of Tactus, the Sixth Chapter
Concerning Augmentation and the Increasing of Song, and
Concerning Canon, the Seventh Chapter
Concerning Diminution and the Halving of Song, the Eighth
Chapter
Concerning Three Kinds of Dots, the Ninth Chapter
Concerning the Imperfection and Blackening of Notes, the
Tenth Chapter
Concerning Alteration or the Doubling of Notes, the
Eleventh Chapter
Concerning Proportions, the Twelfth Chapter
How the Reckoning Takes Place in the Notes, [also] the
Twelfth Chapter

breve plus a semibreve and a minim, a breve is worth 2 semi-
breves plus a minim; was mentioned above, a semibreve is
worth a minim plus a semiminim, and a minim is worth a semi-
minim plus a fusa.
To the Reader

After this little book of figural music has been looked over again at the end in the most exacting way, friendly reader, a very small error has been found. And although it is quite a tiny error, still I did not wish to leave it unnoted. And it is namely this:

In letter J on the ninth column, above on the third line should stand this following example, which gives a clearer understanding to the reader than that one which is found there.\[N iiii\]

\[\begin{array}{c|c|c}
\text{Perfected} & \text{Imperfected} \\
\hline
O_z & \text{\textbullet} & \text{\textbullet} \\
O & \text{\textbullet} & \text{\textbullet} \\
C & \text{\textbullet} & \text{\textbullet} \\
\end{array}\]

\[N iiii^V\] Printed in Wittenberg by Georg Rhau; 1532

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160 Kein in the original ("none"); presumably klein from context.

161 See the top of fol. J v, found above on p. 285.
PART THREE

TRANSLATION OF VON DEN PROPORCIONIBUS:

[A] CONCERNING PROPORTIONS—HOW THEY
ACT UPON THE NOTES AND HOW THEY
ARE USED IN FIGURAL SONG
[A ii] An Especially Fine Little Book on Proportions:

How They Act Upon The Notes and Are Used

In Song—Treated Quite Briefly

Preface

This little book I have placed just after the one on figural music somewhat as an overflow, yet with well-founded reasons. For since in the last chapter of that work there proved to be something obscure and more difficult than in the other chapters, so too a clearer and more understandable exposition properly belongs next to it. For that reason I have collected together the following figures (in which are seen the names and genera of the proportions together with the value of the notes) for the benefit of singers inexperienced in proportions and of everyone in general. And I have included them in a little book of ten chapters in the shortest possible way, yet quite clearly. Therefore, if someone were to come upon a song with these [A iiV] proportions or ones like them mixed in, then he may—if he does not otherwise understand—hold this song against the figures placed here, as though up to a mirror, from which he may quite easily recognize the value of each and every note. Since I have written this with good intention and all for the benefit of the young, I ask every faithful reader and lover of this art in a friendly manner that he may accept it kindly from me and not exercise any malicious cunning against me (even if I have deserved it). May almighty God be with you.
Proportion is a making equal of two things of the same shape and form, such as number to numbers, lines to lines, body to body, etc. And it is [either] like against like, as 2 against 2 or 4 against 4, or two unlike things against each other, such as 2 against 1, etc. Like against like has no subdivision, but when the two things are unlike each other, then at times the large is valued against the smaller and also the smaller against the larger; they have the same name, except that when one values the small above the larger, the prefix sub is added. For instance, 2 against 1 is dupla but 1 against 2 is subdupla, etc. Such proportions are divided into five genera.

[A iii] The First Genus Is Called Multiplex

And [this] happens when the large number contains the small more than once entirely within itself—twice as in dupla, or three times as in tripla, etc.—as the following figure shows.
There Follow the Names of Some Proportions of the First Genus

<table>
<thead>
<tr>
<th>Multiplex</th>
<th>Single</th>
<th>Submultiplex</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Dupla</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Tripla</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Quadrupla</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Quintupla</td>
<td>5</td>
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<tr>
<td>6</td>
<td>Sextupla</td>
<td>6</td>
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<tr>
<td>7</td>
<td>Septupla</td>
<td>7</td>
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<tr>
<td>8</td>
<td>Octupla</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Nonupla</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Decupla</td>
<td>10</td>
</tr>
</tbody>
</table>

An Instruction

Also, I have left certain spaces empty in the ruled figures [omitted some proportions in a series] because difficult and unsingable fractions of notes happen there. I have also left out certain notes (since they are quite difficult to sing in proportions) and have only given instruction concerning the easiest and common ones.

1 Major inequality means that the upper number is larger and is made equal to the smaller number; minor inequality means that the upper number is the smaller one. Agricola neglects to explain this, but it is found in Gafurius' Practica musicae, bk. 4, chap. 1 (Miller trans., p. 154).

2 In the immediately following figure, Agricola has omitted the proportions 2 and 7 in the series from 2 to 8 because his reckoning system would produce "difficult and unsingable fractions of notes" in those proportions. He also
Furthermore, each and every note placed below [on the bottom line] is worth exactly as many whole tactus [i.e., semibreves] as is shown by the numbers directly above it. It is done in this way also in all the following figures placed by this sign $O_3$.

omitted the values of the semibreve and minim in proportions larger than $\frac{1}{4}$ and also the breve in the proportion $\frac{1}{3}$ because their values are so small.

To demonstrate this procedure, let us begin with the long and move up the column above it. In the sign $O_3$ the long is worth nine semibreves because the small modus and the tempus are perfect. To find its value in a certain proportion, one must divide by the fraction that appears when the two numbers of the proportion are placed above the other, i.e., $\frac{2}{3}$, etc. In dupla proportion $\frac{1}{2}$, therefore, the long has only half of its value outside the proportion—that is, four semibreves and one minim. In tripla proportion $\frac{1}{3}$, the nine semibreves are divided by three and equal three semibreves outside the proportion. In quadruplo proportion the initial result is two semibreves with a remainder of one. The one semibreve is equivalent to four semiminims, which may also be divided by four. Another way of thinking of this is that the nine semibreves are equivalent to thirty-six semiminims in $O_3$. In quadruplo proportion $\frac{1}{4}$, therefore, the long has the value of nine semiminims outside the proportion, or two semibreves and one semiminim. Such reckoning is used for the rest of the proportions in this column and elsewhere in these figures.
Comparison of this with the previous figure shows that submultiplex is a matter of simple multiplication of each original note value by the lower number of the proportion; therefore, Agricola here leaves no proportion out, as he did 5/1 and 7/1, and no note out, as he did smaller notes increasingly in the larger multiplex proportions. In both figures, however, he has equated the semibreve with the whole tactus, reaffirming that the sign O₃ carries no implications of diminution.
CONCERNING THE SECOND GENUS OF PROPORTIONS

The second genus, called superparticular, happens when the large count includes the small just one time and not more than one of its parts beyond that—for instance, three against two and four against three, etc.—as is clearly indicated below.

<table>
<thead>
<tr>
<th>Of Major Inequality</th>
<th>Against</th>
<th>Sesquialtera</th>
<th>Quinta</th>
<th>Sexa</th>
<th>Septima</th>
<th>Octava</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>altera</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>3</td>
<td>tercia</td>
<td></td>
<td></td>
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<tr>
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<td>4</td>
<td>quarta</td>
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<td></td>
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<tr>
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<td>5</td>
<td>quinta</td>
<td></td>
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<td>7</td>
<td>6</td>
<td>sexta</td>
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<tr>
<td>8</td>
<td>7</td>
<td>septima</td>
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<tr>
<td>9</td>
<td>8</td>
<td>octava</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Of Minor Inequality</th>
<th>Subsuperparticular</th>
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<tbody>
<tr>
<td>2</td>
<td></td>
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<tr>
<td>3</td>
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<td>9</td>
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<tr>
<td>3 4 5</td>
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</tbody>
</table>
Clarification of the Ruled Figures

The numbers placed with one above another in one space always signify proportions; the other numbers, however, always show how many tactus or semibreves the notes placed directly below them are worth in those proportions. For instance, the maxima placed in the proportion \( \frac{8}{7} \) in this sign—\( 0_{3} \)—is worth twenty-three semibreves and a note like this \( \bullet \) and one like this \( \uparrow \), as is seen in the following figure. And thus understand all of the other subsequent figures done in this way.

[A v^] Values of the Notes in the Large Perfect Modus in the Proportions of the Second Genus

Superparticular Genus of Major Inequality

| \( \frac{9}{10} \) | 3 | 10 | 3 | 1 | 2 | 4 | 5 |
| \( \frac{8}{9} \) | 30/6 | 10/6 | 3/6 | 0/6 |
| \( \frac{5}{6} \) | 31/6 | 11/6 | 4/6 | 0/6 |
| \( \frac{4}{5} \) | 33/7 | 11/7 | 4/7 | 0/7 |
| \( \frac{3}{4} \) | 36 | 12 | 4 | 0/4 |
| \( \frac{2}{3} \) | 40/6 | 15/6 | 5/6 | 0/6 |
| \( \frac{9}{8} \) | 24 | 8 | 2 | 0/2 |
| \( \frac{5}{3} \) | 23/6 | 7/6 | 2/6 | 0/6 |
| \( \frac{6}{5} \) | 22/6 | 7/6 | 2/6 | 0/6 |
| \( \frac{4}{3} \) | 20/6 | 6/6 | 2/6 | 0/6 |
| \( \frac{5}{4} \) | 18 | 6 | 2 | 0/2 |
| 03 | = | = | = | = |

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5 The flag has been omitted from the fusa in the figure, in the proportion \( \frac{8}{7} \), above the maxima.
THE THIRD CHAPTER

CONCERNING THE THIRD GENUS

Called *superpartiens*, it is [found] when the large count includes the small a single time and more than one of its parts above that, thus: $\frac{5}{3}$, $\frac{7}{5}$, etc., as follows.

<table>
<thead>
<tr>
<th>Major Inequality</th>
<th>Against</th>
<th>Of</th>
<th>Proportion</th>
<th>Name</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>3</td>
<td>3</td>
<td>Superbipartiens Tercias</td>
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</tr>
<tr>
<td>7</td>
<td>5</td>
<td>5</td>
<td>Superbipartiens Quintas</td>
<td></td>
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<tr>
<td>9</td>
<td>7</td>
<td>7</td>
<td>Superbipartiens Septimas</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4</td>
<td>Superbipartiens [Supertripartiens] Quartas</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>5</td>
<td>Supertripartiens Quintas</td>
<td></td>
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<td>10</td>
<td>7</td>
<td>7</td>
<td>Supertripartiens Septimas</td>
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<td>5</td>
<td>5</td>
<td>Superquatripartiens Quintas</td>
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<tr>
<td>13</td>
<td>9</td>
<td>9</td>
<td>Superquatripartiens Nonas</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>7</td>
<td>7</td>
<td>Supersextipartiens Septimas</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sub:</th>
<th>Against</th>
<th>Of</th>
<th>Subsuperpartiens of Minor Inequality</th>
</tr>
</thead>
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<td>7</td>
<td>10</td>
<td>10</td>
<td>Subsuperpartiens of Minor Inequality</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>9</td>
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<td>9</td>
<td>13</td>
<td>13</td>
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<tr>
<td>7</td>
<td>13</td>
<td>13</td>
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</tbody>
</table>
Values of the Notes in the Large Perfect Modus

in the Proportions of the Third Genus

Of Major
Inequality

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</tbody>
</table>

Multiplex
Superpar.
[/superparticular]

Superpartiens

Despite the title of this figure, the upper two proportions are not of the third genus but of the fourth, multiplex superparticular, as indicated by the captions in the right margin (the brackets should include only the upper two columns, however). Despite the indications of the margin captions on both sides, the third proportion down is subsuperpartiens, of minor inequality. Only the lower three proportions belong to the genus superpartiens, a very small selection; moreover, the values are not given for the semibreve as they usually are.
THE FOURTH CHAPTER

CONCERNING THE FOURTH GENUS

Called Multiplex Superparticular, this is put together from the first and the second; it happens when the large count contains the small two, three, four, or more times and one of its parts above that, such as the second, third, fourth, fifth [times], etc., like this: $\frac{5}{2} \cdot \frac{7}{3} \cdot \frac{9}{4}$, etc., as the following figure shows.

<table>
<thead>
<tr>
<th>The Names of Some Proportions of the Fourth Genus</th>
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<tbody>
<tr>
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349
### Values of the Notes in the Large Perfect Modus in the Proportions of the Fourth Genus

**[A viii] Submultiplex Superparticular of Minor Inequality**

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<tr>
<td>03</td>
<td></td>
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</tbody>
</table>
THE FIFTH CHAPTER

CONCERNING THE FIFTH GENUS

Called multiplex superpartiens, it is [found] when the large count contains the small two, three, four, or more times and more than one of its parts above that, such as $\frac{8}{3} \cdot \frac{11}{4} \cdot \frac{11}{3}$, etc., as is indicated below.

The Names of Some Proportions of the Fifth Genus

<table>
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<tr>
<th>Multiplex</th>
<th>Superpartiens</th>
<th>Of Major Inequality</th>
<th>Against</th>
<th>3 Dupla Superbipartiens Tercias</th>
<th>4 Dupla Supertripartiens Quartas</th>
<th>5 Dupla Supertripartiens Quintas</th>
<th>3 Tripla Superbipartiens Tercias</th>
<th>5 Tripla Superbipartiens Quintas</th>
<th>4 Tripla Supertripartiens Quartas</th>
<th>5 Tripla Supertripartiens Quintas</th>
<th>3 Quadrupla Superbipartiens Tercias</th>
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</table>

[Submultiplex Superpartiens]

<table>
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<th>Against</th>
<th>17 Submultiplex Superpartiens</th>
<th>15 Of Minor Inequality</th>
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<tr>
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<td>19</td>
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</tr>
</tbody>
</table>
Values of the Notes in the Large Perfect Modus

in the Proportions of the Fifth Genus

7 Despite the caption along the right margin, the two proportions at the bottom of the chart are not sub-, but regular multiplex superpartiens proportions, again a very small selection from a very large category. Again, too, the values for the semibreves are not given.
VALUES OF THE NOTES IN THE SMALL PERFECT MODUS
IN THE ABOVE-MENTIONED PROPORTIONS

A [note] is always worth just this many half tactus here and in all figures with this sign: $o_2^8$

---

$^8$ Agricola equates the semibreve with a half
The Second Genus

Submultiplex
[Subsuperparticular]

Multiplex
[Superparticular]
Genus

The Third Genus

[It is] Called Subsuperpartiens
of Minor Inequality^9

It is in agreement with his position in the preceding treatise that O_2 indicates a 2:1 diminution.

Despite the label at the bottom of the figure, the proportion \( \frac{8}{5} \) is superpartiens of major inequality.
### The Fourth Genus

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<td>2/1</td>
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<td>1/0</td>
<td>1/3</td>
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</table>

It is Called Submultiplex Superparticular of Minor Inequality.  

### The Fifth Genus

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<td>02</td>
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</tbody>
</table>

Submultiplex Superpartiens of Minor Inequality.

---

10. But the proportion at the bottom, \( \frac{16}{3} \), is multiplex superparticular of major inequality.

11. Again, the bottom proportion, \( \frac{8}{2} \), is not "sub-" but multiplex superpartiens of major inequality.
VALUES OF THE NOTES IN THE PROPORTIONS IN PERFECT TEMPUS

THE SEVENTH CHAPTER

| Notation | Value
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</table>

356
VALUES OF THE NOTES IN THE PROPORTIONS IN IMPERFECT TEMPUS

THE EIGHTH CHAPTER

| 1 \frac{1}{2} | 7  | 3  | \frac{11}{8} | 22 | 11 |
| 1 \frac{1}{4} | 6  | 3  | \frac{3}{8}  | 3  | 1  |
| 1 \frac{1}{8} | 80 | 40 | \frac{4}{7}  | 34 | 17 |
| 1 \frac{1}{16} | 72 | 36 | \frac{3}{7}  | 36 | 18 |
| 1 \frac{1}{32} | 64 | 32 | \frac{3}{8}  | 26 | 13 |
| 1 \frac{1}{64} | 56 | 28 | \frac{7}{8}  | 28 | 14 |
| 1 \frac{1}{128} | 48 | 24 | \frac{9}{8}  | 18 | 9  |
| 1 \frac{1}{256} | 32 | 16 | \frac{5}{4}  | 1  | 1  |
| 1 \frac{1}{512} | 24 | 12 | \frac{7}{4}  | 14 | 7  |
| 1 \frac{1}{1024} | 16 | 8  | \frac{2}{3}  | 5  | 2  |
| 1 \frac{1}{2048} | 8  | 4  | \frac{3}{2}  | 9  | 4  |
| 1 \frac{1}{4096} | 2  | 1  | \frac{3}{4}  | 10 | 5  |
| 1 \frac{1}{8192} | 1  | \frac{2}{3} | 12 | 6  | 5  |

Each semibreve has the value of a half tactus in these two signs of diminution before numerical proportions are applied. In this figure, values are given only for the maxima and long.

12
THE NINTH CHAPTER

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</table>

The two signs at the bottom left of the figure have the same meaning for Agricola. The perfect tempus is shown by the number 3 of $\text{C}_3$ and by the perfect circle in $\varnothing$. The small imperfect modus is indicated explicitly by the incomplete circle in the first sign and implicitly by a lack of any indicator for modus in the second sign. In integer valor Agricola gives the value of one to the perfect semibreve.

358
Another Figure in the Preceding Gradations

---

Another Fine Figure in the Preceding Signs

---

Agri-cola gives much space to a variety of proportions in these signs; he devotes three full figures to them. Perhaps they particularly lend themselves to useful theoretical demonstration.

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It seems peculiar that when the dot of perfect prolation is shown, governing the mensural relationships for semibreves and minims, the figure shows values only for the largest notes—the maxima, long and breve.
There Follows a Fine Five-Voice Example
of the Intermixing of the Proportions 16

[B vii\(\text{V} - \text{C}\)]

Discantus

Albus

Quintus from Tenor

Tenor

Bassus

16 This title comes at the end of the example in the original, on folio C. It is followed immediately on C\(\text{V}\) by the title that reads: "Another Example of the Intermixing of the Proportions." In the first example, the only one having five voice parts, the fifth part is indicated only by the sign of congruency and an additional fermata in the tenor (the title confirms that a five-voice example is to be found). A canon at the upper fifth is a logical
solution and the only one to fit the clues; beginning after one breve in accordance with the mark of congruency, it completes and matches the harmony of the other voice parts and reaches the internal fermata just when its final note fits the concluding notes of the other voices. The example demonstrates the cumulative effect of proportions: $\frac{3}{2}$, $\frac{3}{2}$ (cumulatively, $\frac{3}{2}$ subdupla in comparison with the beginning), $\frac{4}{2}$ (resulting in $\frac{4}{2}$ dupla compared with the beginning), and $\frac{4}{2}$ (cumulatively $\frac{4}{2}$, a return to subdupla). Only the tenor part, and the quintus part canonically derived from it, contain proportions. In the bassus at (a) in m. 14, a breve rest in the original must be a minim rest.
Another Example of the Intermixing of the Proportions

This rather long example has relatively few proportions; they are found in all voices except for the tenor throughout the first part of the example and in the tenor alone for the second part (2 pars). In the bassus at (a) in m. 11 a breve rest in the original must be a minim rest. At (b) in m. 2 of the second part of the example a semiminim in the original must be a minim. In the tenor at (c) in m. 10 of the second part, a breve rest in the original must be a minim rest. In the discantus at (d) in m. 14 of the second part, a breve rest in the original must be a semibreve rest. In the following measure at (e) the ligature indicates two breves; the context, however, requires two semibreves.
179 Fol. C ii is mislabeled as B ii in the original.
[C-v C iii v]

[Music notation image]
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