

379
N81d
No. 4276

CADENTIAL SYNTAX AND MODE IN THE SIXTEENTH-CENTURY MOTET:
A THEORY OF COMPOSITIONAL PROCESS AND STRUCTURE FROM
GALLUS DRESSLER'S *PRAECEPTA MUSICAE POETICAE*

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY

By

David Russell Hamrick, B.A., M.M.

Denton, Texas

May, 1996

379
N81d
No. 4276

CADENTIAL SYNTAX AND MODE IN THE SIXTEENTH-CENTURY MOTET:
A THEORY OF COMPOSITIONAL PROCESS AND STRUCTURE FROM
GALLUS DRESSLER'S *PRAECEPTA MUSICAE POETICAE*

DISSERTATION


Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY

By

David Russell Hamrick, B.A., M.M.

Denton, Texas

May, 1996

Hamrick, David Russell, Cadential syntax and mode in the sixteenth-century motet: a theory of compositional process and structure from Gallus Dressler's Praecepta musicae poeticae. Doctor of Philosophy (Musicology), May, 1996, 282 pp., 101 tables, references, 127 titles. 

Though cadences have long been recognized as an aspect of modality, Gallus Dressler's treatise *Praecepta musicae poeticae* (1563) offers a new understanding of their relationship to mode and structure. Dressler's comments suggest that the cadences in the exordium and at articulations of the text are "principal" to the mode, shaping the tonal structure of the work.

First, it is necessary to determine which cadences indicate which modes. A survey of sixteenth-century theorists uncovered a striking difference between Pietro Aron and his followers and many lesser-known theorists, including Dressler. The latter held that the *repercussae* of each mode were "principal cadences," contrary to Aron's expansive lists.

Dressler's syntactical theory of cadence usage was tested by examining seventeen motets by Dressler and seventy-two motets by various early sixteenth-century composers. In approximately three-fourths of the motets in each group, cadences appeared on only two different pitches

(with only infrequent exceptions) in their exordia and at text articulations. These pairs are the principal cadences of Dressler's list, and identify the mode of the motets. Observations and conclusions are offered regarding the ambiguities of individual modes, and the cadence-tone usage of individual composers.

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
Chapter	
PART ONE: APPROACHES TO ANALYSIS OF RENAISSANCE POLYPHONY	
1. INTRODUCTION	1
2. TONAL APPROACHES TO RENAISSANCE ANALYSIS	19
3. MODAL APPROACHES TO RENAISSANCE ANALYSIS	30
4. ECLECTIC APPROACHES TO RENAISSANCE ANALYSIS	42
PART TWO: DRESSLER'S THEORY OF CADENTIAL EXPRESSION OF MODE	
5. STRUCTURAL CADENCES IN RENAISSANCE MUSIC	54
6. CADENCE TONE HIERARCHIES IN RENAISSANCE THEORY	68
7. EXPOSITION OF DRESSLER'S STATEMENTS ON CADENTIAL SYNTAX AND MUSICAL STRUCTURE	84
PART THREE: APPLICATION OF DRESSLER'S CADENCE-TONE THEORY	
8. CADENCE-TONE ANALYSIS OF DRESSLER'S <i>XVII CANTIONES SACRAE</i>	91
9. CADENCE-TONE ANALYSIS OF MOTETS SELECTED FROM <i>PSALMORUM SELECTORUM</i> (1553-1554)	107
PART FOUR: CONCLUSIONS FROM ANALYSIS AND RECOMMENDATIONS FOR FURTHER RESEARCH	
10. REVIEW OF EVIDENCE FOR CADENTIAL EXPRESSION OF MODE	115
11. CONCLUSIONS REGARDING CURRENT SCHOLARSHIP	123
12. AREAS FOR FURTHER RESEARCH	130

APPENDIX A: CADENCE-TONE ANALYSIS TABLES	136
APPENDIX B: GALLUS DRESSLER'S <i>PRAECEPTA MUSICAE</i> <i>POETICAE</i>	221
BIBLIOGRAPHY	272

LIST OF TABLES

Table	Page
1. Theorists Consulted Regarding Composition of Cadence and Ordering of Cadence Tones (arranged chronologically)	56
2. Theorists Using Semibreve Pulse Exclusively in Cadence Examples	59
3. Theorists Exhibiting a Distinction Between "Simple" and "Diminished" Cadences	61
4. Theorists Representing Cadences as Exclusively Containing a Syncopation Figure and Dissonance	62
5. Comparison of the Three Approaches to Cadence-Tone Theory	69
6. Theorists Supporting the <i>Initium</i> -Derived Cadence-Tone Theory	70
7. Comparison of Cadence-Tone Lists in 1523 and 1529 editions of Pietro Aron's <i>Thoscanello de la musica</i>	71
8. <i>Initium</i> List in Tinctoris's <i>De natura et proprietate tonorum</i>	73
9. Theorists Listing <i>Initiae</i> Without Reference to Cadence	74
10. Theorists Supporting the <i>Repercussae</i> -Derived Cadence-Tone Theory	76
11. Cadence-Tone List from Johannes Cochlaeus's <i>Exercitium cantus choralis</i> (1511)	78
12. Cadence-Tone List from Gallus Dressler's <i>Praecepta musicae poeticae</i> (1563)	79
13. Theorists Supporting the Zarlinian Cadence-Tone Theory	83

14.	Cadences in Dressler's "Venite ad omnes"	137
15.	Cadences in Dressler's "Lucerna pedibus meis verbum tuum"	137
16.	Cadences in Dressler's "Haec est voluntas ejus"	138
17.	Cadences in Dressler's "Vespera nunc venit"	139
18.	Cadences in Dressler's "Nil sum, miser novi solatia"	139
19.	Cadences in Dressler's "Quicquid erit tandem, mea spes"	140
20.	Cadences in Dressler's "Ecce ego nobiscum sum"	141
21.	Cadences in Dressler's "Fundamentum aliud nemo potest"	142
22.	Cadences in Dressler's "Pectus ut in spenso flammorum incedia sentit"	142
23.	Cadences in Dressler's "Ego sum lux mundi"	143
24.	Cadences in Dressler's "Sic Deus dilexit mundum"	144
25.	Cadences in Dressler's "Amen dico vobis" á4	144
26.	Cadences in Dressler's "Dixit Jesus mulieri" ...	145
27.	Cadences in Dressler's "Corporatis exercitatio paululum habet"	146
28.	Cadences in Dressler's "Amen dico vobis" á5	146
29.	Cadences in Dressler's "Ego plantavit, Apollo rigavit"	147
30.	Cadences in Dressler's "Ego sum panis ille vitae"	148
31.	Cadences in Jacobus Clemens' "Domine, non est exaltatum cor meum"	149
32.	Cadences in Jacobus Clemens' "Domine probasti me"	150

33.	Cadences in Jacobus Clemens' "Exaltabo te Domino"	151
34.	Cadences in Jacobus Clemens' "In te Domine speravi"	152
35.	Cadences in Thomas Créquillon's "Adjuva nos Deus"	153
36.	Cadences in Thomas Créquillon's "Domine, da nobis auxilium"	154
37.	Cadences in Thomas Créquillon's "Invocabo nomen tuum Domine"	155
38.	Cadences in Thomas Créquillon's "Venite et videte opera Domini"	156
39.	Cadences in Nicolas Gombert's "In te Domine speravi"	157
40.	Cadences in Nicolas Gombert's "Laqueus contritus est"	158
41.	Josquin des Pres' "Domine, ne in furore tuo argas me"	159
42.	Cadences in Josquin des Pres' "Mirabilia testimonia tua, Domine"	160
43.	Cadences in Josquin des Pres' "Usquequo, Domine"	162
44.	Cadences in Elzear Genet's "Legem pone mihi Domine"	163
45.	Cadences in Nicolas Gombert's "Salvum me fac"	164
46.	Cadences in Maistre Gosse's "Laudate Dominum"	165
47.	Cadences in Jean Guyon's "Fundamenta ejus in montibus"	166
48.	Cadences in Jachet de Mantua's "Salvum me fac"	167
49.	Cadences in Francesco Layolle's "Memor est verbi tui"	168

50.	Cadences in Cristobal de Morales' "Inclina me, Domine, aurem tuam"	169
51.	Cadences in Adrian Willaert's "Qui habitat in adjutorio"	171
52.	Cadences in Claudin de Sermisy's "Domini est terra"	173
53.	Cadences in Jacobus Clemens' "Aperio Domine" ...	174
54.	Cadences in Jacobus Clemens's "Servus tuus ego sum"	175
55.	Cadences in Jean Conseil's "Adjuva me, Domine"	176
56.	Cadences in Thomas Créquillon's "Dirige gressus meus"	176
57.	Cadences in Thomas Créquillon's "Hei mihi Domine"	177
58.	Cadences in Mathieu Gascongne's "Quare tristis es anima mea"	178
59.	Cadences in Nicolas Gombert's "Confitebimur tibi Deus"	179
60.	Cadences in Nicolas Gombert's "Peccata mea sicut sagitae"	180
61.	Cadences in Jacotin's "Credidi, propter quod locutus sum"	181
62.	Cadences in Josquin des Pres' "Cantate Domino canticum novum"	182
63.	Cadences in Cipriano de Rore's "In convertendo Dominus"	183
64.	Cadences in Claudin de Sermisy's "Beatus vir qui non abiit"	184
65.	Cadences in Thomas Créquillon's "Cor mundum crea in me"	184
66.	Cadences in Thomas Créquillon's "Erravi sicut ovis"	185
67.	Cadences in Josquin des Pres' "Beati quorum" ...	186

68.	Cadences in Josquin des Pres' "Caeli enarrant gloriam Dei"	187
69.	Cadences in Josquin des Pres' "Domine Dominus noster"	189
70.	Cadences in Josquin des Pres' "Domine, ne in furore tuo argas me"	189
71.	Cadences in Jean Richafort's "Exaudi te Dominus"	190
72.	Cadences in Thomas Stoltzer's "Saepe expugnaverunt me"	191
73.	Cadences in Jacobus Clemens' "Domine clamavi" ..	192
74.	Cadences in Josquin des Pres' "Deus in nomine tuo salvum me fac"	193
75.	Cadences in Josquin des Pres' "Domine, exaudi orationem meum"	194
76.	Cadences in Josquin des Pres' "Domine, ne projicias me"	195
77.	Cadences in Josquin des Pres' "Qui regis Israel, intende"	196
78.	Cadences in Mathieu Lasson's "In manibus tuis sortes meae"	196
79.	Cadences in Pierre de Manchicourt's "Paratum cor meum"	197
80.	Cadences in Dominique Phinot's "Exaudi te Domine"	198
81.	Cadences in Claudin de Sermisy's "Benedic anima mea Domino"	199
82.	Cadences in Claudin de Sermisy's "Deus, in adjutorium meum intende"	200
83.	Cadences in Jacobus Clemens' "Confundantur omnes"	200
84.	Cadences in Thomas Créquillon's "Deus virtutem convertere"	201
85.	Cadences in Nicolas Gombert's "Inclina, Domine, aurem tuam"	202

86.	Cadences in Josquin des Pres' "Benedicite omnia opera Domini Domino"	203
87.	Cadences in Josquin des Pres' "Dominus regnavit"	204
88.	Cadences in Josquin des Pres' "In Domini confido"	204
89.	Cadences in Josquin des Pres' "Laudate pueri Dominum"	205
90.	Cadences in Ludwig Senfl's "Deus in adjutorium"	206
91.	Cadences in Jacobus Clemens' "Dominus qui habitabit"	207
92.	Cadences in Jacobus Clemens' "Levavi oculos meos"	207
93.	Cadences in Nicolas Gombert's "Ad te levavi oculos"	208
94.	Cadences in Nicolas Gombert's "Deus ultionum Dominum"	209
95.	Cadences in Cristobal de Morales' "Beatus omnes qui timent Dominum"	210
96.	Cadences in Adrian Willaert's "Dominus regit me-Parasti"	211
97.	Cadences in Antoine Brumel's "Laudate Dominum de caelis"	212
98.	Cadences in Jacobus Clemens' "Fac mecum signum"	213
99.	Cadences in Claudin de Sermisy's "Deus misereatur nostri"	214
100.	Cadences in Claudin de Sermisy's "Quare tremuerunt gentes"	215
101.	Cadences in Thomas Créquillon's "Delectare in Domino"	216
102.	Cadences in Jean Mouton's "Confitemini Domino"	217

PART ONE: APPROACHES TO ANALYSIS
OF RENAISSANCE POLYPHONY

CHAPTER I

INTRODUCTION

After a half-century in which Renaissance sacred polyphony was viewed as a way station on the road to tonality,¹ the last thirty years have seen the maturing of a new approach to analysis of this repertory.² Scholars have given the theory treatises of the sixteenth century a fresh reading, and have attempted to reconstruct a proper historical understanding of Renaissance polyphony in which the modal system is the keystone to analytical understanding.³ Now, in turn, this method has met with a

1. An example is Edward Lowinsky's *Tonality and Atonality in Sixteenth-Century Music* (Berkeley, Calif.: University of California Press, 1961); Carl Dahlhaus's *Untersuchungen über der Entstehung der harmonischen Tonalität* (Kassel: Bärenreiter, 1968) and Felix Salzer's "Tonality in Early Medieval Polyphony," *The Music Forum I* (1967), 35-98, make some of the same assumptions in a more subtle fashion.

2. This school of thought relies heavily on Bernhard Meier's *Die Tonarten der klassische Vokalpolyphonie* (Utrecht: Oosthoek, Scheltema, and Holkema, 1974).

3. Exemplified by Harold Powers's "Tonal Types and Modal Categories," *Journal of the American Musicological Society* XXXIV/3 (Fall 1981), 428-470, which deconstructs the historicist concept of modality, and Peter Schubert's "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 3-18, a rigorous examination modern interpretation of sixteenth-century theory documents.

wave of criticism as the accuracy of this historical picture and even the relevance of "modality" itself is challenged. In the wake of the "modality" debate, however, one aspect of Renaissance modal theory--that of the deliberate placement of certain mode-defining scale degrees as cadence points--has been underemphasized, despite its prominence in sixteenth-century treatises on composition.

I propose to examine the following thesis: that the deliberate, ordered use of cadences to express modality and musical structure is a distinctive feature of the Netherlands motet, originating as early as the generation of Josquin and continuing until at least the middle of the sixteenth century. For a theoretical model of cadence-tone usage I will use the cadence-tone theory of Gallus Dressler's *Praecepta musicae poeticae* (1564), one of the least-known yet most informative composition treatises of the century.⁴ Dressler's discussion is uniquely practical, thorough, and well-integrated, and may serve as a window through which one might discover a view of Renaissance musical structure that is at once historically documented, logically sound, and analytically useful.

Dressler (1533-1581?) was steeped in the counterpoint of the post-Josquin generation, and apparently spent his early adulthood in the Netherlands, possibly under the

4. Critical edition and commentary by Bernhard Engelke, "Einige Bemerkungen zu Dresslers 'Praecepta musicae poeticae'," *Geschichtsblätter für Stadt und Land Magdeburg* XLIX/L (1914/1915), 213-250, 396-401. I have provided Dressler's text, following Engelke, as Appendix B.

tutelage of Clemens non Papa.⁵ His appointment to the cantorate at Magdeburg in 1558 placed him in the midst of the growing *Lateinschule* tradition, which required a strict classroom regimen rather than the traditional apprenticeship system of composition teaching. Though a practical musician and successful published composer, Dressler had a strong theoretical bent. Consequently, his treatise is both speculative and practical, addressing the technical details of cadence structure as well as the weightier matters of textual expression.

Dressler's viewpoint regarding cadence tones is particularly useful to the debate over the relevance of modality to sixteenth-century composition, because he not only lists the hierarchy of cadence tones in each mode, but also indicates the proper order for presenting cadence tones--a subject not addressed by his contemporaries.

Several thought-provoking objections to the consideration of "modality" in particular and Renaissance theory in general must be answered, however, before proceeding. Harold Powers insists that "modality is not a necessary precompositional assumption for Medieval and Renaissance polyphony in the way that tonality is

5. Wilhelm Luther, *Gallus Dressler: ein Beitrag zur Geschichte des Schulkantorats im 16. Jahrhundert* (Kassel: Bärenreiter, 1941), 17.

precompositional for 18th-19th-century art music."⁶ In a later study, he asserts that while "tonal types" (sketchily defined as combinations of clefs, finals, and key signatures) existed as necessary precompositional phenomena, the modes were an expression of an ideal through melody and ambitus characteristics.⁷ More recently, he described mode expression as an artifice introduced by composers of the sixteenth century, who attempted to impose the only system of pitch organization they knew, the modality of plainsong, on a highly developed tradition of polyphonic composition.⁸ He summarizes this as "a conscious use of tonal types in an orderly way, to represent the members of the modal system." He claims that "the hidden fallacy behind notions of modality . . . turns on the familiar confounding of theory with practice, with the curious wrinkle that the theory in question [plainsong modality] antedates rather than postdates the practice . . ." ⁹

Peter Schubert provocatively questions the assumption that a unified "theory of everything" for Renaissance

6. Harold Powers, "The Modality of *Vestiva i colli*," *Studies in Renaissance and Baroque Music in Honor of Arthur Mendel* (Kassel: Bärenreiter, 1974), 31.

7. Harold Powers, "Tonal Types and Modal Categories," *Journal of the American Musicological Society* XXXIV/3 (Fall 1981), 428-470.

8. Harold Powers, "Is Mode Real? Pietro Aron, the Octenary System, and Polyphony," *Basler Jahrbuch für historische Musikpraxis* XVI (1992), 14.

9. *Ibid.*, 16.

modality is obtainable from theorists spread across a century and coming from varied scholastic traditions. Schubert worries that "arriving at a consensus will thus require more levelling than sharpening of theoretical concepts."¹⁰ Delving into even more troublesome questions, Schubert asks whether an understanding of sixteenth-century theory is relevant, necessary, or even possible. Schubert would approach Renaissance music empirically, rather than continuing a quixotic quest for an unbiased "pre-tonal" approach.¹¹ Leeman Perkins earlier gave an even more pointed caveat regarding the usefulness of Renaissance theory to analysis: ". . . nowhere is there definition of the goals toward which the voices being combined should flow,"¹² a sentiment now to be taken to task.

Bernhard Meier's *The Modes of Classical Vocal Polyphony*¹³ is undoubtedly the standard for a defense of the "modality" approach to understanding Renaissance music. In his fifth chapter, titled "Musical Ranges and Cadence Plans of the Authentic and Plagal Polyphonic Modes," Meier claims

10. Peter Schubert, "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 6.

11. *Ibid.*, " 10ff.

12. Leeman Perkins, "Mode and Structure in the Masses of Josquin," *Journal of the American Musicological Society* XXVI/2 (Summer 1973), 193.

13. Bernhard Meier, *The Modes of Classical Vocal Polyphony*, rev. by author, trans. Ellen Beebe (New York: Broude Bros. Ltd., 1988).

that ". . . the nature of every mode that is represented by final and melodic range . . . is also revealed by a characteristic cadence plan . . ." ¹⁴ While Meier uses this discovery principally to buttress his main arguments concerning ambitus and octave species, the existence of such deliberate compositional choices that seem to express modes fits neatly with Powers's contention that modality was a stylistic feature contrived by the composer. Additionally, in answer to Peter Schubert's concerns about the relevance of Renaissance theory to modern understanding of the music, cadence-tone theory may at least be tested empirically by examining the placement of cadences in musical works. When honed by Gallus Dressler's detailed prescription for its orderly use, this area of modality analysis could even become a more important indicator of modal expression than ambitus and pitch content, the factors emphasized by Meier.

The usefulness of cadence-tone theory has been questioned, of course; Charles Dill, writing on Josquin and his generation, remarks, ". . . there are, if anything, too many possibilities to choose from in selecting the proper cadence tone." ¹⁵ This depends, however, on the theorists one considers to be normative. One must first recognize that two of the best-known exponents of cadence-tone theory are

14. Meier, *Classical Vocal Polyphony*, 128.

15. Charles Dill, "Non-Cadential Articulation of Structure in Some Motets of Josquin and Mouton," *Current Musicology* XXXIII (1982), 38.

also two of the most extreme in their positions. Pietro Aron, however informative he may be on other issues, stands virtually alone in cadence-tone theory in that he lists as many as six different regular cadences per mode. Gioseffo Zarlino, on the other hand, names only the first, third, and fifth degrees of each mode as regular cadences (a suspiciously symmetrical arrangement), even though he must ignore the traditional use of C in place of B as the dominant of the third and eighth modes.¹⁶ Despite these high-profile exceptions, a number of lesser-known Renaissance theorists communally accepted a hierarchy of cadence tones based upon the traditional finals, mediants, and dominants.¹⁷

Carl Dahlhaus has also argued against the importance of cadence tones in the analysis of Renaissance music:

One could object that the clausula degree-- thus a factor of chordal technique--also belongs among a mode's defining features To be sure, the mode can be detected from the clausula, but the clausula forms neither the center around which the sonorities group themselves nor the goal toward which they strive. The clausula is used much like a "sign" of the modes, without the mode being the principle that governs the disposition of the other sonorities. In modal polyphony,

16. Meier, *Classical Vocal Polyphony*, 105ff. Regarding Aron, see also Cristle Collins Judd, "Modal Types and Ut, Re, Mi Tonality: Tonal Coherence in Sacred Vocal Polyphony from about 1500," *Journal of the American Musicological Society* XLV/3 (Fall 1992), 430. Judd's study of Aron's own examples for each mode found no appreciable connection to Aron's cadence-tone theory.

17. *Ibid.*, 106ff.

unlike tonal harmony, it is seldom possible to predict on which clausula degree a series of sonorities will end.¹⁸

Dahlhaus is concerned with tonal interpretations of cadences; he admits, notwithstanding, the mode-expressing use of cadences. As for cadences being the "center around which the sonorities group themselves," this is perhaps a matter of degree. They certainly provide as good a vantage point as any for mapping out the uncharted interiors of Renaissance contrapuntal works.

Dressler's concern for the proper and orderly deployment of cadences is by far the most thorough treatment of the subject, but it is not without precedent. Tinctoris's famous rules in *Liber de arte contrapuncti* (1477) include the dictum that no cadence should be made that might "dislocate" the mode;¹⁹ the obvious implication is that certain tones were supportive of the mode, and that the composer should attend to that fact. Most Renaissance theorists who broach the subject seem to agree at least that "cadences must be made in the proper place, and correctly."²⁰ Even the thoroughly skeptical Harold Powers

18. Carl Dahlhaus, *Studies in the Origins of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, New Jersey: Princeton University Press, 1990), 243.

19. Johannes Tinctoris, *Opera Theoretica*, ed. Albert Seay, 3 vols., *Corpus Scriptorum de Musica XXII* (Rome: American Institute of Musicology, 1975), II, 150.

20. Meier, *Classical Vocal Polyphony*, 63ff.

admits that his own study of Palestrina's Offertory cycle revealed some tendencies to distinguish modes by cadence tones.²¹ John Caldwell takes the matter further, proposing that "the structure of the piece is contained in its pattern of cadences and the keys and modes which they represent."²² Dahlhaus even admits that "the sequence in which the clausula degrees appear . . . is of no less but of a different importance than in a major key."²³

In light of this promising insight into the compositional goals of the Renaissance composer, certain obvious questions arise. When and where did this practice of modal expression through cadence plan begin? How did it interact with other better-known stylistic developments in the Renaissance? Perhaps most importantly, can it instruct our understanding of the structures of Renaissance music, adding a bit more useful substance to a field of analysis that, as Felix Salzer would have it, too often "amounts to description, behind a thinly constructed analytical facade?"²⁴ Dressler's treatise provides the best starting point for such an investigation for several reasons.

21. Harold Powers, "Modal Representations in Polyphonic Offertories," *Early Music History* II (1982), 78.

22. John Caldwell, "Some Aspects of Tonal Language in Music of the Fifteenth and Sixteenth Centuries," *Proceedings of the Royal Music Association* CX (1983-1984), 10.

23. Dahlhaus, *Harmonic Tonality*, 247.

24. Felix Salzer, "Tonality in Early Medieval Polyphony," *The Music Forum* I (1967), 35.

First, *Praecepta musicae poeticae* is essentially practical rather than speculative. Whereas Aron in his *Trattata della musica*, for example, discusses modal polyphony from a rationalist, normative standpoint that may not entirely accord with the reality of music composition,²⁵ Dressler maintains that his treatise compiles "certain things . . . useful and necessary to students, more fully explained and illustrated with examples."²⁶ The treatise may in fact be a compilation of lecture notes, as the author mentions that he had taught these precepts for two years in Magdeburg. Second, Dressler is a thorough-going sixteenth-century advocate of "modality" as an essential element of composition. In Chapter 15, "Concerning the method that ought to be followed in this study," Dressler insists that students "should have mastered the doctrine of modes before anything else, for from this spring flows all of poetics . . ." ²⁷ Third, though one should certainly heed Peter Schubert's caveat about finding an analytical Rosetta stone for all Renaissance music, Dressler's discourse probes further than most into the heart of the creative process-- and it must not be overlooked that Dressler was a successful

25. Powers, "Is Mode Real?," 43.

26. Appendix B, Preface, ¶4.

27. Appendix B, XV, ¶9.

composer himself, with several published motet collections.²⁸

Finally, Dressler indicates not only the cadence tones appropriate to each mode, but the means of their employment. Chapter 9, "The Use of Cadences," opens with the following:

Let the youths not persuade themselves that musical compositions are a coincidental and fortuitous accumulation of consonances . . . What the sentence and comma are in speech, moreover, the cadences are in musical poetics, and these members, as it were, constitute the complete body. It does not suffice, therefore, simply to know the composition of the cadences, but students ought to be taught in what order cadences are connected so that they may produce compositions that are well-grounded and excellent . . . and we wish these cadences to be inserted in the right place, not in an inappropriate one.²⁹

My use of the expression "cadential syntax" refers to this concept of organization of cadence tones, not only by means of a hierarchy of scale degrees, but by syntactical significance accrued by their use in particular contexts. Dressler discusses this "syntax" in Chapters 12-14,

28. *Aliquot psalmi latini et germanici* (1560); *Zehen deutscher Psalmen* (Jena, 1562); *XVII Cantiones sacrae* (Jena, 1562); *XVIII Cantiones* (Magdeburg, 1567); *XVII Cantiones sacrae* (Wittenburg, 1568); *XIX Cantiones* (Magdeburg, 1569); *XC Cantiones* (Magdeburg, 1570, repr. Nuremberg, 1574, 1577, 1585); *XVI Geseng* (Magdeburg, 1570); *Magnificat octo tonorum* (Magdeburg, 1571); *Ausserlesene teutsche Lieder* (Nuremberg, 1575, repr. 1580). See Robert Eitner, *Biographisch-bibliographische Quellenlexikon der Musiker und Musikgelehrten*, 11 vols. (New York: Musurgia, 1947), III, 252ff.

29. Appendix B, Chapter IX, ¶1-2.

concerning the exordium, medium, and finis of a composition. Though this material is usually considered for its importance to "musica poetica" and the "doctrine of figures," musico-rhetorical traditions of later seventeenth-century theorists, Dressler never separates the "music as oratory" concept from modal theory. In Chapter 9, after his first comparison of cadences to the punctuation of oratory, he claims that "in what order or series the composition allows cadences, is known from the doctrine of modes,"³⁰ and proceeds to summarize the cadence-tone hierarchies for each mode. Further, in Chapters 12-14 the embryonic "doctrine of figures" statements, concerning types of "fugas" and other devices, are placed side by side with recommendations for appropriate cadences in each section.

The most striking and useful statements regarding cadential syntax concern the exordium. At the beginning of Chapter 12 Dressler defines the exordium as the beginning up to the first cadence, and recommends the following:

Let the exordia be taken, however, from the principal fonts of the modes, that is, from the species of fourth and fifth, or from the repercussions, and the principal cadences By this action the composition may be more gracious . . . and just as we see the poet to insert the proposition in the exordia, and indeed in the first verses . . . Thus in music, which is greatly identified with poetry, let us express the mode in our exordium.³¹

30. Appendix B, Chapter IX, ¶2.

31. Appendix B, Chapter XII, ¶2.

Though the significance of exordium cadences is recognized in passing by Ellen Beebe in a difficult motet of Clemens,³² few scholars have recognized the force of this concept. Appealing to the model of classical rhetoric, Dressler calls the exordium and its cadences the "proposition" of the composition.³³ Logically, the first two major cadences could be the most important of the entire work; as Dressler himself acknowledges, even an irregular final is possible for the ending, but modal equivocation in the exordium seems out of the question.

Analytical application of this "propositional" concept of the cadences of the exordium produces thought-provoking results. In Harold Powers's famous test case, Palestrina's "Vestiva i colli," application of Dressler's principles indicates an exordium leaning toward a D mode in its fuga entries, but initially suggesting an A mode in its cadences--a metrically strong and well-prepared cadence to A (though avoided in the soprano) between the upper two voices at measure 8, and a "Phrygian" cadence to E between soprano and first tenor at measure 10. Given the dual A-or-D emphases of the cadences and fuga entries throughout the medium, and the strong final cadence on A, the A-E-A emphasis of the first cadences of the exordium tips the scales in the direction of an "A mode"--and in the direction of the

32. Beebe, "Text and Mode," 84.

33. *Ibid.*, 244.

"A piece" assignment given the work by Siegfried Hermelink.³⁴ When the exordium of the text is considered, however, it is noteworthy that the conclusion of the first complete thought in the text coincides with a strong cadence on D in measure 18, a more complete musical demarcation than the previous A and E cadences. D cadences at textual demarcations throughout the work (measures 41 and 93 in the prima pars, and measure 43 in the secunda pars) make a strong case, in Dressler's musical-rhetorical view, for Meier's Dorian assignment³⁵--despite the concluding cadence on A. This is not to say that analytical values derived from Dressler's theory settle the argument; rather, it is hoped that fresh insight may be gained by analyzing with a different set of criteria, these criteria suggested by logical derivation from the teachings of a practicing composer. Powers, never one to overstate the relevance of theorists, has said of Dressler's *Musical Poetics*:

The clear and thoughtful manuscript treatise of Gallus Dressler (1563) brings the doctrine of modality and counterpoint into as close a symbiosis as they were ever to achieve . . . The work is one of the few sources fully discussing the art of polyphonic composition in terms of the traditional eightfold system.³⁶

34. Siegfried Hermelink, *Dispositiones modorum* (Ph.D. dissertation, Tutzing, 1960).

35. Meier, *Classical Vocal Polyphony*, 348ff.

36. Harold Powers, "Mode," *The New Grove Dictionary of Music and Musicians*, 20 vols., ed. Stanley Sadie (London: MacMillan, 1980), XII, 403.

Dressler's treatise is also of particular interest for investigating the beginnings of cadential expression of the mode because it may be at least a partial record of the oral tradition of composition teaching in the Netherlands School, reaching back at least as far as Josquin. Dressler probably spent the early 1550s in the Netherlands, according to biographical information from a 1565 dedicatory poem.³⁷ Dressler's musical world is populated with Netherlands composers; in Chapter 15 his thumbnail sketch of the development of music lists Josquin, Isaac, Senfl, Clemens, Gombert, Crequillon, and Lassus--a decidedly Northern group, in style if not always in location. It is even likely that Dressler studied with Clemens; his treatises are peppered with examples from the master's works, and his first theory treatise, *Practica modorum explicata* (Jena, 1561) uses Clemens examples almost exclusively, some of which were only published in 1554 and were virtually unknown in Germany. Further evidence of a Netherlands sojourn is the inclusion in *Practica modorum explicata* of a work by the little-known Simon Moreau. Moreau's few published works appear exclusively in Tilman Susato's anthologies during the 1550s and 1560s, and the specific work cited by Dressler is known today only from an Aachen manuscript.³⁸

37. Luther, *Gallus Dressler*, 16.

38. *Ibid.*, 17.

According to Adrianus petit Coclico the secrets of composition were taught only to select students, passed down by word of mouth, study of examples, and guided student compositions,³⁹ just as described in Dressler's preface:

"We wish this lecture to be private," he insists, "because it is not suitable for novice students. . ."⁴⁰ The students considered fit for the study of musical poetics met Dressler as a group for a lecture and then privately for further instruction, apparently for review of independent projects. The curriculum is bursting with musical examples, for as Dressler notes in his preface, ". . . the precepts of poetics are built upon the practice of music . . ."⁴¹

It is also interesting that *Praecepta musicae poeticae* was never published, and survives in only one manuscript copy, though Dressler never seems to have lacked access to a press to publish his other treatises. Bernhard Meier comments in passing that "possibly, therefore--not to say, very probably--the rules that Dressler transmits to his students reflect the artistic training that, according to Coclico, had never been recorded in textbook form in the

39. Adrianus petit Coclico, *Musical Compendium*, trans. Albert Seay, *Colorado College Music Press Translations V* (Colorado Springs, Colorado: Colorado College Music Press, 1973), 1, 5-7.

40. Appendix B, Preface, ¶9.

41. *Loc. cit.*

Netherlands."⁴² It is interesting that Dressler's gallery of composers is largely the same group that Edward Lowinsky named as the founders of the "secret chromatic art"; it is not impossible that Dressler's principles of rhetorical composition are fundamental to "musica reservata" as practiced by Orlando di Lasso.⁴³

Proving that Dressler's poetics are the secret to Netherlands composition is not possible, of course; Dressler does, however, seem to be an heir to part of the teaching tradition of the composers who ushered in the "High Renaissance" in polyphonic music. If Dressler's concept of expression of the mode through the syntactical use of cadences can be traced back through the Netherlands tradition, it may be possible to discover and to define one of the myriad changes which in concert separate the very different styles of the early and late Renaissance. The point at which this began should be interesting as well.

In summary, I find that Dressler's treatise provides logical and promising ideas about expression of mode that may lead to a better understanding of changes in compositional goals and musical structure in the Netherlands tradition near the turn of the fifteenth century.

To accomplish this objective, I have undertaken a fourfold study. In Part One the state of research on

42. Meier, *Classical Vocal Polyphony*, 112.

43. Luther, *Gallus Dressler*, 108.

modality and Renaissance analysis is discussed, and the need for a study of cadential expression of mode is outlined. In Part Two, Renaissance theorists are consulted regarding cadence-tone planning, including definition of structural cadences. After establishing this background, I argue for the relevance of Dressler's treatise to the Netherlands tradition, and place his theory within the larger context of Renaissance thought on cadence-tone planning. Part Two comprises a detailed examination of the passages of Dressler's treatise concerning cadential expression of mode, and formulation of an analytical approach that may be applied practically.

In Part Three this formulation is tested, first against a selection of Dressler's own works, and then against motets from a representative group of early sixteenth century composers. In Part Four I present my conclusions regarding the use of cadences in modal composition, conclude with observations on the import of this hypothesis for current methods of analysis and its potential contribution to the understanding of style changes in the Renaissance. The cadence-tone analyses of the examined motets are included as Appendix A, and the Latin text of Dressler's *Praecepta musicae poeticae* is provided as Appendix B.

CHAPTER II

TONAL APPROACHES TO RENAISSANCE ANALYSIS

From review of the literature concerning Renaissance analysis, three different schools of thought emerge: the "tonalist," including Schenkerian-based linear analysis, the "modalist," advocating an historical approach, and the "eclectic," a more diverse group defined primarily by rejection of the excesses of the first two positions and a cautious common-sense approach blending elements of both. I would group Schenkerian-based analysis with more traditional tonal approaches because I believe the two methods share the same fundamental difficulties in application.

Edward Lowinsky's 1961 *Tonality and Atonality in Sixteenth-Century Music* communicates today a quaint notion of musical determinism, an inexorable progress toward tonality, that has become increasingly untenable. Sweeping statements regarding "the inroads of a nascent feeling of tonality . . ." ¹ are undermined by a tendency to pick and choose. The third chapter, on "The Theorists' View," mentions by name only Aron, Zarlino, and Glarean, three of

1. Edward Lowinsky, *Tonality and Atonality in Sixteenth-Century Music* (Berkeley, Calif.: University of California Press, 1961), 1.

the most singular theorists of the sixteenth century. The survey of genres conveniently avoids sacred music after Josquin in favor of the more "tonal" secular genres. This omission, in particular, is poorly excused:

. . . both Dufay and Josquin were open to the secular tendencies of Renaissance society--both lived for long years in Italy--whereas Ockeghem and Gombert, throughout their distinguished careers, were occupied with church music and are not known to have been exposed to Italy's freer social, artistic, and intellectual climate.²

Lowinsky overlooks the possibility that Ockeghem was simply a highly idiosyncratic genius. Whatever the fundamental differences between Josquin and Gombert, they hardly are relevant to those between Dufay and Ockeghem. The explanation that "modality and tonality may be seen as turning in cycles"³ presumes a view of Renaissance music history that follows the scarlet thread of tonality through various regions and genres, regardless of verifiable historical connections.

This is not to say that Lowinsky's facts, reasoning, and presentation are any less than stellar; the problem lies entirely in the presupposition that tonality in its modern definition is a relevant criterion with which to sort through the various currents in the Renaissance. The

2. Lowinsky, *Tonality and Atonality*, 76.

3. *Loc. cit.*

evidence itself does not demand such a conclusion; rather, the author must select carefully that which supports his position. Such a line of inquiry requires a certain degree of faith in the overreaching importance of tonality, a faith that is harder to accept at the close of a century that has seen tonality become one among several options to the composer.

Lowinsky occasionally hedges on a full declaration of tonality in the Renaissance; he claims that "a net of cadences on varying degrees related to the tonic and organizing a whole work into sections comes closer to defining tonality."⁴ This might be a good description of Renaissance musical structure, but it is a rather loose definition for "tonality." Analytical remarks such as "tending to erode a sense of a stable tonal center," "no stable frame of tonal reference," and "losing all [tonal] orientation,"⁵ speak of a desire to define Renaissance music in terms of a system that has to be honored more in the breach than in the observance.

Leo Treitler's "Tone System in the Secular Works of Guillaume Dufay" approaches Dufay solely in terms of key analysis of melodies, a method similar to modal analysis except that instead of ambitus and interval-species study, a looser implication of overall key is sought from the

4. Lowinsky, *Tonality and Atonality*, 15.

5. *Ibid.*, 39.

melody.⁶ While one must respect the pioneering effort, some of the key assignments are improbable. Treitler labels "Adieu quitte le demeurant" as "C tonality";⁷ its final cadence, however, is on E, and Frederick Bashour, in his thorough Schenkerian study of Dufay chansons, identifies it as one of the handful of the "E repertory" chansons.⁸ Once again, commitment to finding a particular system of understanding music usually results in finding it--but at the price of overlooking other, more obvious considerations.

Peter Bergquist's "Mode and Polyphony Around 1500" begins to sound apologetic in light of the strides being made in modal theory: "It may be noted first that not every aspect of music theory around 1500 bears on the analyses of tonal structure."⁹ His question about the feasibility of modal theory in analysis could be as easily turned against the use of tonal theory. He states,

The concept of mode . . . leaves unaccounted for the relationship between or among voices, the chordal element. In any case, this aspect of polyphony in its relation

6. Leo Treitler, "Tone System in the Secular Works of Guillaume Dufay," *Journal of the American Musicological Society* XVIII/2 (Summer 1965), 131ff.

7. *Ibid.*, 155.

8. Frederick Bashour, *A Model for the Analysis of Structural Levels and Tonal Movement in Compositions of the Fifteenth Century*, 2 vols. (Ph.D. dissertation, Yale University, 1975), 74ff.

9. Peter Bergquist, "Mode and Polyphony Around 1500," *The Music Forum* I (1967), 99.

to modality did not attract the attention of Aron or of any other theorist of his period.¹⁰

In "Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac," Saul Novack also expresses belief in a "sense of unity through an extension of tonal order."¹¹ His studious approach finds both immediate expression of tonality through the frequent section-ending "V-I cadence" in Josquin's "Sancti Dei omnes"¹² and long-range projection of the tonality through cadences on degrees of the tonic triad in Josquin's "In illo tempore."¹³ The existence of structures resembling V-I cadences is indisputable; but their existence, alone, does not equate to tonality. The long-range triad projection, a nominally Schenkerian idea, does relate interestingly to Renaissance cadence-tone theory, but nonetheless does not account for the greater part of the musical events--the uncharted regions between the cadences. Herein lies the problem; while section endings of a Renaissance work may create a superficial resemblance to tonality, the hierarchy of chord functions central to many scholars' concept of tonality often cannot be found.

10. Bergquist, "Mode and Polyphony," 102.

11. Saul Novack, "Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac," *The Music Forum* II (1970), 188.

12. *Ibid.*, 196.

13. *Ibid.*, 187.

As "tonalists" continued to grapple with the repertory, this gap in the explanations widened. Don Randel's "Emerging Triadic Tonality in the Fifteenth Century" recognized that the V-I cadence was probably a result of counterpoint, not chords, coming even closer to the heart of the problem. Randel redefines the tonality he is seeking: ". . . if tonality is viewed as a 'list of properties,' then we can observe that some of them have been around a long time . . ." ¹⁴ While Randel is a careful and thoughtful thinker, the system for which he would argue becomes increasingly diluted in meaning.

Friedemann Otterbach touched upon the critical failing of tonal approaches to Renaissance music in *Kadenzierung und Tonalität im Kantilenensatz Dufays* with an attempt to find traces of fundamental bass lines in Dufay chansons. His positive results, as expected, were the cadential structures at the end of major sections.¹⁵ Beyond these points of tonality, he could only identify probable relationships between the cadences themselves.¹⁶

Ronald Ross's foray into fifteenth-century tonality, "Toward a Theory of Tonal Coherence: The Motets of Jacob

14. Don Randel, "Emerging Triadic Tonality in the Fifteenth Century," *The Musical Quarterly* LVII/1 (Jan. 1971), 74.

15. Friedemann Otterbach, *Kadenzierung und Tonalität im Kantilenensatz Dufays*, *Freiburger Schriften zur Musikwissenschaft* VII (Munich: Katzblücher, 1975), 70.

16. *Ibid.*, 54ff.

Obrecht," typifies the problem of the tonal presupposition. After a number of largely unqualified quotes from Lowinsky,¹⁷ Ross relates the cadence-tones of Obrecht works to the tonic triad, noting that "the cadences on D, F, and A, then, are all directly relatable to a D tonality, particularly if one assumes a triadic orientation and perspective."¹⁸ Likewise, David Stern, in "Tonal Organization in Modal Polyphony," does not seem to realize the problems in the statement that "one may assume that Renaissance composers would readily recognize melodies and progressions as belonging to a specific mode . . . ,"¹⁹ unless he means something other than the obvious by the term "progressions."

These references to harmonic "progressions" in Renaissance music are indicative of the chief problem in the application of tonal theory to Renaissance music: "harmonic progression," in the sense of a hierarchy of root movements, is foreign to the thinking of the Renaissance theorist, and seems to have been foreign to the thinking of the Renaissance composer as well. Mode was primarily a melodic construct, a collection of pitch patterns characteristic to

17. Ronald Ross, "Toward a Theory of Tonal Coherence: The Motets of Jacob Obrecht," *The Musical Quarterly* LXVII/2 (April 1981), 147.

18. *Ibid.*, 153.

19. David Stern, "Tonal Organization in Modal Polyphony," *Theory and Practice* VI/2 (Dec. 1981), 5.

a particular final and octave species. In tonal harmony, however, the characteristics of the chords produced by the scale are of equal importance to the melodic aspect of whole- and half-step arrangement.

Carl Dahlhaus explains that in later tonality,

. . . the chord, understood as an unquestionably given entity, and one derived from the natural scale, was the primary, and the interval a secondary, phenomenon. In the sixteenth century, on the contrary, the interval was the primary given, arising from the musical preconditions, and a chord was something resulting from the combination of intervals . . . ²⁰

Roman-numeral analysis of Renaissance music is therefore possible, but not necessarily relevant. Except for the predictable bass movement at cadence points, the root of a chord (if it may be said to be a root) usually does not allow for prediction of the next harmony. Chord function is elusive in the vast interiors of the cadentially-demarcated sections of Renaissance music.²¹

The same essential problem underlies a Schenkerian approach to Renaissance music. Though its emphasis on

20. Carl Dahlhaus, "Zur Harmonik des 16. Jahrhunderts," *Musiktheorie III* (1988), 206. " . . . der Akkord, verstanden als unmittelbar gegebene--und in die Naturtonreihe vorgezeichnet--Einheit, das primäre und das Intervall ein sekundäres Phänomen. Im 16. Jahrhundert war gerade umgekehrt das Intervall die primäre Gegebenheit, von der die musikalische Vorstellung ausging, und ein Akkord ein aus der Zusammensetzung von Intervallen resultierendes . . . "

21. *Ibid.*, 210ff.

linear aspects seems appropriate on the surface, the underlying premise of prolongation of the tonic triad seems not to match what Renaissance music actually does.²² Felix Salzer, in his pioneering article "Tonality in Early Medieval Polyphony," attempts to justify the leap from foreground to middleground by reference to the evolution of organum;²³ ingenious as this argument may be, it only illustrates the real problem with the application of Schenkerian theory to Renaissance music--lack of theoretical or musical evidence of tonic-triad prolongation. Salzer even speaks of "prolongations of different tonal areas,"²⁴ accommodating the musical evidence by altering a cardinal rule of the Schenkerian theory.

Frederick Bashour's dissertation, *A Model for the Analysis of Structural Levels and Tonal Movement in Compositions of the Fifteenth Century*, is a perceptive and thoughtful work that attempts to make the concept of prolongation more credible by relating it to the "fundamentum discantus," the two-voice framework of discant and tenor.²⁵ He proposes that within this framework, a

22. Cristle Collins Judd, "Some Problems of Pre-Baroque Analysis: An Examination of Josquin's Ave Maria . . . Virgo Serena," *Music Analysis* IV/3 (Oct. 1985), 222.

23. Felix Salzer, "Tonality in Early Medieval Polyphony," *The Music Forum* I (1967), 46.

24. *Ibid.*, 65.

25. Bashour, *Analysis of Structural Levels*, 39.

composer's most "background" level of conscious compositional thought, one may see tonal levels at work. Following this thesis, he discovers that Dufay's chansons tend over time toward more prolongation of the dominant (as opposed to other scale degrees) and longer periods of prolongation.²⁶ Ultimately, however, he wisely limits his recommendations to the exploration of a kind of "dyadic tonality," a set of conditions and practices that has some resemblance to tonal prolongation.²⁷

Any tonality-based approach to Renaissance analysis seems fated either to isolate particular aspects without addressing the whole, or to address the whole in such general terms as to become something other than tonality-based. Also, the tonal properties identified in fifteenth-century music (for example, in Ross's study of Obrecht or Bashour's study of Dufay) seem strained when applied to sixteenth-century music, because the short phrases of the fifteenth-century chanson naturally yielded fewer harmonies before each cadence, and were limited by the exigencies of voice-leading, whereas the expansive imitative style allowed the composers far more room to wander.

Interestingly, the one factor that seems to remain in the "redefined tonality" is the large-scale structural importance of cadences and cadence tones, recognized by a

26. Bashour, *Analysis of Structural Levels*, 45ff.

27. *Ibid.*, 133.

wide variety of scholars. While Treitler apparently ignored such articulations, Lowinsky recognized the structure-defining role of cadences, and speculated on the tonal implications of the different cadence-tones.²⁸ One of Ross's chief markers of tonality in Obrecht's Dorian chansons is the distribution of cadences on the tonic triad;²⁹ Novack finds similar cadential milestones in Josquin.³⁰ Bashour notes an apparent evolution in Dufay's tonal organization, based on a growing tendency toward cadences on modal degrees 1 and 5.³¹ The key-defining use of cadences is a matter that deserves further consideration, both with regard to the viability of key definition from cadences alone, and to its existence as a verifiable practice in Renaissance music.

28. Bashour, *Analysis of Structural Levels*, 15.

29. Ross, "Tonal Coherence," 153ff.

30. Novack, "Fusion of Design," 197.

31. Bashour, *Op. cit.*, 45ff.

CHAPTER III

MODAL APPROACHES TO RENAISSANCE ANALYSIS

Bernhard Meier was and remains the godfather of the historicist approach to Renaissance analysis. A cluster of studies have built up around his landmark *The Modes of Classical Vocal Polyphony*, and in the process the Renaissance community has learned a great deal about the details of Renaissance modal theory. An unsettling question, however, remains--how much has this told us about the music? Beyond discovering the presumed mode, and knowing that there is more to being "in the mode" than the final cadence, has this line of inquiry been more than an interesting excursion into the mind of the Renaissance theorist? It was not without justification that Felix Salzer in 1967 complained of analyses consisting mainly of "description" with little analysis.¹ Though identification of mode is probably a necessary first step, by comparison to analysis of later music it is rather elementary. Of course, it might be the case that the more complex structures sought in later music are either nonexistent or of an utterly different nature. These questions must also eventually be addressed.

1. Felix Salzer, "Tonality in Early Medieval Polyphony," *The Music Forum I* (1967), 35.

Meier's article "Alte unde neue Tonarten. Wesen und Bedeuten," from the *Lenaerts Festschrift* of 1969, may serve as a manifesto of modal analysis. Meier posits that modal music is far more intricately bound with mode than tonal music is with tonality; whereas a modal piece sets forth the mode in its exordium and "works it out" in the remainder, the "mode" in a tonal piece is virtually an unconscious given--either major or minor. Beyond recognition of the tonal center and the major or minor quality, tonality, in itself, is not much of an issue; in modality, one must deal with at least four completely different scales, with very different qualities relative to their finals.² Rameau's concept of the intertwining of harmony and melody is less relevant, because the harmonies have no framework of mutual meanings.³ Though triads and cadences are found both in tonality and in modality, according to Meier they have a set of meanings in the former that cannot be applied to the latter.⁴ The most relevant aspect of the music is the melody of individual voice parts, an aspect ruled in its pitch content, range, and points of articulation by modal

2. Bernhard Meier, "Alte und neue Tonarten. Wesen und Bedeuten," *Renaissance Music 1400-1600 donum natalicium René Bernard Lenaerts, Musicologica lovaniensia I* (Lense: Universitit de Lense, 1969), 158.

3. *Ibid.*, 159.

4. *Ibid.*, 160.

theory and only understandable in light of Renaissance theorists.⁵

In *The Modes of Classical Vocal Polyphony* Meier recapitulated these ideas in staggering detail, offering a wealth of information for a fledgling field of research. Despite its breadth, however, Meier's premise remains unaltered: Renaissance music can only be understood in terms of melodic analysis, and this is possible only by reconstructing the precompositional premises of the time, which can best be discovered from contemporary theory sources. In the introduction to the 1988 English-language revision, he states that

The author today still remains of the opinion that what a musical work of the past has to say to us can be understood in its entirety only if we are ready again to appropriate for ourselves in all seriousness the rules that determined the artistic creations of that time.⁶

A key point of contention with Carl Dahlhaus's *Origins of Harmonic Tonality* of 1968 was Dahlhaus's rejection of a relevant distinction between authentic and plagal modes in polyphonic music.

This argument is the background for the first half of Meier's book; the second half discusses specific issues of

5. Meier, "Alte und neue Tonarten," 162.

6. Bernhard Meier, *The Modes of Classical Vocal Polyphony*, rev. by author, trans. Ellen Beebe (New York: Broude Bros. Ltd., 1988), 8.

modal expression and departure from proper modal expression in text-setting.

Meier's arsenal for modal classification is derived from a survey of a broad range of theorists, and includes the ambitus of the voice pairs,⁷ the repercussions,⁸ the species of fourth and fifth employed,⁹ the final,¹⁰ the mode of the tenor,¹¹ and the cadence plan.¹² While this accumulation of information is fascinating and useful, it is open to dispute; as Geoffrey Nutting commented regarding Putnam Aldrich, ". . . he tacitly assumed something which ought rather to be demonstrated (insofar as it may exist), namely the unity of Renaissance theory."¹³

Modalists are sometimes accused of occupying themselves solely with modal classification, roughly the equivalent of identifying the key of a tonal work; Meier, nonetheless, goes much further, and at the same time subtly posits a rather troubling idea about Renaissance analysis. In the second half of his book, after clearing the air regarding

7. Meier, *Classical Vocal Polyphony*, 36ff.

8. *Loc. cit.*

9. *Ibid.*, 43ff.

10. *Ibid.*, 58.

11. *Loc. cit.*

12. *Ibid.*, 128.

13. Geoffrey Nutting, "Cadence in Late Renaissance Music," *Miscellanea Musicologica VIII* (1975), 34.

the reality of modal expression in composition, Meier settles into piece-by-piece analysis. His analyses, however, are uniformly tied to text-expression by modal deviation. The unspoken hypothesis is that here, and here only, is the structure of Renaissance music--in the text. Though Meier's discussions of musical rhetoric are convincing, he is virtually silent regarding purely musical structures.¹⁴

Meier's discussion of cadences and cadence-tone theory is well-documented and thorough, but he appears interested in the subject only as it relates to modal classification. In fact, he devalues the arrangement of cadences, as if they do not have the same functional importance as in tonal music,¹⁵ though he concedes that cadence-tones in free composition might be arranged differently than those in "prius factus" compositions.¹⁶

Karol Berger wrote "Tonality and Atonality in the Prologue to Orlando di Lasso's *Prophetiae Sibyllarum*: Some Methodological Problems in Analysis of Sixteenth-Century Music" in order to bring modal theory to bear on a compositional puzzle that had at that time only been visited by Schenkerian or more traditional tonal analysis. Berger's

14. Peter Schubert, "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 10.

15. Meier, *Classical Vocal Polyphony*, 89.

16. *Ibid.*, 118.

article is also instructive in a general way about the assumptions, qualifications, and pitfalls of modal analysis. The statement that "sixteenth-century modal theory as applied to polyphonic music will undoubtedly provide us, and actually already has provided us, with the best insight into the era's understanding of coherence,"¹⁷ is a loaded proposition. Peter Schubert, in "Authentic Analysis," has sharply and cogently criticized the use of contemporary theory as the last word in analysis, likening it to incantations of mystic languages, calling up the dead for advisement, or searching after some philosopher's stone that will reveal the secrets of the ancients.¹⁸ Applying Renaissance theory to Renaissance music, Schubert contends, risks the difficulties found in later eras in relating the statements of composers to their compositions--the oft-noted "intentional fallacy." By Berger's reasoning, most of the analytical techniques applied to Classical music should be abandoned, for they too were products of a later time, and Schenkerian analysis would be gutted of its basic premises in favor of pure Ramist doctrine. To be fair, though, Berger probably did not intend such draconian extremes. He admits, in fact, some of the limitations of modal theory:

17. Karol Berger, "Tonality and Atonality in the Prologue to Orlando di Lasso's *Prophetiae Sibyllarum*: Some Methodological Problems in Analysis of Sixteenth-Century Music," *Musical Quarterly* LXVI/4 (Oct. 1980), 487.

18. Schubert, "Authentic Analysis," 4ff.

. . . one can in most cases demonstrate that a composer took pains to preserve the modal unity in his works. But the method is unable to explain structures foreign to the basic mode of the composition under discussion, nor can it explain whether and how different modes can be employed in a single work.¹⁹

Leeman Perkins in 1973 subjected these premises to close application with "Mode and Structure in the Masses of Josquin," and came away convinced that expression of a mode was a compositional goal even as early as the turn of the sixteenth century. He points out that, according to Tinctoris, the baseline of counterpoint theory of Josquin's generation, nothing should be done to "dislocate the mode,"²⁰ thus implying that a composition should be composed in such a way as to express deliberately a particular mode. Perkins offers valuable insight into the origin of this compositional goal, suggesting that "modality" in polyphony coincided with the thorough absorption of the cantus firmus (along with its mode) into all voices of an imitative texture, a situation existing only toward the end of the fifteenth century.²¹ He acknowledges that expression of mode could be viewed as a necessary consequence of the presence of the cantus firmus, but raises a serious counter-

19. Berger, "Tonality and Atonality," 488.

20. Leeman Perkins, "Mode and Structure in the Masses of Josquin," *Journal of the American Musicological Society* XXVI/2 (Summer 1973), 196.

21. *Ibid.*, 198.

argument directing attention to the expression of mode in such non-cantus firmus works as Josquin's *Missa ad fugam*.²² He concludes that ". . . Josquin generated [the expression of mode] either directly from the liturgical chant or indirectly from the norms of modal structure and practice . . ." ²³

More recent studies in modality have introduced productive refinements. Charles Dill, in "Non-Cadential Articulation of Structures in Some Motets of Josquin and Mouton," capitalizes on the distinction made by some early theorists between "formal cadences," involving a stereotyped syncopation figure, and "simple cadences" that occur according to metric and durational emphasis.²⁴ Dill concludes that while the formal cadences occur on fairly predictable modal degrees in early sixteenth-century music, the simple cadences show a greater variety in the earlier repertoires, tending over time toward limitation to a few acceptable modal degrees.²⁵

Ellen Beebe, translator of Meier's *The Modes of Classical Vocal Polyphony*, has furthered the latter's research in the correlation of textual rhetoric and musical

22. Perkins, "Mode and Structure," 225ff.

23. *Ibid.*, 238.

24. Charles Dill, "Non-Cadential Articulation of Structure in Some Motets of Josquin and Mouton," *Current Musicology* XXXIII (1982), 39ff.

25. *Ibid.*, 50.

structure. In her 1983 article "Text and Mode as Generators of Musical Structure in Clemens non Papa's 'Accesserunt ad Jesum,'" she determines modes by ambitus, cadences, and also by the initial notes of the voice-entries in the opening point of imitation. In the piece under consideration, she balances the evidence of the final cadence on D against the close of the exordium on G and some additional internal cadences.²⁶

Steven Krantz's 1984 thesis *Modal Practice in the Phrygian Motets of Josquin des Prez* is at once broad-minded and pragmatic: "whatever Josquin and his contemporaries may have intended regarding pitch organization, the only organizing principle mentioned in the theoretical writings of the time is mode."²⁷ Krantz immediately tackles the issue of whether mode was a precompositional given or a descriptive label. Though he finds a descriptive attitude in the writings of Tinctoris, Gaffurius, and Aron,²⁸ some theorists, such as Glarean, clearly considered the mode to be a precondition.²⁹ This bifurcation of modal theory

26. Ellen Beebe, "Text and Mode as Generators of Musical Structure in Clemens non Papa's 'Accesserunt ad Jesum,'" *Music and Language, Studies in the History of Music I* (New York: Broude Bros., Ltd., 1983), 84.

27. Steven Krantz, *Modal Practice in the Phrygian Motets of Josquin des Prez* (M.A. thesis, University of Minnesota, 1984), 1.

28. *Ibid.*, 8.

29. *Ibid.*, 9.

apparently extends also to the emphasis given to certain modal criteria; the earlier, Italian group seems to place greater importance on the mode of the tenor and the interval species employed, with little emphasis given to authentic/plagal distinction, while a later, more Northern group emphasized ambitus and voice-pairing, with far more attention to distinguishing authentic and plagal modes.³⁰

Krantz's focus of investigation is Josquin's repertory of Phrygian motets. After an investigation of mode-determining factors, including openings of points of imitations and the patterns of cadence usage, he maintains that the Phrygian mode is naturally problematic, but that it certainly does not display a consistent modal cadence-pattern.³¹ He also concludes that cadence tones may be more useful for modal definition in local areas than on a largest-scale structural level.³²

In 1989 Benito Rivera summarized the state of research in Renaissance music analysis in three questions:

To what extent can we rely on early theoretical treatises to teach us about the structural design of Renaissance music? How profitably can modern systems of analysis be applied to early music? What real influence

30. Krantz, *Phrygian Motets*, 14ff.

31. *Ibid.*, 56ff.

32. *Ibid.*, 95.

did modal theory bring to bear on the actual practice of musical composition?³³

The first question has certainly been a stumbling block. Some scholars have been led to dismiss the importance of cadence tones because of the rather indiscriminate lists of principal cadences given by Pietro Aron, even though Aron is hardly the most representative theorist on the subject. Others find in Zarlino's cadence-tone listings an affirmation of tonic triad projection in long-range structure, a notion which is debatable for many of the same reasons. Because of the differing purposes in writing, philosophical bases, and personal quirks in both the Renaissance and the modern theorist, scholars sometimes seem to forget the possibility of misinterpretation. As for Rivera's second question, modal theory, despite the vitriolic nature of some scholars' defense of it, in no way assaults the relevance of the analytical approaches of tonalists. Modal theory does tend to claim the high ground of analytical "truth," if only in its obvious legitimacy (insofar as it is accurately understood from the sources) as at least one definitely appropriate way of thinking about the repertory. It does not, however, deny the validity of tonal approaches--these must stand or fall on their own merits.

33. Benito Rivera, "Studies in Analysis and the History of Theory: Sixteenth and Seventeenth Centuries," *Music Theory Spectrum* XI/1 (Spring 1989), 24.

The third question, regarding the relevance of modal theory to the Renaissance composer, is a thorny one. It would be hard to imagine a composer not writing with a mode in mind; it was necessary, after all, to select starting pitches. But whether being "in" one mode and not another caused specific compositional choices is a different matter. The placement of cadence tones, again, is one way to investigate--for, according to Gallus Dressler and later *musica poetica* theorists, the mode was deliberately established by this means.

CHAPTER IV

ECLECTIC APPROACHES TO RENAISSANCE ANALYSIS

Between the sorties of the tonal and historical opponents, several authors have emerged with viewpoints that, though they may reside more in one camp than the other, are so significantly different from either side that they constitute a countermovement. Carl Dahlhaus's 1968 *Origins of Harmonic Tonality*, though represented by Meier as the tonalist opposition, steers clear of the naivety characterizing many tonally-oriented studies of early music. He considers the progression of intervals somewhat important, but warns that "in contrast to the function of chords in tonal harmony, the structural significance of interval progressions . . . is independent of the underlying scale."¹ Regarding some authors' claims of I-IV-V-I progressions, he remarks, "the formulas are not based on a system of chords. Instead, the reverse is true . . ." ²

Dahlhaus also enters the fray over the meaning of cadence tones. He queries, "does a clausula secundaria on the confinalis fulfill a different function than a

1. Carl Dahlhaus, *Studies in the Origin of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, New Jersey: Princeton University Press, 1990), 87.

2. *Ibid.*, 102.

harmonically tonal cadence on the dominant?"³ If this question were answered, others would likely unravel as well. Dahlhaus asserts that cadence-tone patterns, as observed in studies by R. O. Morris, Georg Reichert, and Siegfried Hermelink, reflect the primacy of fourth and fifth relationships within the mode.⁴ He advises, however, that "in the sixteenth century . . . the fifth-relation was understood as a bilateral relationship that implied no subordination of the one degree by the other."⁵

Dahlhaus appears hesitant regarding any tonal or structural implications of the cadence in Renaissance music:

. . . the clausula forms neither the center around which the sonorities group themselves nor the goal toward which they strive. The clausula is used much like a 'sign' of the mode . . . In modal polyphony, unlike tonal harmony, it is seldom possible to predict on which clausula degree a series of sonorities will end.⁶

Nonetheless he recognizes the possible importance of cadence-tone ordering, stating that

In a system of degrees primarily related one to another and only secondarily related to a center, the sequence in which the clausula

3. Dahlhaus, *Harmonic Tonality*, 213.

4. *Ibid.*, 223.

5. *Ibid.*, 241.

6. *Ibid.*, 243.

degrees appear . . . is of no less but of a different importance than in a major key.⁷

Dahlhaus does not define clearly what this importance is, but he seems to suggest organization into simple musical structures built of loosely related cadences. Though Dahlhaus admits that the pitches of these cadences are more or less determined by the prevailing mode, he denies that any real tonal architecture exists relative to the mode.⁸ Dahlhaus also does not consider the possible importance of the cadences at the articulations of the text; indeed, he seems generally to minimize the structural interrelationships of music and text.⁹

Harold Powers has operated under a distinctly new premise, that Renaissance music is neither entirely tonal nor essentially modal. In his landmark article, "Tonal Types and Modal Categories," he suggests that the only definite precompositional assumption was the clefs, the final, and key signatures of the voice parts.¹⁰ The resulting nomenclature is cumbersome--F piece, low clefs,

7. Dahlhaus, *Harmonic Tonality*, 245.

8. *Ibid.*, 247.

9. Graham H. Phipps, "The 'Nature of Things' and the Evolution of Nineteenth-Century Musical Style: An Essay on Carl Dahlhaus's *Studies on the Origin of Harmonic Tonality*," *Theoria* VI (1995), 144.

10. Harold Powers, "Tonal Types and Modal Categories," *Journal of the American Musicological Society* XXXIV/3 (Fall 1981), 428ff.

natural-flat-flat-flat, for example--but the approach has certain advantages in that it can show unarguable relationships between two musical works, without recourse to the historically legitimate but sometimes self-contradictory methods of modal classification.

Powers also authored the *New Grove Dictionary* article on "Mode," a nearly book-length undertaking in itself. His pronouncements are sometimes a bit overstated, as when referring to "the fact" that ". . . between modes and modal theory on the one hand and the actual composition of polyphony on the other there was no necessary connection either in theory or in practice."¹¹ This is difficult to reconcile with the remark, "that polyphonic modalities based on the eightfold system came to be used by the greatest masters of the sixteenth century is beyond question."¹² In the 1982 article "Modal Representations in Polyphonic Offertories," Powers appears to support the more historically accurate latter statement. Entering into a running debate between Bernhard Meier and Carl Dahlhaus over authentic/plagal distinctions in Palestrina's modally-ordered polyphonic offertories, Powers suggested that Meier's affirmation of an authentic/plagal distinction is borne out by high and low cleffing in the pieces in

11. Harold Powers, "Mode," *The New Grove Dictionary of Music and Musicians*, 20 vols., ed. Stanley Sadie (London: MacMillan, 1980), XII, 397.

12. *Ibid.*, 399.

question.¹³ He also notes that Palestrina may have used cadence tones to distinguish modes.¹⁴

Powers's 1992 article "Is Mode Real? Pietro Aron, the Octenary System, and Polyphony" is a gem of thorough and remorseless critique of a system of thought. Examining Aron's compositions in light of Aron's theories, Powers concludes that "in Aron's modal classifications we can see exemplified more perspicuously than anywhere else how very different a rational approach to Renaissance tonalities can be from an empirical approach or an historical approach."¹⁵ Generalizing to the whole field of modal theory, he warns that,

In reading their work, however, we must remember that they were theorists . . . There is neither logical nor historical warrant for adducing writings on mode by such as Aron or Glarean as evidence for how the matter might have been conceived or understood by the many composers whose works they cited so profusely, or by ordinary musicians of the period.¹⁶

It would be no surprise to learn that Aron's modal theory was more speculative than practical, for it has often proven difficult to apply. Such a wholesale devaluing of modal

13. Harold Powers, "Modal Representations in Polyphonic Offertories," *Early Music History* II (1982), 64.

14. *Ibid.*, 78.

15. Harold Powers, "Is Mode Real? Pietro Aron, the Octenary System, and Polyphony," *Basler Jahrbuch für Historische Musikpraxis* XVI (1992), 43.

16. *Ibid.*, 18.

theory, on the other hand, seems unwarranted. Powers may be right in concluding that many of the modal theorists were playing games of classification, after the fact of composition, but this does not necessarily mean that their conclusions were not based on accurate understanding of the process of composition.

Powers makes an interesting statement in this regard concerning Gallus Dressler's *Praecepta musicae poeticae*:

Dressler made the most intimate and coherent of all linkings of multi-part contrapuntal techniques with octenary modal theory in his manuscript treatise of 1563. This fine and original doctrine was unknown in its own day, however, and even Dressler's own *Musicae practicae elementae* (Magdeburg, 1571), like the published treatises of most of his German successors, merely follows Glarean. Of all these writers, then, only Aron and Glarean are of major import as theorists of polyphonic modality, in that 1) their work was well circulated, 2) they presented original and coherent theories linking monophonic modality with polyphonic practice, and 3) they provided copious instantiation for their theories from the polyphonic repertory.¹⁷

To begin with, *Musicae practicae elementae* is unnecessary to the discussion, for it does not deal with composition at all on the level of sophistication under discussion. As for Dressler's anonymity, as noted in Chapter I, he stood at the head of a lengthy German theoretical tradition, *musica poetica*, which despite its

17. Powers, "Is Mode Real?," 18.

occasionally specious excesses in correlating rhetorical and musical devices was one of the earliest systems of theory to address the topic of large-scale form. Additionally, it is not necessary that Dressler have been famous in his time, if his theory embodies to some extent the oral tradition of the Netherlands style with which it is so constantly associated.

In the last fifteen years, a number of other authors have produced works dealing in fresh new ways with the analysis of Renaissance music, but none more unusual than Charles Treibitz's *Structural Thought in the Evolution of Modern Musical Concepts*. Treibitz is seeking no less than a fundamental principle to explain how change occurs in a musical culture, and begins by comparing the emergence of tonality from modality in the sixteenth century with the emergence of serialism and atonality from tonality in the twentieth century. Treibitz concludes that tonality emerged as the tonic triad gradually pervaded all levels of composition--beginning with the exclusive use of vertical triads, and progressing to a fundamental bass and finally the *Ursatz*.¹⁸ Treibitz remarks that while the self-sufficiency and uniqueness of Renaissance music must of course be recognized, this " . . . is not, therefore, to

18. Charles Treibitz, *Structural Thought in the Evolution of Modern Musical Concepts* (Ph.D. dissertation, Brandeis University, 1982), 18.

deny the conceptual dependence of the newer idioms upon the older in structurally perceivable ways."¹⁹

John Caldwell's "Some Aspects of Tonal Language in Music of the Fifteenth and Sixteenth Centuries" seeks to redefine tonality in such a way as to embrace both the modal and tonal eras. He notes that "there never was any real justification, on grounds of etymology or common sense, for limiting the concept of tonality to the procedures of baroque, classical, romantic, and some modern music."²⁰ Caldwell places great stock in tonal structures established by major cadences, remarking that "the structure of the piece is contained in its pattern of cadences and the keys and modes which they represent."²¹ Caldwell also makes an interesting observation regarding the analysis of c. 1500 music, noting that Isaac and Obrecht are more obviously tonal than Josquin. Could Josquin, he suggests, simply have a difficult personal style, much as has been observed in Ockeghem?²²

One of the most engaging recent authors is Cristle Collins Judd, who has adopted and extended some of the premises of Harold Powers. In "Some Problems of Pre-Baroque

19. Treibitz, *Structural Thought*, 6.

20. John Caldwell, "Some Aspects of Tonal Language in Music of the Fifteenth and Sixteenth Centuries," *Proceedings of the Royal Music Association CX* (1983/1984), 2.

21. *Ibid.*, 10.

22. *Ibid.*, 17ff.

Analysis: An Examination of Josquin's Ave Maria . . . Virgo Serena," she states that,

My concern is to relate methods of discussing music which are increasingly viewed as exclusively historical or exclusively analytical. Historical description and analysis when taken separately may provide an unbalanced perspective of the music; certainly as regards the music of the Renaissance, it is only through the broadest possible view that convincing analyses are to be obtained.²³

Her goal, therefore, is to ". . . formulate analytical tools based on contemporaneous theoretical concepts . . ." ²⁴, beginning with a five-point plan for organizing the data: text, mode, articulation of structure, pitch organization, and tonal structure.²⁵ One objection that might be raised is Judd's sometimes indiscriminating treatment of cadences, which, following Meier, does not always distinguish between formal and simple cadences and the probable differences in structural importance.²⁶ Judd remarks concerning cadence-tone theory that "undoubtedly, the relationship of rhetoric and cadential theory in this period could be of use in

23. Cristle Collins Judd, "Some Problems of Pre-Baroque Analysis: An Examination of Josquin's Ave Maria . . . Virgo Serena," *Music Analysis* IV/3 (Oct. 1985), 201.

24. *Ibid.*, 201.

25. *Ibid.*, 201.

26. *Ibid.*, 214.

formulating additional aspects of an analytical method."²⁷ This is no less than a concise statement of my own aim in this dissertation--to hone a new analytical tool, derived from theory and tested by application, that will be one among many ways to extract hopefully useful information from the repertory.

Judd's 1992 article "Modal Types and *Ut, Re, Mi* Tonality: Tonal Coherence in Sacred Vocal Polyphony from about 1500" is perhaps the most provocative contribution to the modality/tonality debate in recent years. Judd extrapolates six "modal types" by suggesting a historically legitimate and empirically verifiable means of organizing them--the solmization syllable of the final. Beginning with the obvious (but heretofore unnoticed) premise that any Renaissance piece must have as its final either UT, RE, or MI, she deconstructs the eight- and twelve-mode systems and arranges them as three pairs, differentiating within the pairs by repercussions. The UT tonality has the modal types expressed as UT-SOL (mode V, mode VII, or authentic Ionian, at any transposition) and UT-FA (mode VI, mode VIII, or plagal Ionian). The RE tonality has the modal types RE-LA (mode I, or authentic Aeolian) and RE-FA (mode II, or plagal Aeolian). The MI tonality has the modal types MI-FA (E to C

27. Judd, "Pre-Baroque Analysis," 227 n. 25.

in mode III) and MI-LA (mode IV).²⁸ The implications of this construct for the history of the development of tonality are obvious; in the Baroque, the UT tonality becomes the major mode, and the RE and MI tonalities coalesce into minor mode.

Though research in the field of Renaissance analysis has more than once strayed into polemics, and has often been shackled by an either/or mentality regarding historical theory and modern analytical devices, the trend in the last decade and a half has been toward a less rigid view of both approaches. Scholars have become highly skeptical of the relevance of the modern concept of tonality to the music of the Renaissance, but have become nearly equally skeptical of the once-unquestioned authority of Renaissance theorists in these matters. On the positive side, many scholars are willing to allow for a redefinition of tonality that finds the common ground between the Renaissance and later eras, and may lead to a better understanding of the nature of tonality in both. Likewise, as Renaissance theory treatises come to be treated as historical documents, influencing and influenced by their historical environs, instead of authoritative reference works to be heeded without question, the historicist's field becomes much richer and more

28. Cristle Collins Judd, "Modal Types and *Ut, Re, Mi* Tonalities: Tonal Coherence in Sacred Vocal Polyphony from about 1500," *Journal of the American Musicological Society* XLV/3 (Fall 1992), 440ff.

practically productive. Empirical and historical research are now merging at various points, and some of the complexities of Renaissance polyphony are beginning to unravel.

Renaissance cadence-tone theory seems to be one of these points at which modality and tonality converge. Dahlhaus believed that cadences were used to express the mode in the function of mere superficial signs--but could their "expression" of the mode be even more fundamental? If the pattern of cadences of varying strengths and hierarchical scale degrees is important to the structure of tonal music, it could have been nearly equally important in music of the Renaissance, in which the same constituent parts exist. Gallus Dressler's *Praecepta musicae poeticae* seems to be the first treatise to offer an insight into how a composer used cadences in the construction of a composition, and therefore will be the point of departure for constructing an analytical model of cadential expression of mode.

PART TWO: DRESSLER'S THEORY OF
CADENTIAL EXPRESSION OF MODE

CHAPTER V

STRUCTURAL CADENCES IN
RENAISSANCE MUSIC

Before proceeding to the specifics of cadence-tone theory, and certainly before undertaking analysis, it is imperative that the term "cadence" be defined with absolute clarity. I contend that this point should not be taken for granted, for adherence to an oversimplified definition leads not only to a bewildering plethora of cadences, but also to analysis based on questionable data.

The most basic definition of cadence in Renaissance music, from Tinctoris's *Terminorum musicae diffinitorium*¹ to *The New Harvard Dictionary of Music*,² is held to be contrary motion from an imperfect consonance to a perfect consonance. Though this element is undeniably the starting point for any description, the other factors necessary to winnow out mere coincidences of counterpoint are not so obvious. Steven

1. Johannes Tinctoris, *Terminorum musicae diffinitorium*, facs. and trans. (Ger.) by Heinrich Bellermann, *Documenta musicologica*, ser. 1, XXXVII (Kassel: Bärenreiter, 1983), A.iiii.

2. *The New Harvard Dictionary of Music*, ed. Don Randel (Cambridge, Mass.: Belknap Press, 1986), 121.

Krantz gives probably the most exhaustive list of other possible factors: number of voices involved, voices dropping out on final sonority, voices entering on final sonority, continuation of voices through the cadences, number of voices ending a phrase of text, significance of text phrase, elision with new text, metric position, which voices participate in imperfect consonance to perfect consonance motion, the use of stereotyped melodic formulas, and the presence of a suspension. Krantz asserts that most of these factors are "either self-evident or adequately defended . . . by Berger and Meier," but perspicaciously notes that he finds no clear grounds for the importance of certain factors over others, often assumed by analysts.³

Is it possible to distinguish "important cadences"? Renaissance theorists apparently thought so, and though the reliability and relevance of such sources must be kept in perspective, it provides a sensible starting-point. In a survey of music theorists from the last quarter of the fifteenth century through the early seventeenth century, I found that three of Krantz's factors attain greater relative importance: the note value of the basic metric pulse of the cadence, the presence of a suspension in context of a syncopated discant formula, and the ending of a section of text. Table 1 lists the theory sources consulted.

3. Steven Krantz, *Rhetorical and Structural Functions of Mode in Selected Motets of Josquin des Prez* (Ph.D. dissertation, University of Minnesota, 1989), 112ff.

Table 1. Theorists Consulted Regarding Composition of
Cadence and Ordering of Cadence Tones
(arranged chronologically)

- Johannes Tinctoris, *Liber de arte contrapuncti*
(MSS, Naples, 1477)
- Johannes Tinctoris, *De natura et proprietate
tonorum* (MSS, Naples, 1476)
- Nicolaus Burtius, *Musices opusculum* (Bologna, 1487)
- Johannes Tinctoris, *Terminorum musicae diffinitorium*
(Treviso, 1495)
- Michael Keinspeck, *Lilium musicae planae* (Basel, 1496)
- Franchinus Gaffurius, *Practica musicae* (Milan, 1496)
- Bonaventura da Brescia, *Regula musicae plane*
(Brescia, 1497)
- Bonaventura da Brescia, *Brevis collectio artis musicae*
(c. 1500)
- Melchior Schanppecher, *Musica figurativa* (Köln, 1501)
- Johannes Cochlaeus, *Musica* (Köln, 1507)
- Domingo Duran, *Sumula* (Salamanca, 1507)
- Nicolas Wollick, *Enchiridion musices* (Paris, 1512)
- Pietro Aron, *Libri tres de institutione harmonica*
(Florence, 1516)
- Andreas Ornithoparchus, *Musicae active micrologus*
(Leipzig, 1517)
- Johannes Galliculus, *Isagogue de compositione cantus*
(c. 1520)
- Pietro Aron, *Thoscanello de la musica* (Venice, 1523,
rev. 1529)
- Pietro Aron, *Trattato della natura et cognitione di
tutti gli toni* (Venice, 1525)
- Biagio Rossetti, *Libellus de rudimentis musices*
(Verona, 1529)
- Giovanni Lanfranco, *Scintille di musica* (Brescia, 1533)
- Stefano Vanneo, *Recanetum de musica aurea* (Rome, 1533)
- Johann Frosch, *Rerum musicarum* (Wittenberg, 1535)
- Martin Agricola, *Rudimenta musices* (Wittenberg, 1539)
- Seybald Heyden, *De arte canendi* (Nuremberg, 1540)
- Giovanni del Lago, *Breve introduttione di musica*
(Venice, 1540)
- Giovanni del Lago, *Correspondence to Fra Seraphin*
(Venice, 1541)
- Adrian petit Coclico, *Compendium musices* (Nuremberg,
1552)
- Nicola Vicentino, *L'Antica musica* (Rome, 1555)
- Hermann Finck, *Practica musica* (Wittenberg, 1556)
- Michel de Menhou, *Nouvelle instruction familière*
(Paris, 1558)
- Gioseffo Zarlino, *Le istituzioni harmoniche* (Venice,
1558)
- Illuminato Aiguino, *La illuminata de tutti tuoni di
canto fermo* (Venice, 1562)

- Lucas Lossius, *Erotemata musicae practicae* (Nuremberg, 1563)
 Gallus Dressler, *Praecepta musicae poeticae* (Magdeburg, 1563)
 Gaspar Stoquerus, *De musica verbali* (1570)
 Friedrich Beurhaus, *Erotematum musicae* (Nuremberg, 1580)
 Illuminato Aiguino, *Il tesoro, illuminato di tutti i tuoni di canto figurato* (Venice, 1581)
 Pietro Pontio, *Ragionamento di musica* (Parma, 1588)
 Orazio Tigrini, *Il compendio della musica* (Venice, 1588)
 Lodovico Zacconi, *Prattica di musica* (Venice, 1592)
 Francisco de Montanos, *Arte de musica* (Valladolid, 1592)
 Thomas Morley, *A Plaine and Easie Introduction* (London, 1597)
 Giovanni Artusi, *L'Artusi overo delle imperfettioni della moderna musica* (Venice, 1600)
 Scipione Cerreto, *Della prattica musica* (Naples, 1601)
 Joachim Burmeister, *Musica poetica* (Rostock, 1606)
 Adriano Banchieri, *Conclusioni nel suono dell'organo* (Bologna, 1609)
 Giovanni Coprario, *Rules How to Compose* (1610)
 Marin Mersenne, *Traité de l'harmonie universelle* (Paris, 1627)
 Charles Butler, *The Principles of Musik* (London, 1636)
 Antoine Parran, *Traité de la musique* (Paris, 1639)
 Johann Andreas Herbst, *Musica poetica* (Nuremberg, 1643)
 Christopher Simpson, *Compendium of Practical Musick* (London, 1667)

The following treatises were unavailable in complete form, but are cited through secondary literature:

- Johannes Cochlaeus, *Exercitium cantus choralis* (1511)
 Vicente Lusitano, *Introdutione facilissima* (Rome, 1533)
 Angelo da Picitono, *Fior angelico di musica* (Venice, 1547)
 Heinrich Faber, *Musica poetica* (1548)
 Cyriacus Schneegass, *Isagoges musicae* (Erfurt, 1591)
 Hofmann, *Doctrina de tonis* (Greifswald, 1582)
 Seth Calvisius, *Melopoeia* (Erfurt, 1592)
 Harnisch, *Artis musicae delineatio* (Frankfurt, 1608)
 Johannes Lippius *Disputatio musica* (Wittenburg, 1609)

The question of the basic metric pulse in cadences is clouded by the fact that the only authors to discuss it in detail do not necessarily reflect the norm; the evidence from cadence examples in other theory texts indicates a clear majority practice. The most thorough description is found in Nicola Vicentino's *L'Antica musica* (Rome, 1555), in which the author describes the "cadentie maggiore" (breve as basic pulse, that is, the note value of the essential three-note pattern of the *tenorizans*), the "cadentie minore" (semibreve as basic pulse), and "cadentie minima" (minim as basic pulse). Vicentino identifies the "cadentie minore" as "antiche," and the "cadentie minime" as "moderne," but his following cadence examples are all of the "cadentie minore" class with the semibreve as the basic pulse.⁴ Orazio Tigrini, in *Il compendio della musica* (Venice, 1588), repeats the tripartite division, but the terms do not appear in any other treatise consulted.⁵

Despite this variety of possibilities, the majority of theorists who discuss cadence construction use only the semibreve as the basic pulse of the cadence in their examples. Table 2 lists the theorists using a semibreve pulse exclusively.

4. Nicola Vicentino, *L'Antica musica ridotta alla moderna prattica* (Rome, 1555), facs. ed., *Documenta musicologica*, ser. 1, XVII (Kassel: Bärenreiter, 1959), f. 51v.

5. Orazio Tigrini, *Il compendio della musica* (Venice, 1588), facs., *Monuments of Music and Music Literature in Facsimile*, ser. 2, XXV (New York: Broude Bros., 1966), 72.

Table 2. Theorists Using Semibreve Pulse
Exclusively in Cadence Examples

- Melchior Schanppecher, *Musica figurativa* (Köln, 1501)⁶
 Andreas Ornithoparchus, *Musicae active micrologus*
 (Leipzig, 1517)⁷
 Johannes Galliculus, *Isagogue de compositione cantus*
 (1520)⁸
 Pietro Aron, *Toscanello de la musica* (Venice, 1523,
 rev. 1523)⁹
 Stefano Vanneo, *Recanetum de musica aurea* (Rome,
 1533)¹⁰
 Adrian petit Coclico, *Compendium musices* (Nuremberg,
 1552)¹¹
 Michel de Menehou, *Nouvelle instruction familière*
 (Paris, 1558)¹²
 Gallus Dressler, *Praecepta musicae poeticae* (Magdeburg,
 1563)¹³

6. Klaus Niemöller, ed., *Die Musica figurativa des Melchior Schanppecher (Opus aureum, Köln 1501, pars III/IV)*, *Rheinische Musikgeschichten CL* (Köln: Arno Volk-Verlag, 1961), 26.

7. Andreas Ornithoparchus, John Dowland, *A Compendium of Musical Practice*, ed. Gustave Reese, Steven Ledbetter (New York: Dover, 1973), 102.

8. Johannes Galliculus, *Isagogue de compositione cantus*, ed. Arthur Moorefield, *Theorists in Translation XIII* (Ottawa: Institute for Medieval Music, 1992), 19ff.

9. Pietro Aron, *Toscanello in Music*, 3 vols., trans. Peter Bergquist, *Colorado College Music Press Translations IV* (Colorado Springs, Col.: Colorado College Music Press, 1970), II, 30ff.

10. Stephano Vanneo, *Recanetum de musica aurea* (Rome, 1533), *Documenta Musicologica*, ser. 1, XXVIII (Kassel: Bärenreiter, 1969), 75ff.

11. Adrianus petit Coclico, *Compendium musices*, facs. by Manfred Bukofzer, *Documenta Musicologica ser. 1, IX* (Kassel: Bärenreiter, 1954), 61.

12. Michel de Menehou, *Nouvelle instruction familière* (Paris, 1558), ed. Henry Expert (Paris: Leduc, 1900), 32.

13. Appendix B, Chapter VIII, ¶18.

Pietro Pontio, *Ragionamento di musica* (Parma, 1588)¹⁴
 Thomas Morley, *A Plaine and Easie Introduction* (London, 1597)¹⁵
 Johann Andreas Herbst, *Musica poetica* (Nuremberg, 1643)¹⁶

Only two departures were found among theorists giving descriptions and examples of cadences. Giovanni Coperario, in *Rules How to Compose* (1610) uses minim pulse examples, not surprising in such a forward-looking treatise.¹⁷ Francisco de Montanos, *Arte de musica* (Valladolid, 1592) uses breve examples, an aberration from his otherwise modern viewpoint.¹⁸

"There is no coming to a close, especially with a cadence, without a discord, and that most commonly a seventh bound in with a sixth . . ." opines Thomas Morley (1592), stating in rather extreme terms what seems nonetheless to

14. Pietro Pontio, *Ragionamento di musica* (Parma, 1588), facs. ed. Susanne le Clercx, *Documenta musicologica* ser. 1, XVI (Kassel: Bärenreiter, 1959), 99ff.

15. Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke*, ed. Alec Herman (London: Dent, 1952), 145.

16. Johannes Andreas Herbst, *Musica Poetica* (Nuremberg: n.p., 1643), 50.

17. Giovanni Coperario, *Rules how to Compose*, facs. ed. Manfred Bukofzer (Los Angeles: Ernest E. Gottlieb, 1952), f. 4.

18. Dan Urquhart, *Francisco de Montanos's Arte de musica theórica y práctica: A Translation and Commentary*, 2 vols. (Ph.D. dissertation, Eastman University, 1969), II, 80.

have been the majority opinion on cadences.¹⁹ Some theorists discuss "simple" cadences, bare interval progressions in even note values, and "diminished" cadences with dissonances of a seventh introduced through stereotyped syncopation patterns. Theorists describing these two cadence-types are listed in Table 3.

Table 3. Theorists Exhibiting a Distinction
Between "Simple" and "Diminished" Cadences

Melchior Schanppecher, <i>Musica figurativa</i> (Köln, 1501) ²⁰
Pietro Aron, <i>Libri tres de institutione harmonica</i> (Florence, 1516) ²¹
Andreas Ornithoparchus, <i>Musicae active micrologus</i> (Leipzig, 1517) ²²
Adrianus petit Coclico, <i>Compendium musices</i> (Nuremberg, 1552) ²³
Gioseffo Zarlino, <i>Le istituzioni harmoniche</i> (Venice, 1558) ²⁴
Orazio Tigrini, <i>Il compendio della musica</i> (Venice, 1588) ²⁵

19. Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke*, ed. R. Alec Herman (London: Dent, 1952), 145.

20. Niemöller, *Die Musica figurativa des Melchior Schanppecher*, 26.

21. Aron, *Libri tres*, 49.

22. Ornithoparchus and Dowland, *A Compendium*, 102.

23. Adrianus, *Compendium musices*, 61ff.

24. Zarlino, *Art of Counterpoint*, 142.

25. Tigrini, *Compendio*, 72.

The majority of theorists who devote time to cadences, however, describe only the syncopated, dissonance-bearing form, as seen in Table 4.

Table 4. Theorists Representing Cadences as Exclusively Containing a Syncopation Figure and Dissonance

- Johannes Galliculus, *Isagogue de compositione cantus* (1520)²⁶
 Pietro Aron, *Toscanello de la musica* (Venice, 1523, rev. 1523)²⁷
 Stefano Vanneo, *Recanetum de musica aurea* (Rome, 1533)²⁸
 Heinrich Faber, *Musica poetica* (1548)²⁹
 Michel de Menhou, *Nouvelle instruction familière* (Paris, 1558)³⁰
 Gallus Dressler, *Praecepta musicae poeticae* (Magdeburg, 1563)³¹
 Gaspar Stoquerus, *De musica verbali* (1570)³²
 Francisco de Montanos, *Arte de musica* (Valladolid, 1592)³³
 Lodovico Zacconi, *Prattica di musica* (Venice, 1592)³⁴
 Thomas Morley, *A Plaine and Easie Introduction* (London, 1597)³⁵

-
26. Galliculus, *Isagoge*, 20.
 27. Aron, *Toscanello*, II, 30-31
 28. Vanneo, *Recanetum*, 75ff.
 29. Christoph Stroux, *Die Musica poetica des Magisters Heinrich Faber* (dissertation, Albert Ludwig Universität, Freiburg im Breisgau, 1967), 128ff.
 30. Menhou, *Nouvelle instruction*, 33.
 31. Appendix B, III, ¶10.
 32. Stoquerus, *De musica verbali*, 219-221.
 33. Urquhart, II, 80ff.
 34. Lodovico Zacconi, *Prattica di musica* (Venice, 1592),, 2 vols. (Bologna: Forni, 1967), II, 73.
 35. Morley, *Plaine and Easie Introduction*, 145.

- Scipione Cerreto, *Della prattica musica* (Naples, 1601)³⁶
 Joachim Burmeister, *Musica poetica* (Rostock, 1606)³⁷
 Harnisch, *Artis musicae delineatio* (Frankfurt, 1608)³⁸
 Giovanni Coperario, *Rules How to Compose* (1610)³⁹
 Charles Butler, *The Principles of Musik* (London, 1636)⁴⁰
 Johann Andreas Herbst, *Musica poetica* (Nuremberg, 1643)⁴¹

A few of the theorists in Table 4 agree with the statement of Morley above, insisting that dissonance in a cadence is not only desirable, but virtually essential. Ornithoparchus (1517) implies this when he identifies the Tinctorian definition of cadence (which says nothing regarding dissonance or rhythm) with the "clausula formales" or "formula cadence," referring to the stereotyped melodic formulas, especially in the discant.⁴² Johannes Galliculus (1520) emphasized the stereotyped melodic formulas:

-
36. Scipione Cerreto, *Della prattica musica vocale, et strumentale* (Naples, 1601), *Bibliotheca musica Bononiensis* ser. 2, XXX (Bologna: Forni, 1969), 295ff.
37. Joachim Burmeister, *Musica poetica* (Rostock, 1601), 37.
38. Benito V. Rivera, *German Music Theory in the Early 17th Century: The Treatises of Johannes Lippius* (Ann Arbor, Mich.: University Microfilms International, 1974), 211.
39. Coperario, *Rules*, f. 4.
40. Charles Butler, *The Principles of Musik* (London, 1636), *The English Experience CCLXXXIV* (Amsterdam: Da Capo, 1970), 67.
41. Herbst, *Musica poetica*, 50.
42. Ornithoparchus and Dowland, *Compendium*, 100.

This is not to be omitted, that one use in his songs cadence formulas (this the universal school of music doggedly holds). For the more a composition contains formal cadences, the more the song imbues the ears with sweetness.⁴³

In Book Three of Stephano Vanneo's treatise (1533), Chapter XVII is "Concerning Dissonances, in which the Cadences of Florid Counterpoint Consist."⁴⁴ Heinrich Faber's (1548) definition of cadence includes the syncopation figure.⁴⁵ Despite his mention of the "simple cadence," Zarlino (1558) says that "a cadence without dissonance lacks the grace and charm found in those employing it."⁴⁶ Dressler advises his students to "observe these rules delivered concerning syncopation, because the cadences which produce the greatest suavity are formed from these."⁴⁷ Gaspar Stoquerus (c. 1570) says that syncopation "frequently happens in formal clausulae."⁴⁸ Francisco de Montanos (1592) also says that "there are two essential things in cadences: one dissonant interval and one

43. Galliculus, *Isagogue*, 28.

44. Vanneo, *Recanetum*, 75ff. "De dissonantiis quibus floridae contrapuncti cadentiae constant."

45. Stroux, *Die Musica poetica des Magisters Heinrich Faber*, 128ff.

46. Zarlino, *Art of Counterpoint*, 203.

47. Appendix B, III, ¶10.

48. Stoquerus, *De musica verbali*, 219ff.

semitone."⁴⁹ Dissonance is also essential to the cadence definitions given by Lodovico Zacconi (1592),⁵⁰ Scipione Cerreto (1601),⁵¹ Giovanni Coperario (1610),⁵² Charles Butler (1636),⁵³ and Johannes Herbst (1643).⁵⁴

The third factor of cadence definition to be considered, the conclusion of a phrase of text in multiple voices, is seldom directly addressed in Renaissance theory. It may be seen to adhere to the concept of cadence in a significant way, however, from the influential definition given by Tinctoris in 1495: "A cadence is that in which either a general pause or perfection is found in ending a part or smaller part of a song."⁵⁵ The "parts" may refer to the major textual divisions. Stephano Vanneo (1533) repeats Tinctoris's definition, then strengthens the textual implication with the remark that "cadence is that which terminates the parts of a song, by means of (as if in the context of oratory) the *media distinctio* and *distinctio*

49. Urquhart, *Francisco de Montanos*, 80.

50. Zacconi, *Prattica di musica*, II, 73.

51. Cerreto, *Della prattica musica*, 295.

52. Coperario, *Rules*, f. 4.

53. Butler, *Principles*, 67.

54. Herbst, *Musica poetica*, 58.

55. Tinctoris, *Diffinitorium*, A.iiii. "Clausula est cuiuslibet partis cantus particula in fine cuius vel quies generalis vel perfectio reperitur."

finalis."⁵⁶ Giovanni del Lago (1540) proves the validity of this relationship with the remark that "cadences are necessary, not arbitrary--as some thoughtlessly claim--especially in vocal music in order to distinguish the parts of speech . . . "⁵⁷ The subservience of the cadence to the text is clear to Dressler (1563) as well:

Since we explained above that the cadences are the parts (the articulations and members, as it were), by which the total composition is mutually connected, the tyros should know that the simple *medium* [the middle portion of a song] without fugues reveals its origin [that is, the prevailing mode] by cadences which should be joined together, fittingly, in consideration of the mode and the text . . .⁵⁸

Zarlino (1558), however, gives the clearest statement regarding the precise relationship of cadence to text:

a cadence is a certain simultaneous progression of all the voices in a composition accompanying a repose in the harmony *or a completion of a meaningful segment of the text upon which the composition is based . . .* "[italics added]⁵⁹

56. Vanneo, *Recanetum*, 85v-86. "Vel cadentia est quaedam ipsius Cantilenaе partis terminatio, per inde atque in orationis contextu Media distinctio, atque Distinctio finalis."

57. Bonnie Blackburn, Edward Lowinsky, and Clement Miller, *A Correspondence of Renaissance Musicians* (Oxford: Clarendon Press, 1991), 888ff.

58. Appendix B, XIII, ¶2.

59. Zarlino, *Art of Counterpoint*, 142.

He reaffirms that a cadence "is needed for marking off sections of music, as well as of the text," and that it "is equivalent to the period in prose."⁶⁰

Admittedly, the cadence-defining factors of semibreve pulse, syncopation/dissonance formula, and textual demarcation are not all discussed per se in Dressler's *Praecepta musicae poeticae*, but these elements are consistently with Dressler's examples and enjoyed a wide enough currency among theorists to be assumed valid for him as well. These three cadence elements will be the criteria for all cadential events in the cadence-tone analyses in Appendix A, and should prove useful in sorting out the significant from the coincidental. Though "non-cadential articulations" may serve their own purposes, as theorized by Charles Dill, the analyst should first identify the structural cadences of a work--and these would appear to be fewer in number than sometimes claimed. A more restricted view of cadences, recognizing fewer cadential events, is more compatible with the warning of Johannes Galliculus (1520): "One should arrange to avoid . . . frequent cadences."⁶¹

60. *Loc. cit.*

61. Galliculus, *Isagoge*, 28.

CHAPTER VI

CADENCE TONE HIERARCHIES

IN RENAISSANCE THEORY

Bernhard Meier's sweeping survey of Renaissance cadence-tone theory in *The Modes of Classical Vocal Polyphony* is a valuable starting-point, but in retrospect Meier was especially susceptible in this topic to Peter Schubert's caveat that "arriving at a consensus will . . . require more levelling than sharpening of theoretical concepts."¹ Meier places the theorists on a continuum bounded by Aron's nearly all-inclusive cadence-tone list on the one hand and by Zarlino's restrictive (and perhaps prescriptive) 1-3-5 dictum on the other (Dressler fits somewhere in between). Though these theorists, each of whom was also a composer, wrote only thirty years or so apart, Meier attributes the differences between them to a tendency toward increasing restriction on the number of acceptable cadence tones.² In fact, Meier's chronological continuum (and for the most part that of Steven Krantz, though it recognizes the essential differences between the

1. Peter Schubert, "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 6.

2. Bernhard Meier, *The Modes of Classical Vocal Polyphony*, rev. by author, trans. by Ellen Beebe (New York: Broude Bros. Ltd., 1988), 106ff.

cadence-tone theory of Aron and that of Dressler³) glosses over the existence of three distinct cadence-tone theories: Aron's theory, apparently based (oddly) on the then-current lists of the *initiae* (psalm-tone intonations) of the modes, Dressler's theory, based on the *repercussae* (psalm-tone reciting tones) of the modes, and Zarlino's theory, apparently based on the primacy of the first, third, and fifth scale degrees of the mode as the final, mean of the octave, and mean of the fifth, respectively. Table 5 represents the basic tenets of the three schools of thought, though individual theorists vary slightly.

Table 5. Comparison of the Three Approaches to Cadence-Tone Theory

1. *Initium*-Derived (Aron)⁴

Mode	"Regular" Cadences
I	D F G a d
II	A C D F G a
III	E F G a b c
IV	C D E F G a
V	F a c
VI	C D F a c
VII	G a b c d
VIII	D F G c

3. Steven Krantz, *Rhetorical and Structural Functions of Mode in Selected Motets of Josquin des Prez* (Ph.D. dissertation, University of Minnesota, 1989), 117, 120.

4. Pietro Aron, *Toscanello in Music*, 3 vols., trans. Peter Bergquist, *Colorado College Music Press Translations IV* (Colorado Springs: Colorado College Music Press, 1970), II, 29ff.

2. *Repercussa*-Derived (Dressler)⁵

Mode	"Principal" Cadences	"Secondary" Cadences
I	D A d	E F
II	A D F a	E
III	E b c	G A
IV	E a	C G
V	C F c	a
VI	C F a c	-
VII	D G d	c
VIII	D G c d	-

3. Triad-Derived (Zarlino)

Mode	"Regular" Cadences
I	D F a d
II	A D F d
III	E G b e
IV	B E G b etc. ⁶

Table 6 lists the adherents to the first theory.

Table 6. Theorists Supporting the *Initium*-Derived
Cadence-Tone Theory

Pietro Aron, *Toscanello de la musica* (Venice, revision of 1529)⁷

Giovanni Lanfranco, *Scintille di musica* (Brescia, 1533)⁸

Stefano Vanneo, *Recanetum de musica aurea* (Rome, 1533)⁹

5. Appendix B, IX, ¶7-14. Dressler presents the second mode in a G-final transposition.

6. Gioseffo Zarlino, *The Art of Counterpoint*, pt. 3 of *Le istituzioni harmoniche*, trans. Guy Marco and Claude Palisca (New Haven: Yale, 1968), 125.

7. Aron, *Toscanello*, II, 29ff.

8. Barbara Lee, *Giovanni Maria Lanfranco's Scintille di musica and Its Relation to Sixteenth-Century Music Theory* (Ph.D. dissertation, Cornell University, 1961), 205ff.

9. Stephano Vanneo, *Recanetum de musica aurea* (Rome, 1533), *Documenta Musicologica* ser. 1, XXVIII (Kassel: Barenreiter, 1969), 89ff.

- Giovanni del Lago, *Breve introduttione di musica*
(Venice, 1540)¹⁰
Angelo da Picitono, *Fior angelico di musica* (Venice,
1547)¹¹
Scipione Cerreto, *Della prattica musica* (Naples,
1601)¹²

The authors are Italians to a man, and with the exception of Cerreto (1601) wrote within a span of twenty-four years.

Pietro Aron's cadence-tone list from the 1529 revision is curious in that it is a considerable departure from that of the 1523 original, as seen in Table 7.

Table 7. Comparison of Cadence-Tone Lists in the 1523 and 1529 Editions of Pietro Aron's *Thoscanello de la musica*¹³

1523 edition		1529 edition	
Mode:	"Regular"	Mode:	"Regular"
I	D F G a d	I	D F G a
II	"	II	A C D F G a
III	E a (g rarely)	III	E F G a b c
IV	"	IV	C D E F G a
V	F a c (g rarely)	V	F a c
VI	"	VI	C D F a c
VII	G a c	VII	G a b c d
VIII	"	VIII	C D F G

Besides the interesting phenomenon of progressing from no differentiation between authentic and plagal modes to

10. Giovanni del Lago, *Breve introduttione di musica misurata* (Venice, 1540), *Bibliotheca musica bononiensis* ser. 2, XVII (Bologna: Forni, 1969), 29ff.

11. Krantz, *Rhetorical and Structural Functions*, 117.

12. Scipione Cerreto, *Della prattica musica vocale, et strumentale* (Naples, 1601), *Bibliotheca musicale bononiensis* ser. 2, XXX (Bologna: Forni, 1969), 122ff.

13. Aron, *Loc. cit.*

distinct cadence tones for each, it is worth noting that Aron moved from a cadence-tone list more closely resembling that of Dressler to one of strikingly different content and background.

Lanfranco (1533) speaks of the "distinctions," a common term for plainchant cadences, "the which in figured music are called cadences."¹⁴ His list of these cadences differs from that of Aron only in the inclusion of C in mode I and a in mode VIII, and the exclusion of G from mode II and a and b from mode III.¹⁵ Stephano Vanneo (1533) also closely adheres to Aron, varying only in the inclusion of a C in mode I and a G in mode V,¹⁶ and Angelo da Picitono (1547) differs only in the inclusion of a C in mode I.¹⁷ (From the foregoing, the weight of evidence indicates that a C cadence in mode I was typical of the theory, despite Aron's omission.) Scipione Cerreto (1601) agrees entirely with Lanfranco's list.¹⁸

It is in Giovanni del Lago's *Breve introduttione* (1540) that the source of this view of cadence tones is revealed; del Lago introduces his list with the heading "principii" (*initiae*), but notes that "similmente le sue distinctioni,"

14. Lee, *Lanfranco*, 205ff.

15. *Ibid.*, 207ff.

16. Vanneo, *Recanetum*, 89ff.

17. Krantz, *Rhetorical and Structural Functions*, 117.

18. Cerreto, *Della prattica musica*, 122ff.

"distintioni" being earlier equated with "cadentie."¹⁹ Within the list itself, he twice refers to the "principii" of a mode as also being "cadentia, overo distintione."²⁰ The doctrine of *initiae* goes back at least as far as Tinctoris's *De natura et proprietate tonorum* (Naples, 1476), where a roughly similar list appears, seen in Table 8.

Table 8. *Initium* List in Tinctoris's
*De natura et proprietate tonorum*²¹

Mode	<i>Initiae</i>	Mode	<i>Initiae</i>
I	C D E F G a	V	F G a c
II	G A C D E F	VI	C D F
III	E F G c	VII	F G a b d
IV	C D E F G a	VIII	D F G a c

The differences between the Tinctoris and Lanfranco, for example, are negligible. Though Aron's list differs in more notes, it should be observed that Aron both excludes notes allowed by Tinctoris and includes notes not mentioned by the older theorist. No great reduction of the number of cadence tones had occurred. Table 9 lists theorists before and after Aron who offered similar lists of *initiae* without calling them cadences.

19. Del Lago, *Breve introduttione*, 30.

20. *Ibid.*, 39.

21. Johannes Tinctoris, *Concerning the nature and Propriety of Tones*, trans. Albert Seay, *Colorado College Music Press Translations II* (Colorado Springs: Colorado College Music Press, 1967), 20ff.

Table 9. Theorists Listing *Initiae*
Without Reference to Cadence

- Johannes Tinctoris, *De natura et proprietate tonorum*
(Naples, 1476)²²
 Nicolaus Burtius, *Musices opusculum* (Bologna, 1487)²³
 Michael Keinspeck, *Lilium musicae planae* (Basel,
1496)²⁴
 Bonaventura da Brescia, *Brevis collectio artis musicae*
(c. 1500)²⁵
 Nicolas Wollick, *Enchiridion musices* (Paris, 1512)²⁶
 Biagio Rossetti, *Libellus de rudimentis musices*
(Verona, 1529)²⁷
 Johann Frosch, *Rerum musicarum* (Wittenberg, 1535)²⁸

-
22. Tinctoris, *Nature and Propriety of Tones*, 20ff.
23. Nicolaus Burtius, *Musices opusculum*, trans. Clement Miller, *American Institute of Musicology Manuscript Studies and Documents XXXVII* (Neuhausen-Stuttgart: Hänssler-Verlag, 1983), 64ff.
24. Winfried Ammel, *Michael Keinspeck und sein Musiktraktat "Lilium musicae planae" Basel 1496*, *Marburger Beiträge zur Musikforschung V* (Marburg: Görlich & Weiershäuser, 1970), 123ff.
25. Bonaventura da Brescia, *Brevis collectio artis musicae*, ed. Albert Seay, *Colorado College Music Press Critical Texts XI* (Colorado Springs: Colorado College Music Press, 1980), 28ff.
26. Nicolas Wollick (Volcyr), *Enchiridion musices*, facs. (Geneva: Minkoff Reprints, 1972), bk. 3, chs. 6-12.
27. Biagio Rossetti, *Libellus de rudimentis musices* (Verona, 1529), ed. Albert Seay, *Colorado College Music Press Critical Texts XII* (Colorado Springs: Colorado College Music Press, 1981), 42.
28. Johann Frosch, *Rerum musicarum* (Wittenberg, 1535), *Monuments of Music and Music Literature in Facsimile ser. 2, XXXIX* (New York: Broude Bros., 1967), ch. 14.

Martin Agricola, *Rudimenta musices* (Wittenberg, 1539)²⁹
 Illuminato Aiguino, *La illuminata de tutti tuoni di canto fermo* (Venice, 1562)³⁰

From Table 9 it is observed that the *initium* list was a fairly well-known aspect of plainchant theory in the first half of the sixteenth century. What could have prompted the smaller group of Italian theorists c. 1530-1550 to equate the opening notes of psalm-tone intonations to the cadence tones appropriate to each mode remains unexplained; the very word "cadence," with its etymological connotation of (at least momentary) "conclusion,"³¹ seems incompatible with such an idea. That this conclusion was not tacitly accepted by other theorists is suggested by the fact that Illuminato Aiguino, who lists *initiae* in his treatise on the use of the modes in plainchant, *La illuminata de tutti tuoni di canto fermo* (Venice, 1562), nonetheless supports Dressler's *repercussae*-derived cadence-tone theory in his work on the use of the modes in mensural music, *Il tesoro, illuminato di tutti i tuoni di canto figurato* (Venice, 1581).³²

29. Martin Agricola, *Rudimenta musices* (Wittenberg, 1539), *Monuments of Music and Music Literature in Facsimile* ser. 2, XXXIV (New York: Broude Bros., 1966), Dii verso.

30. Illuminato Aiguino, *La illuminata de tutti tuoni di canto fermo* (Venice: Antonio Gardano, 1562), 44.

31. "Kadenz," *Handwörterbuch der musikalischen Terminologie*, ed. Hans Eggbrecht, 3 vols. (Wiesbaden: Steiner, 1971-), II.

32. Krantz, *Rhetorical and Structural Functions*, 120.

At the same time that Aron and his Italian successors were expounding the *initiae*-derived cadence-tone theory, a longer-lived and more widespread rival theory appeared that derived cadence-tone lists from the *repercussae* (*repercussa* is defined as the characteristic interval of the mode, bounded by the final and the reciting tone). Table 10 lists theorists supporting this school of thought.

Table 10. Theorists Supporting the *Repercussae*-Derived Cadence-Tone Theory

- Bonaventura da Brescia, *Regula musicae plane* (Brescia, 1497)³³
 Johannes Cochlaeus, *Musica* (Köln, 1507)³⁴
 Johannes Cochlaeus, *Exercitium cantus choralis* (1511)³⁵
 Vicente Lusitano, *Introdutione facilissima* (Rome, 1533)³⁶
 Seybald Heyden, *De arte canendi* (Nuremberg, 1540)³⁷
 Adrian petit Coclico, *Compendium musices* (Nuremberg, 1552)³⁸

33. Bonaventura da brescia, *Regola musice plane* (Brescia, 1497), *Monuments of Music and Music Literature in Facsimile* ser. 2, LXXVII (New York: Broude Bros., 1975), ch. 37.

34. Hugo Riemann, ed., *Anonymi introductorium Musicae, Monatshefte für Musikgeschichte XXIX* (1897) 147-164, XXX (1898) 1-19, (XXIX) 162.

35. Carl Dahlhaus, *Studies in the Origins of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, N.J.: Princeton University Press, 1990), 220ff.

36. Meier, *Classical Vocal Polyphony*, 111.

37. Sebald Heyden, *De arte canendi*, trans. Clement Miller, *American Institute of Musicology Musicological Studies and Documents XXVI* (Rome: American Institute of Musicology, 1972), 113ff.

38. Adrian petit Coclico, *Compendium musices*, facs. ed. Manfred Bukofzer, *Documenta musicologica* ser. 1, IX (Kassel: Bärenreiter, 1954), 24.

- Michel de Menhou, *Nouvelle instruction familière*
(Paris, 1558)³⁹
- Gallus Dressler, *Praecepta musicae poeticae* (Magdeburg,
1563)⁴⁰
- Illuminato Aiguino, *Il tesoro, illuminato di tutti i*
tuoni di canto figurato (Venice, 1581)⁴¹
- Pietro Pontio, *Ragionamento di musica* (Parma, 1588)⁴²
- Cyriacus Schneegass, *Isagoges musicae* (Erfurt, 1591)⁴³
- Francisco de Montanos, *Arte de musica* (Valladolid,
1592)⁴⁴

The earlier theorists, it is granted, do not use the word "cadence;" their language, however, implies the not only the emphasis of the interval but also the stress of the two boundary notes through repetition. Johannes Cochlaeus in *Musica* (Köln, 1507) says that the upper note of the interval is "pluries repetens,"⁴⁵ to which Seybald Heyden (1540)⁴⁶ and Adrian petit Coclico (1552)⁴⁷ agree. Bonaventura da Brescia in *Regule musice plane* (Brescia, 1497) calls the *repercussae* notes the "terminis tonorum," already implying the cadential function these notes could

-
39. Michel de Menhou, *Nouvelle instruction*, 114.
40. Appendix B, IX, ¶7-14.
41. Krantz, *Rhetorical and Structural Functions*, 120.
42. Pietro Pontio, *Ragionamento di musica* (Parma, 1588), facs. ed. Susanne le Clercx, *Documenta musicologica ser. 1*, XVI (Kassel: Bärenreiter, 1959), 99ff.
43. Meier, *Classical Vocal Polyphony*, 114.
44. *Ibid.*, 115.
45. Riemann, *Anonymi introductorium*, XXIX (1897), 162.
46. Sebald Heyden, *De arte canendi*, 115.
47. Adrian petit Coclico, *Compendium musices*, 24.

have.⁴⁸ There are also early statements identifying these notes as the cadences of their respective modes. Another treatise by Johannes Cochlaeus, *Exercitium cantus choralis* (1511), lists the finals and *repercussae* as primary and secondary cadences, respectively, establishing the typical pattern of this branch of cadence-tone theory. His listing is given in Table 11.

Table 11. Cadence-Tone List from Johannes Cochlaeus's *Exercitium cantus choralis* (1511)⁴⁹

Mode	Primary Cadence	Secondary Cadence	Tertiary Cadence
I	D	a	--
II	D	F	--
III	E	c	--
IV	E	a	--
V	F	a	c
VI	F	a	c
VII	G	d	b
VIII	G	c	—

Except for the fifth and sixth modes, Cochlaeus follows the *repercussae* precisely, observing the customary avoidance of the b in modes III and VIII and the adjustment of the fourth mode's reciting tone to parallel the third mode. The "secondary cadence" appears as a temporary point of repose or interior cadence, fitting neatly with Cochlaeus's 1507 statements regarding "frequent repetition" of these notes.

48. Bonaventura da Brescia, *Regula musice plane* (Brescia, 1497), ch. 37.

49. Dahlhaus, *Harmonic Tonality*, 220ff.

The *repercussae*-derived theory was promoted in similar form by Vicente Lusitano (1533)⁵⁰ and Michel de Menhou (1558), but Gallus Dressler's *Pracepta musicae poeticae* (Magdeburg, 1563) added an entirely new dimension to the classification. The *repercussa* notes (final and reciting tone) were called the primary cadences (though the final would certainly still have preeminence), and a new group of secondary cadence tones was distinguished for each mode. Though this expanded the possibilities, it still was not as all-inclusive as the cadence-lists of Aaron's group, and had the added structurally significant feature of a greater importance being attached to the *repercussae* notes. Table 12 lists Dressler's cadence-tones.

Table 12. Cadence-Tone List from Gallus Dressler's *Pracepta musicae poeticae* (Magdeburg, 1563)⁵¹

Mode	Primary Cadences	Secondary Cadences
I	D a	E F
II	A D f	a
III	E b c	G a
IV	E a	G c
V	F c	a
VI	F a c	--
VII	G d	c
VIII	G d c	--

In addition to the expansion in secondary cadences, it must be noted that in all but mode IV, the fifth above the final (or the fourth below) is a primary cadence even if it

50. Meier, *Classical Vocal Polyphony*, 111.

51. Appendix B, IX.

is not one of the traditional *repercussa* tones. This adds an A cadence to the D and F primary cadences of mode II, a c cadence to the F and a in mode VI, and a d cadence to the G and c in mode VIII. It is interesting as well that both a b and a c cadence are listed as primary cadence options for mode III, perhaps in reaction to Zarlino's purism. Despite the overall mingling of cadences between the authentic and plagal modes, their differences remain distinct.

Generally, the authentic modes in Dressler's list have the distinct primary cadence of their corresponding plagal as a secondary cadence, while the plagal modes employ both of the primary cadences of their corresponding authentic in addition to the distinctive primary cadence of their own. The pairs can be distinguished, however, by the cadences that are presented as primary in the opening of the work in question. If D and a are presented as primary cadences, then mode I is operative, even though it may have a later F cadence. If D and F are presented as primary, then mode II prevails, though it also may later employ an a cadence. The key to such a distinction lies in the syntactical use of the cadences in the rhetorical device of the exordium, a concept first fully explained by Dressler.⁵²

Illuminato Aiguino's *Il tesoro* (1581) presents a virtually identical listing of cadence-tones,⁵³ and that

52. Appendix B, IX.

53. Krantz, *Rhetorical and Structural Functions*, 120.

given by Pietro Pontio (1588) differs only in subdividing the secondary cadences into secondary and tertiary cadences, giving preference to cadences that are primary in the corresponding plagal or authentic mode.⁵⁴ Agreement is found on the subject of primary cadences in the expositions given by Cyriacus Schneegass (1591)⁵⁵ and Francisco Montanos (1592).⁵⁶

The validity of the *repercussae*-derived theory can only be ascertained through the search for consistent and relevant analytical results, but its theoretical superiority to the earlier *initiae*-derived system is obvious. Theorists of Dressler's group appear to base their cadence-tone hierarchy on two consistent features of chant, the final and the reciting tone, features that are by nature points of arrival and repose. Their significance, even when appearing in the alien context of imitative polyphony, surely would not be lost on the Renaissance ear, for they establish the structure and sound of the modes in ways that the *initiae* by nature of their function cannot.

A third school of cadence-tone theory emerged with Zarlino's *Le institutioni harmoniche* (1558), probably based upon the already-established *repercussae*-derived system but incorporating uniquely Zarlilian concepts regarding the

54. Pontio, *Ragionamento*, 99ff.

55. Meier, *Classical Vocal Polyphony*, 114ff.

56. *Ibid.*, 115.

mathematical basis of the modes. Zarlino simply declared that "regular cadences" occur on the notes bounding the octave of the mode, the mean of the octave (harmonic for authentic modes, arithmetic for plagal), and the mean of the resulting fifth.⁵⁷ Thus the mode I cadences are D f a d, and the cadences for mode II are A d f a. The parallels with Dressler's list are obvious, and the Zarlinian method may be viewed as an extension of the tendency to amalgamate the primary cadences of the authentic/plagal pairs. Two significant differences are that Zarlino does not indicate that, for example, the f cadence is more indicative (as if a primary cadence) of mode II than of mode I. The only real possibility Zarlino allows for distinguishing plagal/authentic pairs on the basis of cadences is the range in which they occur; if an A cadence occurs, for example, but not a d cadence, one might be led toward understanding the work in mode II rather than mode I. The other significant difference is that Zarlino trims away the traditional dodges around cadences on b-natural. Where Dressler lists a c cadence as a primary cadence in modes III and VIII, Zarlino fits these modes into the 1-3-5 mold.

Zarlino's position on cadence-tone theory proved widely popular in the seventeenth century, but seems to have had only limited circulation during his lifetime. Table 13 lists theorists promoting Zarlino's views.

57. Zarlino, *Art of Counterpoint*, 125.

Despite Zarlino's tremendous influence, his cadence-tone theory was relatively slow in catching on, and at any rate seems to be more a derivative of the *repercussae*-based theory of Dressler's group than a new theory of its own.

Table 13. Theorists Supporting the Zarlinian Cadence-Tone Theory

Gioseffo Zarlino, <i>Le institutioni harmoniche</i> (Venice, 1558)
Friedrich Beurhaus, <i>Erotematum musicae</i> (Nuremburg, 1580)
Hofmann, <i>Doctrina de tonis</i> (Greifswald, 1582)
Orazio Tigrini, <i>Il compendio della musica</i> (Venice, 1588)
Seth Calvisius, <i>Melopoeia</i> (Erfurt, 1592)
Giovanni Artusi, <i>L'Artusi overo delle imperfettioni della moderna musica</i> (Venice, 1600)
Adriano Banchieri, <i>Conclusioni nel suono dell'organo</i> (Bologna, 1609)
Marin Mersenne, <i>Traité de l'harmonie universelle</i> (Paris, 1627)
Antoine Parran, <i>Traité de la musique</i> (Paris, 1639)
Johann Andreas Herbst, <i>Musica poetica</i> (Nuremburg, 1643)
Christopher Simpson, <i>Compendium of Practical Musick</i> (London, 1667)

The mathematical proofs offered by Zarlino for its derivation are more indication that it is only a permutation of the earlier theory, altered to fit Zarlino's neatly ordered musical universe. The dominant, operative theory of cadence-tone hierarchy, throughout the sixteenth century, appears to be that espoused by Dressler, based on a set of primary cadences derived from the *repercussae*, the chief structural points of the modes.

CHAPTER VII
EXPOSITION OF DRESSLER'S STATEMENTS ON
CADENTIAL SYNTAX AND
MUSICAL STRUCTURE

Despite his reliance on earlier authors in some chapters, Dressler's statements in *Praecepta musicae poeticae* relevant to cadential syntax, mode, and musical structure are found in the entirely original chapters: Chapters VIII and IX on cadences, and Chapter XI and following on the actual construction of a composition.¹ Here Dressler expounds a view of music as rhetoric, with a clear progression of proposition, elaboration, and recapitulatory conclusion, all demarcated by the deliberate placement of appropriate cadences.

In Chapter VIII "Concerning the Construction and the Divisions of Cadences," Dressler explains that "cadences not only wonderfully adorn a song, but in fact agreeably connect the parts of the total composition,"² contradicting Carl Dahlhaus's opinion that cadences are a byproduct of

1. Wilhelm Luther, *Gallus Dressler: ein Beitrag zur Geschichte des Schulkantorats im 16. Jahrhundert* (Kassel: Bärenreiter, 1941), 101, 103.

2. Appendix B, VIII, ¶1.

composition processes.³ Chapter IX, "The Use of Cadences" is even stronger in this respect:

Let the youths not persuade themselves that musical compositions are a coincidental and fortuitous accumulation of consonances. For just as speech has eight parts, and likewise the sentence, with the comma and caesura, by which articulations its members are connected, so musical composition also has eight or even more modes, as well as the intervals and cadences, from which a composition is constructed. What the sentence and comma are in speech, moreover, the cadences are in musical poetics, and these members, as it were, constitute the whole body. It does not suffice, therefore, simply to know the composition of the cadences, but students ought to be taught in what order cadences are connected so that they may produce compositions that are well-grounded and excellent . . . In what order or series the composition allows cadences, is known from the doctrine of modes.⁴

Four things should be noted from this passage: first, that Dressler thought of the composition as a unified whole with a "background" structural level of several contiguous sections of music; second, that the cadence was the means by which these sections were articulated and related to the whole; third, that the "order" of presentation of the cadences matters in the intelligibility of this structure; and fourth, that the order of cadences is dependent upon the cadence-tone hierarchy of the modes. Dressler stresses the

3. Carl Dahlhaus, *Studies in the Origin of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, N.J.: Princeton University Press, 1990), 243.

4. Appendix B, IX, ¶2.

importance of the selected mode, stating that in composition, "First of all, a mode suitable to the subject ought to be selected."⁵ Though the relation of the doctrine of ethos espoused by Dressler is difficult to relate to reality, it is not to be denied that he claimed selection of the mode as a precompositional choice.

The "order" of the cadences, the syntactical rule of Dressler's cadence-tone theory, is discovered in Chapters XII through XIV, which describe respectively the "exordium," "medium," and "finis" of the composition. In Chapter XII "Concerning the Forming of the Exordia," Dressler states first that "we call the exordium that with which songs begin, up to the first cadence."⁶ In the next paragraph, however, he notes that the principal cadences are to be used, and not the secondary or foreign cadences, as though more than one cadence might occur.⁷ A possible explanation is that the end of the exordium is marked by a cadence meeting all of the criteria identified in Chapter V of the present study, while a weaker cadence might occur earlier. Dressler remarks in Chapter XIII "Concerning the Constructing of the Medium" that the exordium ends in a cadence in which all voices come to rest together;⁸ an

5. Appendix B, XIII, ¶3.

6. Appendix B, XII, ¶1.

7. Appendix B, XII, ¶2.

8. Appendix B, XIII, ¶14.

earlier cadence might only meet the criteria of syncopation and dissonance and a semibreve pulse. (Dressler's cadence theory bears out these three criteria; his cadence examples are in semibreve pulse,⁹ he supports the dissonant syncopation figure,¹⁰ and he stresses the conjunction of text and music in cadences.¹¹) Dressler admits the possibility of two cadences in the exordium, and notes-- interestingly for the subject of syntax--that in the exordium of the Clemens motet "Adesto dolori meo," "two cadences, a wonderful manner, have much grace in signifying the mode."¹² Two principal cadences, of course, are sufficient in Dressler's cadence-tone list to distinguish a specific mode--a D cadence followed by an a cadence, for example, indicates mode I, but an F cadence in place of the a cadence indicates mode II.

If the mode is, in fact, declared in the exordium, it is of more than passing interest to determine precisely when the exordium ends. From observation of motet practice, it is apparent that the "best" cadence usually coincides with the end of the first verse of poetry, that is, the "exordium" of the text, even when several other cadences have occurred. Though one would not come to this conclusion

9. Appendix B, VIII, ¶18.

10. Appendix B, III, ¶10.

11. Appendix B, IX, ¶1.

12. Appendix B, XII, ¶4.

from Dressler alone, it is compatible with his statements, and fulfills the spirit of his rhetoric-music corollary. This conclusion can make a significant difference in the interpretation of mode; in Palestrina's "Vestiva i colli," for example, the first two cadences taken alone would argue for Hermelink's A-mode interpretation, while consideration of the cadential content underlying the entire first verse of text places the A and E cadences in a D-mode context.

In Chapter XIII "Concerning the Constructing of the Medium," Dressler reaffirms the rhetorical function of the exordium by comparing it to the statement of a proposition in a poetic work, and notes that ". . . in music, which is greatly identified with poetry, let us express the mode in the exordium itself."¹³ The "medium," however, is not so clearly defined; Dressler indicates that it is the "more excellent part of the composition,"¹⁴ and naturally has more freedom in its form. Concerning the use of cadences in the medium, Dressler says that the secondary cadences "are inserted in the middle part of a song without offense,"¹⁵ and that other "foreign" cadences to the mode "are hardly ungracious" when applied at a stirring moment in the text.¹⁶

13. Appendix B, XII, ¶2.

14. Appendix B, XIII, ¶1.

15. Appendix B, IX, ¶5.

16. Appendix B, XIII, ¶5.

In Chapter XIV, "Concerning the Constitution of the Finis," Dressler notes that the cadences in this final section reassert the mode by use of the principal cadences.¹⁷ The use of the "cofinal" ("irregular ending," as Dressler says it) is mentioned, but with a strong warning that success in this requires great skill, acquired from observation of the works of the musical luminaries. To Dressler this is used for the ending of a prima pars, but only rarely for the ending of an entire composition.¹⁸ How rarely, of course, is a question left unanswered, but it leaves open the possibility that the final cadence is not the final of the work.

The analytical question raised by the possibility of a cofinal is whether the final cadence, as opposed to the cadential procedure of the exordium, is the determinant of mode. Though these two usually agree, and one is usually able to predict the final cadence from the procedure of the exordium, there are works whose final cadence leaves some doubt about the mode. It is important to note that, though Dressler echoes the common sentiment of Renaissance theorists that perfection is found in the ending,¹⁹ he gives greater emphasis to the exordium. He opens this discussion with a proverb that counters the emphasis given by other

17. Appendix B, XIV, ¶1-2.

18. Appendix B, XIV, ¶6.

19. Appendix B, XIV, ¶1.

theorists to the final: "that which is well begun is half completed."²⁰ Dressler then compares the musical exordium to that of poetry, giving propositional import to its contents, and concludes his introduction to the topic with the admonition "let us express the mode in the exordium itself".²¹

20. Appendix B, XII, ¶1.

21. Appendix B, XII, ¶2.

PART THREE: APPLICATION OF DRESSLER'S
CADENCE-TONE THEORY

CHAPTER VIII

CADENCE-TONE ANALYSIS OF DRESSLER'S
XVII CANTIONES SACRAE

Part Three tests the following method: investigating according to the tones of cadences (defined primarily by significant textual closure, semibreve pulse, and dissonant syncopation), I expect to be able to identify the exordium, medium, and finis of the work, and to show how use of principal cadences (and, conversely, restricted use of other cadences) establishes a mode in the exordium, defines a distinct sectional structure in the medium, and provides closure in the finis.

Two motet sources were investigated: first, a collection of seventeen motets by Gallus Dressler himself, chosen from among his works because of its availability in a modern edition, and second, a body of seventy-two motets from the Nuremberg anthology *Psalmorum selectorum* (1553-1554), selected again according to availability in modern edition. In each case works are selected because of their likelihood of identifying with Dressler's concept of composition; in the former, since they are motets by

Dressler himself, and in the latter, because they were common currency in Dressler's circles (most of the works cited in *Praecepta musicae poeticae* had appeared in this or similar collections from the Nuremberg publishers Johann Berg (Montanus) and Ulrich Neuber).

Gallus Dressler's *XVII Cantiones Sacrae* (Wittenburg: Georg Rhau, 1565)¹ appears to have been arranged in rudimentary modal order: nos. 1-3 are mode I/II G-pieces with a flat signature, nos. 4-6 are mode III/IV E- or A-pieces (the cadential procedure in Phrygian modes leaves some doubt about the true final), nos. 7-14 are mode V/VI F-pieces with a flat signature, no. 15 is a C-piece belonging to the mode VII/VIII group, and nos. 16 and 17 are mode VII/VIII G-pieces. Analysis reveals that each group contains both authentic and plagal compositions, distinguishable by Dressler's choice of cadence tones. (In the following analyses, cadences are counted in which at least two of the three characteristics outlined in Chapter V are present; for example, a cadence with appropriate syncopated dissonance and rhythm is listed, even without clear textual closure in the participating voices. The abbreviation "n/c" is used when a non-cadential event is

1. Modern edition by A. Halm and Robert Eitner, *Gallus Dressler XVII Motetten zu vier und fünf Stimmen, Publikationen älterer praktischer und theoretischer Musikwerke XXIV* (Leipzig: Breitkopf & Härtel, 1900).

so clearly set off by textual closure that it cannot be excluded in consideration of the structure.

Appendix A, Table 14, by Dressler's definitions, is a mode I work. Its exordium, taken to be the first section of text, begins with three solid G cadences, followed by alternating D and G cadences, the principal cadences of mode I, and concluding in a strong G cadence. Each section of text concludes in a cadence appropriate to this mode. The second section ends on G, the third on G. The fourth textual section, beginning the *secunda pars*, may function as a second exordium, opening with two G cadences, followed by a D cadence, and concluding on G. The fifth section has more diversity than the preceding ones, with a cadence on B-flat, a secondary cadence in Dressler's mode I hierarchy, and a conclusion on D. The sixth and final section has only G cadences, with a textual emphasis on C just before the final G cadence, a typical closing gesture. Examination of the more conventional indicators of modality reveals that the voices are paired in the manner typical for an authentic mode, with sopranos and tenor in authentic ranges and alto and bass in plagal. The opening intervals in the first imitation is also typical of mode I: the first soprano and tenor leap up by the G-D fifth, while the second soprano, alto, and bass leap up by the D-G fourth below. Dressler's cadence-tone theory independently confirms mode I for this work, and suggests that the selection of mode was more

influential on the course of the composition beyond the selection of clefs, opening intervals, and final.

The second motet of the collection (Appendix A, Table 15), however, does not entirely agree with the modal indications of ambitus and initial imitation. The voices are paired with the soprano and tenor in plagal ranges and the alto and bass in authentic ranges, and they demonstrate this ambitus assignment by their opening notes in the first point of imitation--d', g, d, and G respectively from the top. Despite these mode II indications, the B-flat principal cadence of Dressler's mode II hierarchy is conspicuously absent. Though Dressler's theory allows the fifth degree (D) as a primary cadence in mode II, in this case G and D figure prominently but B-flat not at all; from the cadence structure, only mode I can be justified.

No. 3 (Appendix A, Table 16) is also arranged with plagal-range soprano and tenor and authentic-range alto and bass, with corresponding opening intervals. Unlike the preceding motet, however, a strong cadential expression of mode II is also observable. Though the exordium does not contain a B-flat cadence, relying on G and D cadences, the second text section concludes in a B-flat cadence, as does the first ending of the third text section. The third section also opens with a pair of B-flat cadences. Here Dressler's prescribed principal cadences for mode II

articulate the musical structure at the main divisions of the text, even though the exordium does not suggest mode II.

Dressler's motets in modes I and II illustrate in miniature the incongruities to be found in comparative modal analysis. No. 1 behaves exactly as might be expected, with mode I voice ranges, mode I opening entries, a mode I exordium, and mode I cadence points at textual divisions. No. 2 has mode II voice ranges, mode II opening entries, but a mode I exordium and mode I cadential emphases. The matter is made more difficult by the fact that none of the cadences are actually unacceptable in mode II, according to the working theory; there is simply nothing in the cadences to suggest mode II instead of mode I. Motet no. 3 indicates mode II everywhere except in the exordium, where one would expect Dressler to project it most forcefully. Again, there are no cadences that contradict mode II; the exordium is indistinguishable, however, from that of the mode I first motet. Curiously, in the latter two motets, in which mode II is indicated by ranges, the B-flat cadence that would assert mode II is either absent or introduced only after the exordium.

The ranges of the voices of No. 4 (Appendix A, Table 17) do not match the standard pairings; rather, the soprano covers a plagal range, the alto a plagal range, the tenor an authentic and the bass a plagal. It is not really possible to judge by their respective opening notes, because three of

the voices begin together in a series of repeated harmonies. The cadence pattern, however, more clearly indicates mode IV by the absence of mode III's C cadence and abundance of mode IV's A cadence.

Must one, however, accept unequivocally that this motet is an E-piece? The exordium could easily be interpreted as indicative of transposed mode I, or Aeolian mode, following the preponderance of strong A cadences, especially that which closes the exordium in m. 20. The exordium does not, however, necessarily conclude on the final of the work; it is observed elsewhere that exordia often end on the *repercussa*, the other principal cadence. The E cadence makes a showing in the exordium, being the first quasi-cadential articulation in the piece with the textual emphasis in m. 5. An E cadence concludes the second textual section, and the E cadence in m. 54, in the final text section, has considerable textual and musical emphasis. Both of these section-defining cadences, however, are supported by D-A bass movements; the E cadence seems dependent on A's support, though it could easily have been constructed with an F-E motion in the bass supporting an E-G-B harmony. It should be observed that A cadences were found to be abundant in all the Phrygian motets examined, raising the question of Aeolian interpretation. For the sake of consistency, however, mode III or mode IV

classification will be attempted; in the case of the Table 17 motet, mode IV.

In the fifth motet (Appendix A, Table 18), Dressler uses the soprano voices in a plagal range, the alto and tenor in an authentic, and the bass in a plagal. In the opening imitation, the sopranos, tenor, and bass begin on A and move through the course of a subphrase of text down to E; the alto begins on D and ends the same subphrase on A. Once again the validity of viewing the piece as in E is undermined by the dominance of A cadences in the exordium, and in this motet by the opening of the first imitation as well. A case for mode IV is maintained, however, on the same grounds as in the preceding motet--the presence of E cadences at textual articulations, and the held E from the cadence in m. 50 that continues through an A cadence and on to the E-harmony ending. The textual sections conclude on the cadence tones A, E, G, A in the prima pars and A, E, E in the secunda pars. The cadence-tone content of the motet includes a majority of A cadences, followed by E cadences, then G and C cadences. With the exception of two D cadences (one of which, in m. 50, is compromised by a G harmonization), these cadence tones fit with Dressler's principal and secondary cadence tones for mode IV.

The sixth motet of the collection (Appendix A, Table 19) makes the strongest argument yet for an A modality. As in the preceding two motets, the exordium consists of

strong A cadences; the secunda pars has a similar opening text-section. The text sections end in the cadences A, C, E, and A in the prima pars, and A, E, E in the secunda pars; in the course of the motet, in fact, only a G cadence in m. 15 of the secunda pars intrudes upon the three degrees A, C, and E. If this motet were Aeolian or transposed mode I or II, its cadential tendencies would be toward the plagal of the pair--a fact borne out by the E-octave ranges of the sopranos and tenor, and the A-octave ranges of the alto and bass. If the motet were mode IV, however, one would expect--though we have seen that the evidence of voice ranges cannot be taken for granted, as in motet no. 2--that the combination of ranges presented would deliver a work in the authentic mode, a fact not borne out by the preponderance of A cadences over C cadences, either of which could be secondary to the other in the opposite mode, according to Dressler. No circumstance of the closing measures leads compellingly to an E modality, such as the sustained E from a true cadence held through an A cadence to an E-harmony resolution. One is tempted to simply label the motet Aeolian.

The presence of strong G cadences, however, argues for understanding the motets in terms of E-modality, despite the unusual relationship to the degree A. G cadences in no. 5, mm. 68 and 74, conclude a section of text--an odd modal degree for emphasis, if A is the true final. The degree

lying a whole step below the final is considered an irregular cadence tone for any mode, and would be highly unusual for the ending of a major section of text.

G cadences also occur in mm. 22 and 28 of no. 4, opening a section of text. A G cadence opens a section of text in m. 15 of no. 5, as well. Though the latter two examples could conceivably be read in an A modality, the evidence of the improbable G cadences, the interior emphasis of E, and the E finals lead to the conclusion that these three works are in E modality. The evidence also indicates a relationship to A beyond its status as a primary cadence. The exordia of these motets contain a preponderance of A cadences, and even the E cadences are often harmonized with D to A harmonies. If authentic/plagal differences are to be recognized, it seems likely that a large number of A cadences must be regarded as the norm, even in mode III.

In contrast to the ambiguity of nos. 4, 5, and 6, no. 7 (Appendix A, Table 20) is a simple display of mode V, with F and C cadences only. The sopranos and tenor range through the F octave and the alto and bass through the C octave, also implying the authentic mode. The imitative entries could be misleading, however; the voices in authentic ranges begin and end the opening motif on C, while the plagal voices begin and end on F. The latter three sections of the motet are distinguished where a significant closure of text and music has occurred, though the same text serves for the

latter three-fourths of the piece. In each section, a C cadence occurs first, then is recouped by alternating F and C cadences, ending on a strong F cadence in each case.

The exordium of no. 8 (Appendix A, Table 21) strongly expresses mode VI, with cadences on F, A, and C. This fact is in disagreement, however, with the modality implied by the voice ranges and initial notes of the first imitation. The sopranos and tenor cover the F octaves, but begin the first imitation on C, while the alto and bass cover the C octaves but begin on F. The exordium alone contains significant cadential variety; here the A and C cadences predominate, with F cadences on only two occasions. The exordium opens and closes with a C cadence, not an F cadence, but mode VI is still the only logical implication of the evidence at hand, according to Dressler's reckoning.

The voice ranges of Appendix A, Table 22 are yet another odd combination--the sopranos, alto, and bass range through a plagal octave, while only the tenor covers the authentic. The initial notes of the voice parts are c', c', f, c, and F from highest to lowest, contradicting the implications of the voice ranges. Turning to the cadential analysis, however, mode V is clearly indicated by the exclusive use of F and C cadences. C cadences are prominent, opening and closing the exordium and finishing the second sections of both the prima pars and secunda pars.

We find in Appendix A, Table 23 another motet in which the voice ranges and initial notes imply the plagal mode, but the cadence plan indicates otherwise. The soprano and tenor cover the C octaves and begin on C, while the alto and bass cover the F octaves and begin on F; the cadences, however, are strictly F and C, indicating mode V. The exordium, in fact, contains only F cadences, and all three major sections conclude in F. Though an important contrast, the C cadences are not as prominently featured as in the few preceding motets.

Just as in the preceding motet, no. 11 (Appendix A, Table 24) is written with a plagal voice-range combination, the implications of which are borne out by the starting notes of the first point of imitation. The cadence plan, however, indicates mode V.

No. 12 (Appendix A, Table 25) has a soprano voice in the C octave range, an alto in the F octave, a tenor covering only a fifth, F-C, and a bass in the F octave. Its opening imitation has entries on C in every voice. Certain evidence actually leads toward a mode VIII classification: E-flats appear frequently in the melodic lines, and the only cadence besides F in the exordium is a B-flat cadence in m. 14. B-flat harmonies are emphasized rhythmically before F cadences in mm. 12, 47, and 77. On the other hand, C is highly prominent as well, closing

out the second and fourth textual sections, leading to a mode V classification.

No. 13 (Appendix A, Table 26) is yet another example of disagreement between cadence structure and traditional ambitus-based modal classification. The voices are composed in plagal-authentic-plagal-authentic format, from sopranos down to bass, and their opening entries match this modal implication. The cadences, however, are nothing but F and C, arguing for mode V; the A cadence, distinctive of mode VI, is nowhere to be found.

No. 14 (Appendix A, Table 27), like the preceding motet, has plagal-authentic-plagal-authentic disposition of the voices, presumably implying mode VI, but has no cadential support for the plagal mode. F cadences predominate, with C cadences present only after the opening F cadences of each section. Mode V is the only justifiable analysis from the cadential content.

A few of the F-pieces are unarguably composed in mode V. Nos. 7 and 9 are constructed with F and C cadences in their exordia and prominent sectional divisions, and also have appropriately authentic voice ranges. No. 8 is equally clearly a mode VI piece, with plagal voice ranges and an exordium composed of F, A, and C cadences. Several other motets, however, give conflicting signals. Nos. 10 and 11 share the features of plagal voice ranges and unadorned F-cadence exordia. Without a contrasting primary cadence, the

mode is unproven until C cadences appear in later text sections. Nos. 13 and 14 also have the plagal disposition of ranges, and tend to have a large majority of F cadences, but do contain contrasting C cadences in their exordia. Given that in no. 8, a mode VI motet, the distinctive A cadence gives way to exclusive F and C cadences at the structural divisions after the exordia, it may be that nos. 13 and 14, the motets with plagal ranges and featureless F-cadence exordia, are expressing mode VI by the absence of the C cadence, a common indicator of mode V; this, however, requires too great an assumption without the study of a broader sample of works.

The voice-ranges in no. 15 (Appendix A, Table 28) are arranged, from highest to lowest, in a plagal-authentic-plagal-authentic disposition. The entries of the first imitation, however, bely this arrangement; the soprano, first alto, and tenor open with an upward leap of G-C, theoretically appropriate to the authentic voice-pair, while the second alto and bass open with a leap of C-F, appropriate to the plagal voice-pair. The motet is clearly transposed mode VIII, with C, G, and F cadences predominant. The cadential content is more diverse, however, than the preceding few motets, and is illustrative of the importance of the syntactical placement of cadences. For example, one might initially question whether the motet is a C-piece or an F-piece because of the opening cadence on F in the

exordium (m. 12) and the second textual section (m. 21), and the fact that the final true cadence is to F (m. 113).

The opening cadence, however, is followed by a G cadence and a C cadence, and the exordium closes on C. Every textual division in the motet closes on a C cadence. These cadences are typically stronger than any of the F cadences, involving full, rather than partial, textual closure, and in most cases are preceded by a G cadence in close proximity.

No. 16 (Appendix A, Table 29) is an uncomplicated example of mode VIII, with voice ranges disposed in plagal-authentic-plagal-authentic pairing, matching plagal and authentic opening entries, and a clear G- and C-cadence construction. Here again, the precise placement of cadences reveals whether the motet is a G-piece with strong C emphasis or a C-piece with strong G emphasis. The exordium (the first complete presentation of the first division of text) opens and closes with G cadences, the second section opens with a series of three G cadences, and the prima pars concludes with three G cadences. The first section of the secunda pars contains two strong G cadences, and the final section opens with three strong G cadences before the final C cadence and G resolution. It is very difficult, on the other hand, to make a case for the predominance of C; though it is present in all but one of the textual divisions, its only prominent usage is at the ends of the second section in the prima pars (m. 31) and the parallel third section in the

secunda pars (m. 35). Its presence is enough, however, to signal mode VIII; it is present in the exordia of both the prima pars (m. 10) and secunda pars (m. 16), concludes the two mentioned textual divisions, and is given penultimate position in the close of the motet. The D cadence, necessary to express mode VII, appears only as an interior cadence in the second section of the prima pars (m. 29) and the parallel third section of the secunda pars (m. 32), and in a weak manifestation (evaded and undercut by a G harmony) in the second section of the secunda pars (m. 24).

No. 17 (Appendix A, Table 30) displays a cadential plan that only occasionally deviates from G. The exordium and the final section contain nothing but G cadences, while the middle sections have a handful of interior D cadences, one C cadence, and two A cadences. The mode VII implication is obvious. As with several other motets in this collection, the voice ranges and initial notes imply a mode different from that implied by the cadences; they are disposed in a plagal-authentic-plagal-authentic arrangement, suggesting a plagal mode.

Nos. 15 and 16, the mode VIII motets, differ from the other plagal-mode motets in that their mode-defining cadences, G and C (or C and F), are displayed together in the exordia and in most later sections of the works, whereas the mode II motet no. 3 has the all-important B-flat cadences only in the final two sections, and the mode VI

motet no. 8 has its A cadences only in the exordium. This pervasiveness of the C cadence in the mode VIII motets also speaks against a mode VIII classification of the F-final motet no. 12, as it has only one B-flat cadence in the exordium and none in the following sections.

Overall, the relationship of Dressler's composition practices to his composition theory is ambiguous. Though he sometimes expresses the mode exactly as *Praecepta musicae poeticae* describes, some of the motets have very little to distinguish the plagal from the authentic. Also, the relationship of vocal ranges to the modes of these motets must be questioned, because ambitus combinations sometimes contradict clear cadential expression of mode.

CHAPTER IX

CADENCE-TONE ANALYSIS OF MOTETS SELECTED FROM *PSALMORUM SELECTORUM* (1553-1554)

In order to study cadential expression of mode in a broader sample of works from the period of Dressler's *Praecepta musicae poeticae*, I have examined seventy-two motets from the four-volume print *Psalmorum selectorum*, published in Nuremberg by Johann Berg (Montanus) and Ulrich Neuber in 1553-1554.¹ This collection was chosen because of the homogeneity of its texts and presumably of its types of compositions, and because of its apparent currency in Dressler's milieu. Dressler cites eight examples in *Praecepta musicae poeticae* that were available from Berg and Neuber prints of the middle and late 1550s, more than any other publisher.

The seventy-two works examined (out of the total one hundred thirty-nine motets in the four volumes) were selected according to availability of modern editions. The composers most represented include Josquin des Pres (17),

1. The four volumes of this collection are designated 1553/04, 1553/05, 1553/06, and 1554/11 by *RISM*. A complete list of their contents is found in Harry B. Lincoln, *The Latin Motet: Indexes to Printed Collections, 1500-1600* (Ottawa: Institute of Mediaeval Music, 1993), 759-761, 768-769. Lincoln's composer/title index and its accompanying documentation were used to find those motets available in modern editions.

Clemens non Papa (10), Thomas Créquillon (10), Nicolas Gombert (8), Claudin de Sermisy (6), Cristobal de Morales (2), Adrian Willaert (2), and single works by Jean Mouton, Antoine Brumel, Jachet of Mantua, Maistre Gosse, Jacotin, Elzear Genet, Francesco Layolle, Cipriano de Rore, Mathieu Gascongne, Jean Conseil, Jean Richafort, Pierre de Manchicourt, Thomas Stoltzer, Mathieu Lasson, Jean Guyon, and Dominique Phinot.

Of the twenty-one mode I motets discovered, thirteen (Appendix A, Tables 31-43) present such straightforward cadence plans that they need very little comment. Each presents both of its distinctive principal cadences in the exordium (either D and A or G and D), leaving no doubt of the modality, and in most of the works each section of text concludes with one of these two cadence tones. All but one of the motets (Appendix A, Table 35) conclude on the regular final. In only four of these motets (Appendix A, Tables 36, 37, 39, and 42) do the exordia contain another cadence, the second degree of the mode. In two of the motets, (Appendix A, Tables 33 and 41) the second degree appears at the conclusion of a text section.

The remaining eight motets vary from this model in various ways. One motet (Appendix A, Table 44) has similar features to the preceding group, except that its exordium contains only cadences on its D final; another pair (Appendix A, Tables 46 and 49) have exordia that contain

cadences only the fifth degree of the mode. Another two motets (Appendix A, Tables 45 and 50) have typical exordia, but use irregular cadences in conclusion of major text divisions. The remaining three motets (Appendix A, Tables 47, 48, and 51) display an ambiguity in choice of cadences, sometimes vacillating between D-modality and G-modality, and using irregular cadence-tones at textual divisions.

Twelve motets were judged, according to their cadence structure, to be written in mode II, once transposed. Compared to the mode I motets, there are fewer "typical" cadence plans; though several of the motets (Appendix A, Tables 53, 54, 56, 57, 58, 62, and 63) have exordia constructed with the critical B-flat principal cadence that indicates mode II, some also have irregular cadences in the exordia (Appendix A, Tables 54, 57, and 58). Several motets only display the B-flat cadence late in the prima pars, or even delay it to the secunda pars (Appendix A, Tables 52, 59, 60, and 61). The cadence usage at textual divisions, however, is fairly consistent; only two motets (Appendix A, Tables 52 and 53) have irregular cadences at the conclusion of major textual divisions. Three motets (Appendix A, Tables 58, 60, and 61) have the irregular final D, proportionally a much greater number than that found in the mode I motets.

Of the seventeen E-modality works found in the *Psalmorum selectorum*, nine were judged to be mode III and

eight to be mode IV. This distinction was made on the relative emphasis of C cadences (mode III) and A cadences (mode IV). Given the frequency of A cadences in all the works, however, the determining factor is often the presence or absence of C cadences in important positions. Seven of the nine works judged to be composed in mode III emphasize C cadences by their appearance in the exordium (Appendix A, Tables 64, 66, 68-72), and most of these have a C cadence closing a text division at least twice (Appendix A, Tables 68-72). The other two mode III works without a C cadence in their exordia (Appendix A, Tables 65 and 67) emphasize C by its appearance at the close of text divisions. In contrast to the mode I or mode II motets, only one of the mode III motets has an irregular cadence in its exordium (Appendix A, Table 71), and none of the motets has an irregular cadence at the conclusion of a major section of text. In fact, even the secondary cadence G is fairly uncommon in an important position; it occurs three times as the closing cadence of a text division (Appendix A, Tables 68, 70) and appears only once in an exordium (Appendix A, Table 71). Cadences on A, however, though considered secondary by Dressler, occur in every exordium and conclude some text sections in all but one motet (Appendix A, Table 69). An A cadence concludes the prima pars in all but two (Appendix A, Tables 71 and 72) of the two-part motets, and is actually the final cadence in four motets (Appendix A, Tables 64-66 and 72).

The group of motets judged to have been composed in mode IV is classified as such largely on the absence of emphasis on C cadences that could indicate mode III; the A cadence that Dressler lists as principal in mode IV is too common to both modes in actual practice to be a distinguishing factor. Of the eight mode IV motets, half have only one C cadence, or none at all (Appendix A, Tables 73, 74, 77 and 79). The other four motets (Appendix A, Tables 75, 76, 78, and 80) contain several C cadences, but none are in an important position. One motet (Appendix A, Table 80) contains a C cadence in its exordium, and two others (Appendix A, Tables 76 and 78) have one text division closing in C, but otherwise the C cadences are passing events, relegated to a supporting role as secondary cadences. One possible exception is seen in Appendix A, Table 80, where four text divisions open with C cadences, but these are the only C cadences in the work (in addition to one in the exordium). Modal classification after the fact is always open to debate, of course; it is apparent, however, that two significant groupings exist within the E-modality pieces, corresponding to the third and fourth modes, and differing accordingly in their cadential content and usage.

Ten motets were found to be composed in mode V, and six in mode VI. Five of the mode V motets (Appendix A, Tables 81, 83, 86, 87, 90) are so consistent in their cadential

procedure as to require little comment. Their exordia consist of F and C cadences (or C and G in transposed motets such as Appendix A, Tables 83 and 88), and each major text division concludes in one of these two principal cadences. Each motet concludes on its regular final. The other four motets do not vary greatly from this norm. One (Appendix A, Table 82) uses only F cadences in its exordium, but emphasizes the C cadence at the close of a text section. Another (Appendix A, Table 88) uses the irregular cadence D in its exordium along with the F cadence; C cadences appear frequently in the balance of the motet, but the text divisions close in F exclusively. Josquin's well-known "Dominus regnavit" (Appendix A, Table 87) has nothing but F cadences; it is grouped with the mode V works by default, as its cadential content cannot make any more certain claim to another mode. In Appendix A, Table 85, the motet has an exordium of F and C cadences and uses F or C for the close of most of its text divisions, but has one major text close on an A cadence. Though A is the secondary cadence for mode V, it is also indicative of mode VI; taken in context, however, the F and C cadences far outweigh even a prominent A cadence that stands alone. The motet of Appendix A, Table 84 is also problematic; the final G cadence and alternating strong G and C cadences could lend themselves to a mode VIII interpretation; the absence of G in the exordium, however,

and the relatively greater importance of the C cadences through position and frequency, indicate mode V transposed.

Out of the six motets judged to be in mode VI, all but one (Appendix A, Table 93) have F, A, and C cadences (or C, E, and G) in their exordia. The one lacking an A cadence in the exordium is included because of its frequent later use of A cadences, once to close a major text division, and also because it has "clustered" A cadences (three within sixteen measures), a practice characteristic of the principal cadence usage in some of the analyzed mode II motets. In the other five motets, the A (or E) principal cadence appears only infrequently after the exordium, and does not close a text division, a task assigned to the F and C (or C and G) cadences. One motet (Appendix A, Table 92) ends on its cofinal, G; the others conclude on regular finals.

Only six motets were judged to have been composed in the seventh and eighth modes, with two in mode VII and four in mode VIII. Appendix A, Table 97 is a model of cadence-tone expression of mode VII, with G and D cadences in the exordium and G cadences at the close of each section of text. Appendix A, Table 98 is less straightforward, with the irregular cadences A and F intruding in the exordium.

All of the mode VIII motets (Appendix A, Tables 99-102) have both G and C cadences in their exordia, usually accompanied by D cadences. Major divisions of the text usually conclude in G or C cadences, but rarely on D.

C cadences are dispersed fairly widely throughout the course of a given motet, though final sections may exclude them in favor of G and D cadences.

PART FOUR: CONCLUSIONS FROM ANALYSIS AND
RECOMMENDATIONS FOR FURTHER RESEARCH

CHAPTER X

REVIEW OF EVIDENCE FOR CADENTIAL
EXPRESSION OF MODE

Out of the seventeen Dressler motets analyzed, fourteen adhere exclusively to one of the modal patterns of principal cadences in both their exordia and their conclusions of text divisions.¹ Another two nearly attain to this level of conformity, with only occasional departures (Appendix A, Tables 28 and 30); only one (Appendix A, Table 24) does not conform to a prescribed set of principal cadences. Of the sixteen motets that do conform, eleven use both principal cadences in the exordium.² About two-thirds of the motets, therefore, forecast the content of the following sections and their structural cadences by use of mode-defining cadences in the exordium.

Turning to the larger sampling from the *Psalmorum selectorum*, a similar majority practice is discovered. Out of seventy-two motets analyzed, thirty-nine conform exclusively to Dressler's prescribed principal cadences in

1. Appendix A, Tables 27-36, 38-40, and 42.

2. Appendix A, Tables 14, 15, 17, 18, 20-22, 26-29.

their exordia and conclusions of text divisions.³ Another sixteen conform significantly but with some departures;⁴ thus fifty-five of seventy-two, a little over three-fourths of the motets, use cadence-plans that may be identified from Dressler's prescriptions. All but fifteen of these motets use both principal cadences in the exordium, clearly identifying the mode from the outset. The motets in which the exordium uses both principal cadences and is an accurate predictor of the cadence plan amount to forty motets out of seventy-two, a little over half.

Twenty-one mode I motets were identified, and out of this group all but three conform to a Dresslerian cadence plan with only minor deviations.⁵ Of this group, all but two use both principal cadences in their exordia. In mode II, however, only seven out of twelve conform to the principal cadences in their exordia and text division conclusions, and these only with a greater degree of deviation than found in mode I motets.⁶ Only two use both principal cadences in their exordia. Out of nine mode III motets, seven adhere to Dressler's principal cadences for

3. Appendix A, Tables 31-44, 55, 62, 67-70, 73, 79, 81-83, 85-86, 88, 90-97, 99, 101, 102.

4. Appendix A, Tables 45, 47, 49, 50, 53, 54, 58, 59, 63, 64, 66, 71, 78, 89, 98, 100.

5. Appendix A, Tables 31-45, 47, 49, 50.

6. Appendix A, Tables 53-55, 58, 59, 62, 63.

this mode.⁷ Only three use both principal cadences in their exordia. In eight mode IV motets, only three are very close to Dressler's model (Appendix A, Tables 73, 78, and 79), and only two use both principal cadences in their exordia.

Mode V motets again show greater affinity to Dressler's descriptions; out of ten motets, all but two use primarily principal cadences at structural points.⁸ Six motets use both principal cadences in their exordia. Of the six motets identified as mode VI (Appendix A, Tables 91-96), all seem to adhere to the appropriate principal cadences, and all but one use both principal cadences in their exordia. The two mode VII motets (Appendix A, Tables 97, 98) and four mode VIII motets (Appendix A, Tables 99-102) also adhere fairly closely to the appropriate principal cadences in their exordia and endings of text sections; all six display both principal cadences in their exordia.

From the above it is obvious that the Phrygian modes are especially problematic. E is still an arguable final from the exordia of most of the motets, but the emphasis given to A, theoretically the *repercussa* note and a subordinate to the final, is unparalleled in the cadential procedure of the other modes. When one stands the pieces on their heads, however, and attempts to hear A as the final, they have a disconcerting tendency to use the cofinal E

7. Appendix A, Tables 64, 66-71.

8. Appendix A, Tables 81-83, 85, 86, 88-90.

cadence in places one would expect the final. The modal ambiguity of these motets reflects the changing nature of the Phrygian modes as they began to be transformed into the modern minor mode.

The inconsistencies of mode II are more unexpected; the plagal modes VI and VIII tend to be far more consistent than mode II, in which the use of both principal cadences in the exordium is actually a minority practice.

Looking at the nonconforming motets in mode II (Appendix A, Tables 52, 56, 57, 60, and 61) as well as the only occasionally aberrant group (Appendix A, Tables 53, 54, 58, 59, and 63), it is apparent that the fifth degree is often preferred in addition to, or in place of, the third degree in structural positions, even though the third degree may be predominant by frequency. In Appendix A, Tables 52, 59, 60, and 61, G and D cadences make up the exordia without the B-flat that appears in later sections. In Appendix A, Tables 54 and 61, D cadences close a significant number of text sections. Despite the prominent B-flat cadence in the exordium in Appendix A, Table 56, D cadences are more numerous in that motet than cadences on any other scale degree. Despite the emphasis on the third scale degree in the mode II motets, the importance of the fifth scale degree blurs the distinction between modes II and I.

Concerning the modes III and IV, it is significant that in nine out of the seventeen motets, more text sections

conclude on A cadences than all other scale degrees combined.⁹ These motets almost read as Aeolian, with emphasis on A, C, and E cadences, and illustrate the blurring of distinctions found in A- and E-pieces.

A breakdown of the data by individual composers reveals some striking trends. All eleven motets by Jacobus Clemens conform predominantly to Dressler's principal cadences in their exordia and conclusions of text divisions; eight of them, in fact, do so exclusively. All but one of the Clemens motets¹⁰ present both principal cadences in the exordium. Out of ten motets by Thomas Créquillon,¹¹ six out of four conform closely to the Dressler model of cadential selection, and all six use both principal cadences in their exordia. Nicolas Gombert's eight motets¹² conform for the most part in all but one instance, and present both principal cadences in the exordium in five instances. Claudin de Sermisy, represented by six compositions,¹³ conforms to Dressler's usage in all but one instance. Four of his motets present both principal cadences in their exordia. The three latter composers stray from the Dressler model of cadence usage primarily in their mode II

9. Appendix A, Tables 64-66, 68, 72, 74, 77-79.

10. Appendix A, Tables 31-34, 53, 54, 73, 83, 91, 92, 98.

11. Appendix A, Tables 35-38, 56, 57, 65, 66, 84, 101.

12. Appendix A, Tables 39, 40, 45, 59, 60, 85, 93, 94.

13. Appendix A, Tables 52, 64, 81, 82, 99, 100.

compositions, which, as noted above, tend to blur the distinction between modes I and II by emphasis of the fifth modal degree.

Josquin des Pres, with sixteen motets, is the best-represented composer in the collection. Eleven of these motets conform to Dressler's cadence theory in their exordia and conclusions of text sections, in all but one instance exclusively so. Josquin's motets present the principal cadences in their exordia, however, in only six cases. Compared to the succeeding generation, this is a low percentage; it is possible that careful presentation of the mode in the exordium became more formalized in the generation of Clemens.

Josquin's exceptions are also noteworthy. One mode V motet, "Dominus regnavit," is exceptional in that it has only F cadences. The other four motets that do not match Dressler's model are the four motets classified as mode IV, Appendix A, Tables 74-77. These motets use a wide variety of cadences in prominent positions, such as text endings on G, F, and D. Compared to other mode III and IV motets, such the Clemens motet (Appendix A, Table 73) that uses only E, A, and C cadences, they are less uniform in structure. Reviewing all of eight of the mode III and IV Josquin motets, it is notable that they tend to have a greater variety of cadence degrees than those by other composers; of the Aeolian-leaning group mentioned above, only two of the

nine are by Josquin. The evidence seems to indicate that the older composer used a richer selection of cadences, while his successors Clemens and Créquillon moved toward a more spare cadential content that tended toward Aeolian.

The composers of the seventeen motets that are not explicable by Dressler's cadence-tone theory tend to be those sparsely represented overall; Gosse, Jachet, Jacotin, Stoltzer, Phinot, and Willaert have only one or two motets apiece in the collection, but account for over a third of the anomalous motets; the other two-thirds are provided by Créquillon and Josquin. Clemens is the only well-represented composer to conform at least most of the time to Dressler's theories in all of his motets, further strengthening the obvious connections between Dressler's theory and Clemens's practice.

The evidence thus far presented indicates that Dressler's theory of cadential expression of mode is valid for the majority of motets in a broad sampling of mid-century music. This evidence appears even stronger when the motets of individual composers are considered; while Josquin's works provide a number of examples of Dressler's principles, it was the succeeding generation of Clemens, Créquillon, and Gombert--the core of the post-Josquin Netherlands school--that made the practice standard. The principal cadences of the modes are almost exclusively those used for the conclusion of major divisions of the

text, setting forth the mode in the most structurally important articulations. The majority of the time (though more so in the post-Josquin group than with Josquin himself), both of the principal cadences, necessary to identify the mode, are presented in the exordium.

This presentation of the mode is then carried out in the structural and final cadences of the remainder of the motet, bearing out the syntactical or "propositional" use of these cadences in the exordium.

CHAPTER XI

CONCLUSIONS REGARDING CURRENT SCHOLARSHIP

Turning first to the ongoing debate over the usefulness of historical theoretical documents to the modern analyst, it should be obvious that Gallus Dressler, at least, was describing reality as he saw it. The relevance of Powers's statement that Dressler's "doctrine was unknown in its own day"¹ must be seriously challenged, for whether Dressler's writing was widely known or not, it appears aptly to describe the structural basis of the works of the era. Powers's suspicion of Aron's reliability has been shown, however, to be well-founded;² Aron and a few others appear to have held a radically different view of cadence-tone selection that may have had no relationship to actual practice. This should not be an excuse, however, to simply dismiss all modal theory of the time; Dressler's brand of *repercussae*-based cadence-tone theory appears adequately to reflect his contemporaries' practice. That Dressler's or any other theorist's treatise provides the "best insight"

1. Harold Powers, "Is Mode Real? Pietro Aron, the Octenary System, an Polyphony," *Basler Jahrbuch für Historische Musikpraxis* XVI (1992), 18.

2. *Ibid.*, 43.

into Renaissance composition, as phrased by Karol Berger,³ is probably still saying too much, but it is enough to cast serious doubt on Harold Powers's statement that there was "no necessary connection" between mode and composition.⁴ In observance of Peter Schubert's warnings,⁵ I have maintained that Dressler's theory is not a standard by which works are judged fit or unfit, but rather that it could be a guide to what the cadential structures of compositions in the various modes might be; ultimately, the empirical reality of the music's structure should be apparent, but considering our distance from the tradition within which this music was composed, a little inside information, however dubious and liable to misinterpretation, must be welcomed.

In further support of the "historicist" side of Renaissance analysis, Bernhard Meier's contention that the preselected mode is consciously "worked out" by the composer throughout a piece is validated by my findings on cadential content.⁶ Meier's crusade in *The Modes of Classical Vocal*

3. Karol Berger, "Tonality and Atonality in the Prologue to Orlando di Lasso's *Prophetiae Sibyllarum*: Some Methodological Problems in Analysis of Sixteenth-Century Music," *Musical Quarterly* LXVI/4 (Oct. 1980), 487.

4. Harold Powers, "Mode," *The New Grove Dictionary of Music and Musicians*, 20 vols., ed. Stanley Sadie (London: MacMillan, 1980), XII, 397.

5. Schubert, "Authentic Analysis," 4ff.

6. Bernhard Meier, "Alte und neue Tonarten. Wesen und Bedeuten," *Renaissance Music 1400-1600 donum natalicium René Bernard Lenaerts, Musicologica lovaniensia I* (Lense: Universitè de Lense, 1969), 158.

Polyphony to prove the distinction between authentic and plagal modality in polyphony appears as well to have been well-founded. The body of motets considered has revealed distinct groups of mode I and mode II works--those that cadence on the third degree frequently, and those that do so hardly at all. The other modes revealed similar bifurcation.

The central controversy, however, that must be revisited in light of these findings is the question of whether mode was (in the words of Harold Powers) "a necessary precompositional assumption . . . in the way that tonality is precompositional . . ." ⁷ The answer depends on the nature of the question. Yes, in the sense that a mode appears to have been preselected and deliberately used as a source of pitch content. Yes, in the sense that a hierarchy of pitches existed in the mode selected, and these found expression in the musical structure. Yes, in the sense that the pitch hierarchy, the pair of distinct principal cadences, was often made explicit in the opening section of the piece, inviting comparison to a tonicizing cadence at the close of a phrase in tonal music. But no, in the sense of the tonality being evident on a measure-by-measure level; here is the distinction that must be maintained. In simple tonal music, a few chords may suffice to imply the key, but

7. Harold Powers, "The Modality of *Vestiva i colli*," *Studies in Renaissance and Baroque Music in Honor of Arthur Mendel* (Kassel: Bärenreiter, 1974), 31.

the same may not be said of modal music. The implications of opening intervals of imitative sections can usually identify the pitch center, but not invariably, and the interior of a point of imitation may imply more than one pitch center. Though the cadential structure identified may resemble the section-defining cadences in tonal music, the successions of sonorities in between are not so regulated. On the positive side, however, there appears to be more to Powers's "tonal types" than just pitch content and final cadences--the cadential events in the interior of the work appear to have meaning as well.

Dahlhaus's assertion that ". . . the clausula forms neither the center around which the sonorities group themselves nor the goal toward which they strive . . ." ⁸ must also be reexamined, because what he describes are two different things. I propose that, while cadences are not the centers around which sonorities are organized, they are nonetheless goals preselected according to the custom of the mode and employed for closure of major sections within the work.

Saul Novack's quasi-Schenkerian search for triad projection in cadence selection is given an interesting twist by my findings on cadence selection in mode II. Though I would argue that cadence selection was governed by

8. Carl Dahlhaus, *Studies in the Origins of Harmonic Tonality*, trans. Robert Gjerdingen (Princeton, N.J.: Princeton University Press, 1990), 243.

the "principal cadence" concept, that is, the *repercussae* of the mode, the trend in mode II to use both the third and fifth degrees with nearly equal emphasis lends support to Novack's idea, as does the later sixteenth-century triad-based cadence-tone theory extolled by Zarlino and others. Such a merger, in which distinct principal cadence usage turns to a more uniform triad-based cadence selection, seems to parallel the trend toward an overall narrowing of the number of acceptable cadence-tones during the sixteenth century, as noted by Charles Dill⁹ and supported by my comparison of mode III and mode IV works of Josquin to those of the succeeding generation. The fusion of modes I and II, paralleled somewhat by the changes noted in cadence usage in modes III and IV, may lend new understanding to the evolution of true minor mode. Cristle Collins Judd's theory of UT, RE and MI tonalities is also supported by these findings, for they bear out the idea that the *repercussae* are interrelated in a smaller number of categories by the quality of important intervals above their finals, as seen in the similarity of mode I to mode II, or of mode V to mode VII.¹⁰

9. Dahlhaus, *Harmonic Tonality*, 50.

10. Cristle Collins Judd, "Modal Types and *Ut, Re, Mi* Tonalities: Tonal Coherence in Sacred Vocal Polyphony from about 1500," *Journal of the American Musicological Society* XLV/3 (Fall 1992), 440ff.

The confused state discovered in the mode III and mode IV works matches the conclusions of Steven Krantz that the norms of cadence-tone selection were in flux.¹¹ That the same phenomenon is not observed in modes V and VI, which remain (in the sample considered, at least) arguably distinct, is puzzling. This illustrates the main caveat to quasi-Schenkerian analysis of Renaissance music: though the results of cadential expression of a mode may sometimes resemble triad projection, the cadences are selected according to a different--and to the Schenkerian, an arbitrary--rule. A case in point is the mode VIII motet, which despite its preponderance of cadences on C and G will usually refuse to be fit into a C-tonality mold, as its true final is G, and its would-be tonic dominant relationship is G to D.

This fact in itself, however, has certain implications for the history of tonality. Though Dahlhaus questioned the relevance of fifth-relationships between frequently-occurring cadences in the authentic modes, denying any subordination of one to another,¹² the cadential procedure used in mode VIII works on the one hand and transposed mode V works on the other necessitates the dominance of either C or G, regardless of their frequency, through syntactical and structural position. This dominance is established by

11. Judd, "Ut, Re, Mi," 56ff.

12. Dahlhaus, *Harmonic Tonality*, 241.

repetition and structural emphasis, not unlike the confirmation of tonic by a series of cadences at an obvious terminal point of a section in tonal music. Another area of similarity is the primacy of the exordium in the establishment of the mode; though interior sections may stray from the principal cadences, the exordium is typically a reliable indicator of the final cadence and overall mode.

CHAPTER XII

AREAS FOR FURTHER RESEARCH

While it has been possible to establish that cadential expression of mode took place in a broad sample of mid-century music, it would be fruitful to pursue the terminal points of this practice. The modally-ordered collections that begin to appear after 1550 should be examined for evidence of syntactical cadential expression, as well as further large anthologies from later in the century.

The establishment of a beginning point is complicated by two factors. One, the presence of a cantus firmus is likely to be as strong a determinant of cadence degrees as is the composer's desire to express the mode. If, however, the cantus firmus-determined cadences coincide with what later theorists would recognize as modal expression, we may have further evidence for Leeman Perkins's idea that the phenomenon of cadential expression of mode was actually a result of the thorough absorption of the cantus firmus into all voices.¹ The other complicating factor is the fact that pre-Josquin works, tending to have less expansive imitative sections, may cadence as a result of contrapuntal necessity

1. Leeman Perkins, "Mode and Structure in the Masses of Josquin," *Journal of the American Musicological Society* XXVI/2 (Summer 1973), 198.

rather than by larger design. Such cadences are less deliberate, and more likely to be determined by the shape of the local melodic phrases; at some point, the relevance of the cadential content may change. At either end of the time period in which cadential expression of mode was used, it will be worthwhile to examine carefully the changes in treatment of the individual modes, being attentive to trends that might elucidate the transition from modality to major/minor tonality.

Another promising area of study is that of the cadential practices of individual composers. Dressler's theory seems to apply very well to the works of some composers, such as Jacobus Clemens; it might be fruitful to examine a large sampling of his motets, taking a cross section of his career, to search for any pattern over time in his cadential procedures. Josquin's motets are also especially promising; it would be interesting to know if any change in cadential procedures can be discovered across his style periods as we recognize them today. A group study, comparing the practices of Clemens with those of Thomas Créquillon and Nicolas Gombert, might reveal further insight into the differences in cadential procedure between Clemens and the other two leaders of the post-Josquin generation; while Clemens thus far appears to be exactly what Dressler described, the other two members of the theorist's list of

current masters² have exhibited (in an admittedly small sample) less consistency in this area. Orlando di Lasso would also provide an interesting subject, as he was a composer whom Dressler claimed "appears to exceed all others in suavity."³ His modally-ordered *Penitential Psalms* would be a good starting point, having been composed around the same time that Dressler wrote. Any connection between cadential expression of mode and *musica reservata* invites research.

On a more advanced level, the intersections between this cadential practice and tonality must further be pursued. Because the first and fifth scale degrees are important to several of the modes, one already finds many musical events in the music examined that appear (to the modern mind) to have a tonic-dominant relationship; how relevant is that idea to this music? One area of particular interest is the closing cadences of text sections; it might be fruitful to examine the relevance of the concept of open and closed sectional structure in this context.

Another tempting question in modal theory is that of modulation. Though the majority of works examined stay with the principal cadences at the conclusion of major sections, this is not true for all; those motets might be a useful starting point for a search for modal change within a piece.

2. Appendix B, XV, ¶13.

3. Appendix B, XV, ¶14.

The central question of this issue has been how we determine the establishment of a mode; Dressler's theory, though intended for the scale of an entire work, might be adaptable to a theory of internal modal change; that is, the same things that establish the mode in the exordium might establish an internal change of mode.

Concerning the rhetorical use of cadences, I hope to have established a better basis upon which to judge what is "expected" and "unexpected" in modal expression. An irregular cadence might, for example, be more "irregular" as the final cadence of the exordium than anywhere else; it would also stand out as the conclusion of a text section. An irregular cadence in the interior of the exordium would probably carry more weight than one in the interior of a later section. This idea may provide an answer to the question raised by Peter Schubert concerning what aspect of the text is "expressed" by regular cadences;⁴ in my view, the cadences of the exordium and those concluding succeeding sections function primarily as articulations of the musical framework and the main divisions of the text, but may or may not have an additional, secondary function in text-expression on the local level. This context provides a more solid basis from which to examine cadential "deviation."

4. Peter Schubert, "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 10.

In the area of modal classification, a problem discovered in the study of the Dressler motets in Chapter VIII still lingers--the conflict between the mode indicated by the melodic ranges and the mode indicated by the cadences. Though this level of detail was too exacting to continue into the broader scope of the motets from the *Psalmorum selectorum* studied in Chapter IX, the question of which method of modal classification is "correct" bears further examination. I am inclined to value the cadence, a specific musical event, over the ambitus, which is a general attribute of the work having more to do with the desired distribution of voices than with the pitch organization of the composition. This aspect, however, has been highly valued as a criterion of modal classification by the "historicist" camp in modal theory, and the whole issue deserves an independent investigation. The final cadence has also been a prized determinant of mode, and though Dressler's theory generally supports the idea of principal cadences at important structural points, it does not rule out a final cadence on the confinalis. In this case (or in an apparent such case, where the actual mode may be in doubt), does the weight of the exordium determine the mode regardless of the final? This appears to be the case in some of the motets examined (Appendix A, Tables 58, 60, and 61 in mode II, for example), but needs further proof.

Beyond this study's self-imposed horizon of the sacred motet, Dressler's cadence-tone theory might be a useful guide through the complexities of the mass. A comparison of cadential practices between a motet and mass paraphrasing that motet might yield a better understanding of the structural undergirding of the mass. A comparison of cadential modal expression in motet and madrigal might serve as a benchmark for the intersection and divergence of these genres during the sixteenth century. It might even profit in the study of the structure of free-composed instrumental music.

If our research is an attempt to construct a window to the past, then I have attempted in this study to clean and polish one corner of a much larger pane. Insofar as it has been successful, and has removed the blemishes of lack of knowledge, and has accounted for the limitations of Dressler's theory, as it were flaws in the glass itself, we will be able to see a bit more of the beauties that lie on the other side.

APPENDIX A

CADENCE-TONE TABLES

PREFACE

Each of the following tables are set up in four columns: "Measure," "Voices," "Degree," and "Text Phrase." The measure numbers employed are those in the cited modern edition; in those editions which do not number measures, I have numbered them beginning over from one at the secunda pars. In the Dressler motets, my measure numbers correspond to the keyboard reduction at the bottom of the score, because the voice parts are not barred consistently with each other. All numbers refer to the measure in which the cadence concludes.

Under the "Voices" column, the abbreviations S, A, T, B, Q for "Quintus," represent the voices involved in the clausula pattern; the "cantizans" is listed first, the "tenorizans" second. When a significant musical demarcation occurs, but no clear cadence pattern is detected, the abbreviation "N/C" ("non-cadential") appears under the "Voices" column. "Degree" represents the pitch class of the octave conclusion of the cadence. It should be noted that since cadences are being listed, only the endings of text sections are reflected in the measure numbers.

Table 14. Cadences in Dressler's "Venite ad omnes"
(XVII Cantiones, No. 1)¹

Measure	Voices	Degree	Text Phrase
Prima pars			
9	S1-T	G	1
12	A-S1	G	"
15	S2-A	G	"
17	S2-A	D	"
20	A-S2	G	"
22	S2-T	D	"
25	T-A	G	"
29	S2-A	D	2
31	S1-T	G	"
35	A-S2	G	"
38	S2-T	G	"
42	A-S2	D	3
47	S1-T	C	"
50	S2-T	B-flat	"
57	S2-T	G	"
Secunda pars			
5	S2-A	G	4
8	S1-T	G	"
11	T-A	D	"
15	A-S1	G	"
21	n/c	D	5
28	n/c	B-flat	"
33	A-S1	G	"
40	n/c	D	"
46	n/c	G	6
50	S2-T	G	"
56	n/c	C	"
60	S2-T	G	"

Table 15. Cadences in Dressler's "Lucerna pedibus meis
verbum tuum" (XVII Cantiones, No. 2)²

Measure	Voices	Degree	Text Phrase
8	A-T	G	1
11	S-T	G	"
13	B-A	G	"
15	A-S	G	"
17	A-B	D	"
20	T-A	G	2
21	A-B	D	"

(continued)

-
1. Halm and Eitner, 1-8.
 2. Halm and Eitner, 9-13.

26	A-S	D	"
28	S-T	F	"
34	S-T	G	"
41	T-A	G	3
44	T-S	D	"
45	S-A	D	"
46	A-S	G	"
51	A-T	D	4
53	A-B	D	"
57	T-B	D	"
60	A-S	D	"
62	A-S	G	"
65	S-T	G	"

Table 16. Cadences in Dressler's "Haec est voluntas ejus" (XVII Cantiones, No. 3³)

Measure	Voices	Degree	Text Phrase
5	A-S	G	1
7	S-T	G	"
7	A-B	D	"
9	B-T	G	"
13	T-B	G	"
15	A-S	D	"
18	S-T	G	"
21	T-A	G	"
24	A-B	D	2
26	S-A	D	"
29	T-B	D	"
32	S-T	G	"
35	T-A	B-flat	"
39	S-T	B-flat	3
41	T-A	B-flat	"
52	A-S	D	"
58	S-T	G	"
61	T-A	B-flat	"
(repeat begins from m. 34)			
65	S-T	B-flat	3
67	T-A	B-flat	"
78	A-D	D	"
84	S-T	G	"
88	S-T	G	"

3. Halm and Eitner, 14-18.

Table 17. Cadences in Dressler's "Vespera nunc venit"
(XVII Cantiones, No. 4)⁴

Measure	Voices	Degree	Text Phrase
5	n/c	E	1
7	S-A	A	"
13	A-B	A	"
16	T-A	A	"
20	S-T	A	"
22	S-T	G	2
28	T-A	G	"
31	T-A	A	"
33	S-T	E	"
40	S-T	A	3
42	S-T	E	"
45	S-T	A	"
52	S-T	A	"
54	S-T	E	"
57	B-A	A	"
61	n/c	E	"

Table 18. Cadences in Dressler's "Nil sum, miser
novi solatia (XVII Cantiones, No. 5)⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S1-A	A	1
11	T-S2	A	"
13	A-B	A	"
19	T-A	A	"
21	S2-S1	A	"
23	T-A	A	"
24	B-S2	A	"
25	A-B	E	"
28	A-S1	E	"
29	A-B	A	"
33	B-S1	E	"
36	S2-T	A	"
40	T-S2	A	2
42	S1-T	E	"
44	T-S2	A	"
46	S2-A	A	"
49	S1-T	E	"
50	A-T	D	3
53	S1-B	E	"
54	S2-T	A	"

(continued)

4. Halm and Eitner, 19-22.

5. Halm and Eitner, 23-33.

56	A-S1	C	"
59	A-B	E	"
63	S1-T	E	"
65	A-S1	C	"
68	S1-A	G	"
74	S2-T	G	"
80	S1-T	A	4
82	S1-S2	E	"
84	S2-T	E	"
86	T-B	A	"
89	S2-A	A	"
91	S1-T	A	"
93	A-T	E	"
95	T-B	A	"
98	S2-A	A	"
101	S1-T	A	"
103	S2-A	D	"
105	n/c	A	"
Secunda pars			
4	S1-T	A	5
7	T-B	A	"
9	S2-T	A	"
11	S1-A	A	"
15	T-B	A	"
23	A-T	A	"
26	S2-T	G	6
29	S1-T	E	"
33	A-T	E	"
35	S2-A	A	7
38	S2-A	A	"
40	S1-T	E	"
44	S1-T	A	"
47	S1-T	E	"
50	S2-T	E	"
52	S1-T	A	"
55	n/c	E	"

Table 19. Cadences in Dressler's "Quicquid erit tandem, mea spes" (*XVII Cantiones*, No. 6)⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S1-A	A	1
16	S1-A	A	"
19	S2-A	A	"
22	S1-T	A	"

(continued)

6. Halm and Eitner, 34-39.

25	S1-B	E	2
29	S2-T	C	"
32	T-B	A	3
34	A-S2	C	"
37	S2-T	E	"
39	S1-T	A	4
42	S2-T	A	"
Secunda pars			
6	S1-A	A	5
8	A-B	A	"
13	S1-T	A	"
15	S1-T	G	6
20	S2-T	E	"
25	B-A	A	"
26	n/c	E	"
28	S1-T	A	7
33	T-S2	E	"
38	B-S1	A	"
38	n/c	E	"

Table 20. Cadences in Dressler's "Ecce ego nobiscum sum"
(XVII Cantiones, No. 7)⁷

Measure	Voices	Degree	Text Phrase
7	S2-T	C	1
7	A-T	F	"
10	A-S2	F	"
12	S2-T	F	"
16	S2-B	C	"
16	A-B	F	"
22	S2-T	C	2
23	T-B	C	"
27	A-S1	F	"
32	S1-B	C	"
32	T-B	F	"
39	A-B	C	2
41	S2-S1	F	"
43	S1-T	F	"
47	S2-S1	C	"
50	S2-T	F	"
57	A-B	C	2
59	S1-S2	F	"
61	S2-A	C	"
65	S1-A	C	"
68	S1-T	F	"
71	n/c	F	"

7. Halm and Eitner, 40-43.

Table 21. Cadences in Dressler's "Fundamentum aliud nemo potest" (XVII Cantiones, No. 8)⁸

Measure	Voices	Degree	Text Phrase
6	S2-T	C	1
7	A-B	F	"
8	S2-T	A	"
12	T-S1	C	"
15	S1-A	A	"
16	A-B	C	"
22	S1-T	F	"
25	S2-T	C	"
30	A-T	F	2
33	S2-T	F	"
42	S1-A	C	3
45	S2-T	F	"
52	S1-T	F	"
59	S2-T	F	"
62	n/c	F	"

Table 22. Cadences in Dressler's "Pectus ut in spenso flammorum incedia sentit" (XVII Cantiones, No. 9)⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
7	S1-T	C	1
7	A-B	F	"
10	A-S1	F	"
12	S1-T	F	"
15	S1-B	C	"
18	A-S1	F	"
23	S2-T	C	"
25	A-S1	F	2
27	S1-A	F	"
28	T-A	F	"
29	S2-A	F	"
32	S1-T	C	"
35	S1-S2	F	"
38	n/c	C	"
42	A-B	F	3
44	S2-T	A	"
46	S1-A	F	"
51	S1-A	C	"
54	S2-T	F	"

(continued)

8. Halm and Eitner, 44-49.

9. Halm and Eitner, 50-59.

57	S2-B	C	4
58	A-S1	F	"
67	A-T	F	"
79	S1-T	F	"
Secunda pars			
7	S1-T	C	5
7	A-B	F	"
9	A-B	F	"
10	A-T	F	"
15	S2-B	C	"
15	A-S1	F	"
20	S2-S1	F	6
24	S1-T	F	"
27	S1-T	C	"
29	T-S1	C	"
31	S1-T	C	"
34	n/c	C	7
38	S2-T	F	"
41	n/c	C	"
45	S1-T	F	"
49	n/c	F	"

Table 23. Cadences in Dressler's "Ego sum lux mundi"
(*XVII Cantiones*, No. 10)¹⁰

Measure	Voices	Degree	Text Phrase
7	S-A	F	1
12	T-S	F	"
14	A-S	F	"
16	S-T	F	"
17	B-A	F	"
22	A-T	F	"
24	S-T	F	"
28	S-T	F	"
34	T-A	F	2
36	S-A	F	"
39	A-S	F	"
41	S-A	F	"
46	A-B	C	"
49	S-B	C	"
50	T-A	F	"
52	A-B	C	"
55	T-B	F	"
58	S-T	F	"
62	A-B	C	"
65	T-B	F	"
68	S-T	F	"
72	T-A	F	2
77	T-A	C	"
	(continued)		

10. Halm and Eitner, 60-67.

80	A-B	C	"
83	T-B	F	"
86	S-T	F	"
90	A-B	C	"
93	T-B	F	"
96	S-T	F	"
99	n/c	F	"

Table 24. Cadences in Dressler's "Sic Deus dilexit mundum"
(XVII Cantiones, No. 11)¹¹

Measure	Voices	Degree	Text Phrase
6	S-T	F	1
7	T-B	F	"
12	T-A	F	"
14	T-B	F	2
17	S-T	F	"
18	T-B	C	"
21	S-A	C	"
28	T-A	F	"
33	B-T	F	3
36	A-S	F	"
39	T-B	F	"
46	S-T	F	"
49	A-B	F	"
52	T-S	F	"
55	A-T	F	"
58	S-T	F	"
63	B-T	F	3
66	A-S	F	"
68	S-T	F	"
69	T-B	F	"
76	S-T	F	"
79	A-B	F	"
82	T-B	F	"
85	A-T	F	"
88	S-T	F	"
92	n/c	F	"

Table 25. Cadences in Dressler's "Amen dico vobis"
(XVII Cantiones, No. 12)¹²

Measure	Voices	Degree	Text Phrase
5	S-A	F	1
7	A-B	F	"
10	S-T	F	"
13	S-B	F	"

(continued)

11. Halm and Eitner, 68-73.

12. Halm and Eitner, 74-79.

14	A-T	B-flat	"
17	A-B	F	"
19	S-T	F	"
23	A-S	F	2
26	T-A	F	"
30	B-T	F	"
34	T-A	C	"
38	A-S	F	3
40	T-A	C	"
43	S-T	F	"
49	T-A	F	"
53	A-S	F	4
56	T-A	F	"
60	B-T	F	"
64	T-A	C	"
68	A-S	F	5
70	T-A	C	"
73	S-T	F	"
79	T-A	F	"

Table 26. Cadences in Dressler's "Dixit Jesus mulieri"
(*XVII Cantiones*, No. 13)¹³

Measure	Voices	Degree	Text Phrase
8	A-B	C	1
13	S2-T	F	"
16	A-S2	F	"
17	S2-A	F	"
25	S2-T	F	"
37	S1-T	F	2
43	A-S2	F	1
44	S2-A	F	"
46	T-B	C	"
49	S2-T	F	"
52	S2-T	F	"
55	B-T	F	3
60	A-T	F	"
64	S1-T	F	"
69	B-T	F	3
71	A-S2	F	"
73	T-A	F	"
74	S1-B	F	"
76	S2-A	F	"
77	B-T	F	"
78	A-B	C	"
79	S1-T	F	"
81	n/c	F	"

13. Halm and Eitner, 80-85.

Table 27. Cadences in Dressler's "Corporatis exercitatio paululum habet" (XVII Cantiones, No. 14)¹⁴

Measure	Voices	Degree	Text Phrase
6	A-T	F	1
9	A-S1	F	"
11	T-B	C	"
14	S1-T	F	"
15	T-B	F	"
17	S1-S2	F	"
23	S2-T	F	"
26	S1-S2	F	"
27	A-B	F	"
33	A-S1	F	"
36	S2-T	F	"
44	T-B	F	2
48	A-S1	F	"
50	S1-B	F	"
53	S1-T	C	"
56	T-A	F	"
59	S2-S1	F	"
62	S1-T	F	"
70	T-B	F	2
74	A-S2	F	"
76	S2-B	F	"
79	S2-T	C	"
82	T-A	F	"
85	S1-S2	F	"
88	S2-T	F	"
91	S1-B	B-flat	"
92	n/c	F	"

Table 28. Cadences in Dressler's "Amen dico vobis" á5 (XVII Cantiones, No. 15)¹⁵

Measure	Voices	Degree	Text Phrase
12	A1-A2	F	1
15	A2-A1	G	"
17	A1-T	C	"
19	S-T	C	"
21	A2-A1	F	2
24	S-A1	C	"
32	S-B	G	"
32	T-A2	C	"
33	A2-B	C	3
38	A2-B	G	"
39	S-T	C	"

(continued)

14. Halm and Eitner, 86-92.

15. Halm and Eitner, 93-100.

41	A1-S	C	4
43	A1-S	C	"
44	n/c	C	"
45	S-T	D	"
46	A2-A1	G	"
49	S-T	C	"
51	T-B	G	5
54	A1-T	G	"
55	S-A2	C	"
56	B-A1	C	"
57	T-B	G	"
58	A1-T	C	"
58	n/c	C	"
61	S-A1	E	5
65	A2-A1	C	"
70	S-T	G	"
73	A1-T	C	"
74	n/c	C	6
75	A2-B	C	"
78	S-T	C	"
82	S-T	G	"
83	S-A2	C	"
84	n/c	C	"
86	S-A2	C	"
88	S-T	C	"
90	T-B	C	"
94	S-T	C	"
98	S-T	G	6
100	S-A1	C	"
103	S-A1	C	"
107	T-B	C	"
111	S-T	C	"
113	A2-B	F	"
115	n/c	C	"

Table 29. Cadences in Dressler's "Ego plantavit, Apollo rigavit" (*XVII Cantiones*, No. 16)¹⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
4	S1-A	G	1
7	T-B	G	"
10	S1-A	C	"
13	A-T	G	"
14	T-B	G	"
17	B-S2	G	1
21	S1-T	G	"
25	A-T	G	"
27	T-B	A	"
(continued)			

16. Halm and Eitner, 101-108.

29	S1-B	A	"
29	A-S2	D	"
31	S2-B	G	"
31	A-S1	C	"
33	S1-T	G	2
35	A-B	E	"
37	S1-B	A	"
39	S2-A	G	"
43	S1-T	G	"
45	n/c	G	"
Secunda pars			
8	S1-T	G	1
11	S1-B	G	"
16	S1-A	C	2
19	A-B	G	"
24	S2-T	D	"
28	S1-T	G	"
30	A-B	A	2/3
32	S2-T	A	"
32	A-S1	D	"
33	S1-T	G	"
35	S2-B	G	"
35	A-T	C	"
37	S2-T	G	3
40	S1-T	G	"
44	S2-T	G	"
46	T-A	C	"
50	n/c	G	"

Table 30. Cadences in Dressler's "Ego sum panis ille vitae" (*XVII Cantiones*, No. 17)¹⁷

Measure	Voices	Degree	Text Phrase
4	S-A	G	1
7	T2-B	G	"
10	T1-A	G	"
12	S-T2	G	"
13	T2-B	G	"
14	B-T1	G	"
16	T2-A	G	"
19	T2-T1	G	"
22	A-T1	G	2
25	A-T2	G	"
28	S-T2	G	"
32	T2-T1	G	"
33	T1-A	D	"
35	B-T2	G	"
38	T2-A	D	"

(continued)

17. Halm and Eitner, 109-115.

40	S-T2	G	"
41	S-T2	C	"
43	S-T2	G	"
46	T2-B	A	3
47	T1-A	D	"
49	B-T1	G	"
51	S-T2	G	"
54	A-T2	D	"
55	T2-S	D	"
58	A-B	G	"
59	S-T1	A	"
60	T2-A	D	"
62	S-T2	G	"
63	T2-B	G	"
64	B-T1	G	"
68	T2-A	G	"
71	T2-B	G	3
72	B-T2	G	"
73	S-T2	G	"
75	S-T2	G	"
78	T2-T1	G	"
80	n/c	G	"
82	T2-B	G	"
83	B-T1	G	"
84	B-T1	G	"
85	T1-T2	G	"
86	n/c	G	"

Table 31. Cadences in Jacobus Clemens'
"Domine, non est exaltatum cor meum"¹⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S-A	D	1
16	S-T	G	"
21	T-A	D	2
26	Q-A	D	"
30	S-T	G	"
31	A-S	D	"
33	A-B	D	3
38	S-Q	G	"
42	T-S	G	"
46	S-Q	G	"
47	A-T	D	4
48	S-Q	A	"
53	A-T	D	"

(continued)

18. Karel P. Bernet Kempers, ed., *Clemens non Papa, Opera omnia*, 21 vols., *Corpus mensurabilis musicae* IV (Rome: American Institute of Musicology, 1951-1976), IX, 27-34.

56	A-B	D	"
58	T-Q	D	"
61	S-T	A	5
65	Q-B	G	"
71	Q-B	A	"
74	S-Q	G	"
76	n/c	G	"
Secunda pars			
13	A-Q	D	1
20	S-T	G	"
21	B-T	G	2
23	S-A	G	"
35	S-T	D	"
36	A-Q	G	"
43	S-A	D	3
45	S-T	G	"
46	A-T	D	"
49	S-T	D	"
52	S-T	G	"
62	S-Q	G	4
66	n/c	G	"

Table 32. Cadences in Jacobus Clemens' "Domine probasti me"¹⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
6	S-A1	D	1
8	A2-T	G	"
14	T-A1	D	"
16	S-T	G	"
19	A1-B	D	"
19	T-A2	G	"
24	A2-B	D	"
26	A1-T	G	"
29	n/c	D	2
35	S-T	D	"
39	A1-B	D	"
47	A1-B	D	3
50	A1-A2	G	"
52	T-A2	D	"
59	S-A1	D	"
61	A2-T	G	"
65	T-B	D	4
68	S-A2	D	"

(continued)

19. Bernet Kempers, XIII, 122-128.

71	T-A2	D	"
74	A1-A2	G	"
78	A2-T	G	"
80	n/c	G	"
Secunda pars			
84	A1-B	A	5
87	S-A1	D	"
89	A2-B	D	"
91	A2-A1	G	"
93	S-A2	D	"
95	A2-B	D	"
98	S-A2	D	"
105	S-A1	A	6
105	T-A2	D	"
108	S-A2	B-flat	"
112	S-A2	D	"
115	A2-B	D	"
118	S-A1	D	"
122	S-T	G	"
124	S-T	D	7
126	A2-A1	D	"
127	A2-B	G	"
129	A1-A2	G	"
130	S-A2	D	"
143	S-A2	D	"
145	A1-T	G	"
149	S-T	G	"
151	n/c	G	"

Table 33. Cadences in Jacobus Clemens' "Exaltabo te Domino"²⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
19	S-A	G	1
20	S-T	G	"
23	S-A	D	"
30	S-T	D	"
35	S-B	A	2
35	A-Q	D	"
38	T-Q	G	"
41	Q-B	G	"
48	S-B	A	"
49	A-Q	D	"
58	B-T	D	3
65	S-T	G	"

(continued)

20. Bernet Kempers, XIII, 104-111.

67	S-A	A	4
71	A-Q	D	"
73	S-T	G	"
81	S-Q	G	"
83	n/c	G	"
Secunda pars			
90	n/c	D	5
98	S-T	G	"
101	A-Q	D	"
103	S-A	G	"
105	S-Q	G	6
111	A-Q	G	"
116	S-A	G	"
120	S-Q	A	"
121	A-T	D	"
122	T-S	D	"
123	Q-A	G	"
124	S-Q	G	"
126	S-A	A	"
129	S-T	G	"
131	S-T	A	7
133	S-Q	A	"
135	A-B	D	"
139	A-B	D	"
140	S-A	G	"
141	S-T	A	8
142	B-A	G	"
143	B-A	G	"
144	S-A	G	"
145	S-T	A	"
150	S-T	A	"
151	T-B	D	"
155	Q-B	A	"
156	A-S	A	"
159	S-B	A	"
159	A-T	D	9
163	A-Q	D	"
170	S-Q	G	"
178	S-T	G	"
181	n/c	G	"

Table 34. Cadences in Jacobus Clemens'
"In te Domine speravi"²¹

Measure	Voices	Degree	Text Phrase
6	S-Q	D	1
9	A-T	G	"
19	Q-T	G	"

(continued)

21. Bernet Kempers, XIII, 39-43.

21	S-T	A	2
25	A-B	A	"
27	S-B	A	"
28	S-Q	D	"
32	T-Q	D	"
35	S-A	D	3
37	T-A	G	"
44	T-Q	D	"
46	S-Q	D	"
49	Q-A	G	"
60	S-A	D	4
66	S-Q	D	"
70	S-A	D	"
72	Q-A	G	5
78	T-Q	D	"
87	S-A	G	"
95	S-Q	G	"
96	n/c	G	"

Table 35. Cadences in Thomas Créquillon's
"Adjuva nos Deus"²²

Measure	Voices	Degree	Text Phrase
4	S-A	D	1
7	S-A	D	"
9	S-T	G	"
13	S-T	A	"
14	Q-A	D	"
19	A-T	D	"
28	S-B	D	2
29	T-Q	G	"
35	S-Q	G	"
38	A-T	C	"
39	Q-B	B-flat	"
41	Q-B	G	"
44	S-Q	G	"
59	S-Q	C	3
61	S-Q	A	"
64	A-Q	G	"
70	A-Q	G	4
72	S-A	D	"
74	S-Q	A	"
78	A-T	D	"
82	n/c	D	"

22. George R. Walter, *The Five-Voice Motets of Thomas Créquillon*, 2 pts. in 3 vols. (Ph.D. dissertation, West Virginia University, 1975), pt. 2, I, 6-14.

Table 36. Cadences in Thomas Créquillon's
"Domine, da nobis auxilium"²³

Measure	Voices	Degree	Text Phrase
Prima pars			
4	A1-S	G	1
7	S-A2	D	"
8	A1-T2	A	"
10	A1-T1	G	"
11	A1-T2	A	"
12	T1-A1	D	"
13	A2-B	D	"
16	T1-B	G	"
17	A1-T1	G	"
20	S-T1	G	"
22	A1-T2	G	"
24	A1-T1	D	"
30	T1-A1	D	2
33	A1-T2	A	"
33	B-T2	G	"
37	T2-A2	D	"
40	A2-T2	D	"
44	S-T1	G	"
47	T2-T1	G	3
49	S-T1	G	"
52	A1-T2	A	"
53	A1-T2	D	"
55	A1-T1	G	"
57	S-T2	F	"
59	T2-T1	A	"
61	T2-B	G	"
63	S-T1	A	"
64	S-T2	A	"
66	S-A2	D	"
68	A1-T1	G	"
68	A2-B	D	"
73	A1-T1	G	"
75	n/c	G	"
Secunda pars			
82	T1-A1	D	4
84	A1-T1	G	"
87	S-T2	G	"
94	S-T2	A	"
96	A1-A2	E	"
98	S-T2	A	"
101	T1-B	D	"
104	A1-T2	D	"
106	T-B	G	"
(continued)			

23. Barton Hudson, *Thomas Crecquillon, Opera omnia*, 5 vols. to date, *Corpus mensurabilis musicae* LXIII (Rome: American Institute of Musicology, 1974-), V, 53-65.

109	A1-S	G	5
115	A1-T2	F	"
118	A2-B	G	"
119	S-A2	G	"
121	T2-B	D	"
122	T1-A2	G	"
123	A1-S	G	"
125	T2-A2	D	"
129	A2-T2	G	"
133	A1-T2	D	"
137	T1-A1	D	6
140	A1-A2	G	"
146	T1-A2	D	"
148	B-T2	G	"
150	S-T2	G	"
154	S-T2	G	"
157	n/c	G	"

Table 37. Cadences in Thomas Créquillon's
"Invocabo nomen tuum Domine"²⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
8	A-S	G	1
9	S-T2	G	"
11	S-T2	A	"
12	T1-A	D	"
14	A-B	D	"
15	S-T2	G	"
19	T1-T2	D	"
22	S-T2	D	2
24	T1-A	D	"
27	S-B	D	"
34	T2-B	D	"
37	T2-B	A	"
41	S-A	A	"
43	T1-B	A	"
47	A-T2	D	"
49	n/c	D	"
Secunda pars			
54	A-S	G	3
59	S-T2	G	"
66	S-T2	A	"
68	T1-A	A	"
70	T1-A	D	"
80	S-T2	A	"
82	S-T1	D	"

(continued)

24. Walter, pt. 2, II, 440-452.

Tertia pars			
88	S-T2	G	4
90	T2-B	D	"
92	S-T1	A	"
95	T1-T2	G	"
97	A-S	D	"
100	S-T2	D	"
102	A-T2	D	"
103	B-T1	G	"
106	S-T1	G	"
108	T1-B	A	"
114	T1-A	D	"
119	S-T2	G	"
122	n/c	G	"

Table 38. Cadences in Thomas Créquillon's
"Venite et videte opera Domini"²⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
13	S-T1	A	1
15	S-T2	G	"
19	S-T1	D	"
20	T1-A	D	2
23	S-T1	G	"
26	A-T1	D	"
28	T2-B	G	"
29	S-A	D	"
30	A-B	D	"
33	S-T2	G	"
47	B-S	G	"
50	S-T2	A	3
52	S-T2	G	"
54	A-B	D	"
56	A-T1	F	"
63	T2-B	A	"
66	T2-B	C	"
68	A-T1	D	"
69	n/c	D	"
Secunda pars			
75	S-A	D	4
77	A-S	D	"
80	S-T1	G	"
83	A-T1	D	"
84	A-T2	D	"
90	S-T1	G	"
94	T1-B	G	"
98	S-T1	G	"

(continued)

25. Walter, pt. 2, II, 888-900.

102	A-B	D	5
104	A-T2	D	"
107	A-B	D	"
108	S-T1	G	"
115	T1-B	D	"
120	S-T1	G	"
124	n/c	G	"

Table 39. Cadences in Nicolas Gombert's
"In te Domine speravi"²⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
8	A2-A1	D	1
11	A1-S	A	"
11	T1-A1	G	"
15	S-T1	D	"
17	T1-B	D	"
23	S-T2	G	"
31	S-T1	D	"
34	S-A2	D	"
36	A2-B	D	2
48	S-T1	D	"
54	S-A2	G	"
58	A1-B	D	"
62	A1-B	D	"
72	T1-B	D	"
74	S-A2	A	"
76	S-T1	D	"
78	n/c	D	3
82	T1-A2	C	"
84	S-T1	C	"
85	n/c	C	"
87	S-A2	C	"
90	S-T2	D	"
97	T1-T2	D	"
100	A1-B	G	"
104	T1-B	D	"
109	n/c	D	"
Secunda pars			
115	S-T1	D	4
117	n/c	D	"
121	S-T2	D	"
123	A2-T2	D	"
124	S-A2	A	"
128	S-T1	G	"
131	A1-T2	F	"
(continued)			

26. Joseph Schmidt-Gorg, *Niclas Gombert, Opera omnia*, 11 vols., *Corpus mensurabilis musicae* VI (Rome: American Institute of Musicology, 1951-1974), IX, 136-145.

139	A1-B	G	"
140	B-A2	G	"
142	T1-S	F	5
143	S-T1	C	"
145	S-A2	B-flat	"
149	S-A2	C	"
151	S-A2	G	"
159	S-A2	C	"
160	T1-B	C	"
163	S-A2	G	"
168	S-T1	G	"
172	n/c	G	"

Table 40. Cadences in Nicolas Gombert's
"Laqueus contritus est"²⁷

Measure	Voices	Degree	Text
Prima pars			
8	A-S	D	1
9	S-T	G	"
15	S-T	D	"
19	A-T	D	"
21	T-S	G	"
26	A-S	D	2
28	T-A	G	"
32	S-B	D	"
34	S-T	D	"
37	S-T	A	"
39	T-A	D	"
41	A-B	D	"
43	A-B	G	"
49	A-S	D	3
54	S-T	A	"
57	S-T	D	"
61	A-T	F	"
63	S-A	A	"
65	A-B	G	"
71	S-T	G	"
74	n/c	G	"
Secunda pars			
83	S-A	A	4
85	A-S	D	"
93	S-T	G	"
96	A-T	D	"
99	A-S	D	"
101	S-T	D	"
102	T-A	G	"

(continued)

27. Schmidt-Gorg, X, 42-47.

107	A-B	D	5
111	T-A	D	"
120	S-T	G	"
128	S-T	D	6
130	B-A	G	"
131	S-A	G	"
132	A-S	D	"
134	S-T	G	"
138	A-S	D	"
140	A-T	D	"
141	S-A	G	"
146	S-T	G	"
148	n/c	G	"

Table 41. Josquin des Prés'
"Domine, ne in furore tuo argas me"²⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S-A	A	1
12	A-S	D	"
19	T-B	A	"
23	B-T	D	"
42	A-B	D	2
60	T-B	A	3
66	S-T	A	"
73	B-S	A	4
74	S-T	A	"
78	S-T	A	"
89	A-B	G	5
91	n/c	E	"
Secunda pars			
99	T-B	A	6
103	A-B	E	"
106	S-T	A	"
107	A-B	A	"
109	S-T	D	"
117	T-B	D	7
125	A-S	D	"
131	n/c	C	8
136	n/c	G	"
142	S-B	D	"
(continued)			

28. Albert Smijers et. al., *Werken van Josquin De Prés*, 53 vols. in 5 series (Amsterdam: G. Alsbach; Leipzig: Kistner & Siegel, 1921-1969), ser. 3, XV, 131-137.

145	A-B	A	9
147	A-B	E	"
148	T-S	E	"
160	T-B	A	"
168	n/c	D	"

Table 42. Cadences in Josquin des Pres'
"Mirabilia testimonia tua, Domine"²⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
11	A-S	D	1
21	B-T	D	"
27	S-T	D	"
31	S-T	A	"
33	A-B	D	"
35	S-T	D	"
39	n/c	A	2
40	T-S	A	"
46	S-T	A	"
47	B-A	D	"
49	S-A	A	"
53	A-B	G	"
54	S-T	A	"
56	S-T	D	"
64	S-A	A	"
68	T-B	D	"
72	S-A	D	"
76	T-B	A	"
78	A-S	E	"
80	B-T	E	"
82	B-T	D	"
84	A-B	A	"
86	S-T	D	"
95	A-T	A	3
99	A-B	C	"
103	S-T	A	"
105	B-T	D	"
107	T-B	A	"
112	S-T	D	"
118	A-B	C	"
122	A-B	A	"
129	S-T	D	"
134	S-T	A	4
140	S-T	D	"
144	A-B	C	"
146	A-B	A	"
148	S-T	D	"
154	A-B	C	"
156	A-B	A	"

(continued)

29. Smijers, *Josquin*, ser. 3, XVIII, 69-82.

158	A-B	A	"
162	A-B	A	"
Secunda pars			
175	A-B	E	1
177	S-T	A	"
183	A-B	A	"
185	S-T	D	"
189	S-A	D	"
191	T-B	A	"
194	S-T	D	"
197	A-B	E	"
199	A-B	C	"
201	B-T	D	"
203	A-B	C	"
207	S-T	D	"
209	A-T	D	2
211	T-B	D	"
213	T-S	D	"
215	S-A	D	"
216	A-S	G	"
219	S-T	C	"
221	A-B	F	"
225	A-B	A	"
227	A-T	E	"
229	T-B	A	"
233	S-A	A	"
235	A-B	D	"
243	S-T	D	"
251	T-B	A	3
255	S-T	A	"
261	S-T	A	"
265	A-B	D	"
267	B-A	A	"
271	S-T	D	"
273	A-B	D	"
275	S-T	F	"
279	A-B	D	"
281	A-S	D	"
283	S-T	D	"
289	S-T	A	4
294	A-B	D	"
299	S-T	D	"
303	T-B	A	"
305	A-B	C	"
309	A-B	C	"
311	A-B	A	"
313	n/c	D	"

Table 43. Cadences in Josquin des Pres'
"Usquequo, Domine"³⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
10	S-T	A	1
12	A-B	D	"
16	A-B	G	"
19	S-T	G	"
31	B-T	G	2
34	S-T	G	"
43	S-T	C	3
49	T-B	C	"
52	T-B	G	"
53	S-T	G	"
67	S-T	G	4
78	T-B	D	5
79	n/c	D	"
Secunda pars			
86	S-T	G	6
93	A-B	G	"
100	S-T	D	"
106	D-T	G	"
109	S-T	F	7
113	A-B	G	"
115	S-T	G	"
118	S-A	C	8
120	T-B	C	"
126	B-T	G	"
141	S-T	G	9
149	T-B	G	"
152	A-S	D	"
153	T-S	G	"
154	B-T	G	"
160	T-B	G	10
166	S-T	G	"

30. Smijers, *Josquin*, ser. 3, XV, 138-145.

Table 44. Cadences in Elzear Genet's
"Legem pone mihi Domine"³¹

Measure	Voices	Degree	Text Phrase
Prima pars			
14	T-B	D	1
27	S-A	D	"
34	T-B	D	2
40	S-A	D	"
48	S-T	D	"
50	A-B	D	3
52	B-T	A	"
56	A-T	D	"
61	S-T	D	"
62	T-B	D	"
64	A-B	G	"
66	S-B	D	"
68	S-T	A	"
70	A-S	D	"
86	S-A	A	"
94	T-B	D	4
97	S-A	D	"
102	S-T	A	"
106	A-B	D	"
110	S-A	D	5
115	T-B	A	"
119	S-T	D	"
140	T-B	D	"
147	S-T	A	"
159	A-B	E	"
162	A-B	E	"
163	S-T	A	"
Secunda pars			
174	T-S	D	6
179	S-A	D	"
183	T-B	D	"
186	T-B	D	"
195	S-A	D	"
201	S-A	D	"
203	T-B	D	"
211	n/c	A	"
213	A-S	A	"
220	B-T	C	7
223	B-T	D	"
228	S-A	D	"
(continued)			

31. Albert Seay, *Carpentras, Opera omnia*, 5 vols. to date, *Corpus mensurabilis musicae* LVIII (Rome: American Institute of Musicology, 1972-), V, 85-99.

231	S-B	C	"
234	T-B	F	"
238	S-T	A	"
250	A-S	G	8
262	B-T	A	"
271	A-B	G	"
276	T-B	D	"
286	S-B	A	"
289	A-B	A	"
294	n/c	A	"
304	A-B	D	9
308	A-B	D	"
310	S-T	D	"
316	A-B	F	"
322	S-T	A	"
325	A-B	D	"
327	S-T	D	"
337	S-T	A	"
341	A-B	F	10
344	S-T	A	"
345	A-B	A	"
346	T-A	C	"
355	S-T	A	"
358	S-T	A	"
361	A-B	D	"
369	S-T	D	"

Table 45. Cadences in Nicolas Gombert's "Salvum me fac"³²

Measure	Voices	Degree	Text Phrase
Prima pars			
7	A-S	D	1
12	B-T	D	"
14	S-A	A	"
19	T-B	A	"
20	B-A	A	"
25	S-T	D	"
26	S-B	A	2
34	A-S	D	"
37	T-B	A	"
42	T-A	A	"
46	S-B	E	"
57	S-A	A	3
59	T-A	D	"
63	S-T	G	"
65	T-B	A	"
74	S-T	F	4
77	A-B	C	"

(continued)

32. Schmidt-Gorg, V, 36-43.

81	T-S	D	"
84	A-B	A	"
86	S-B	D	"
89	S-B	D	"
92	S-T	D	"
Secunda pars			
99	A-T	D	5
101	A-S	D	"
103	n/c	G	"
105	A-B	D	"
106	T-S	D	"
110	A-T	G	"
113	T-B	A	"
119	T-B	A	6
125	S-T	D	"
131	S-T	E	7
135	T-A	A	"
141	S-T	A	"
146	S-T	E	8
149	S-T	A	"
153	S-T	A	"
156	A-S	D	"
159	T-B	A	"
164	S-T	D	"
167	T-B	G	"
173	T-B	A	9
174	S-A	A	"
183	T-A	A	"
186	A-B	A	"
188	A-S	D	"
189	A-T	D	"
190	B-S	G	"
194	S-T	D	"
195	n/c	D	"

Table 46. Cadences in Maistre Gosse's "Laudate Dominum"³³

Measure	Voices	Degree	Text Phrase
5	T-B	D	1
9	S-A	D	"
15	S-T	A	2
20	S-T	G	"
22	T-B	D	"

(continued)

33. Albert Smijers and Tillman Merritt, eds., *Trieze livres de motets parus chez Pierre Attaingnant*, 14 vols. (Paris, Monaco: Loiseau-Lyre, 1934-1964), IX, 34-36.

25	T-B	D	3
26	n/c	D	"
27	S-A	A	"
29	S-T	A	"
30	B-S	G	"
34	S-A	D	"
36	T-B	F	4
41	S-T	G	"
43	T-B	F	"
47	S-T	G	"
48	n/c	G	"

Table 47. Cadences in Jean Guyon's
"Fundamenta ejus in montibus"³⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
8	B-T	G	1
15	A-S	D	"
21	B-T	A	"
22	S-A	A	2
32	S-A	A	"
38	n/c	A	"
44	S-T	A	3
48	S-A	D	"
50	n/c	B-flat	"
53	T-B	A	4
54	A-T	D	"
55	S-A	A	"
58	T-A	D	"
59	S-T	A	"
62	S-T	F	"
75	B-S	D	5
76	n/c	A	"
Secunda pars			
82	S-T	A	6
86	S-A	A	"
87	n/c	D	"
91	A-S	D	"
92	B-S	D	"
98	S-A	D	"
109	S-T	A	"
110	A-S	D	"

(continued)

34. Smijers and Merritt, *Trieze livres de motets*, IX, 13-21.

112	B-A	D	7
113	T-A	A	"
118	B-T	G	"
120	n/c	A	"
124	A-S	D	"
130	T-A	A	"
135	T-B	A	"
140	S-A	A	"
142	S-T	D	"
148	S-T	D	"
150	n/c	D	"

Table 48. Cadences in Jachet de Mantua's "Salvum me fac"³⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
10	A-S	F	1
14	Q-T	D	"
23	S-T	G	"
30	S-T	D	2
32	Q-T	D	"
37	S-Q	G	"
40	Q-B	D	"
45	S-Q	D	"
52	T-B	F	3
54	T-A	C	"
57	A-Q	C	"
61	T-B	D	"
67	A-S	G	"
70	S-T	D	"
75	A-B	A	"
77	S-B	A	"
80	S-T	G	4
87	S-T	A	"
99	Q-T	G	"
101	A-T	G	"
111	S-T	G	"
Secunda pars			
123	Q-B	D	5
125	A-Q	A	"
133	A-T	G	"
144	A-T	G	6
152	S-A	D	"

(continued)

35. George Nugent, *Jacquet of Mantua, Collected Works*, 5 vols. to date, *Corpus mensurabilis musicae* LIV (Rome: American Institute of Musicology, 1970-), V, 118-131.

158	Q-S	D	7
164	Q-T	A	"
167	S-Q	D	"
177	T-B	D	8
187	Q-T	B-flat	"
189	S-T	G	"
199	S-T	G	9
202	n/c	G	"

Table 49. Cadences in Francois de Layolle's
"Memor est verbi tui"³⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
9	S2-S3	A	1
17	S2-S3	A	"
23	A-B	A	"
24	B-T	A	"
31	S1-T	A	"
34	T-S3	A	2
42	B-S1	D	"
43	S2-A	D	"
46	S2-S1	D	"
48	S3-A	A	3
52	n/c	A	"
57	S2-S3	A	"
59	S1-S3	D	"
66	S3-S1	A	4
68	S3-S1	D	"
70	A-T	D	"
72	S2-S3	D	"
77	T-A	D	"
80	S3-B	A	"
84	S2-A	C	5
89	S1-S3	A	"
98	T-S2	A	"
102	S3-S2	A	"
106	S1-S2	D	"
115	n/c	A	"
Secunda pars			
120	S1-S3	D	6
124	S2-S1	A	"
133	S1-B	A	"
(continued)			

36. Frank D'Accone, *Francois de Layolle, Collected Motets, Music of the Florentine Renaissance V* (Rome: American Institute of Musicology, 1973), 69-83.

136	S2-S3	A	"
139	S3-T	A	"
141	B-S3	G	7
142	A-S1	G	"
143	S1-S2	G	"
148	T-S1	G	"
149	S1-S2	G	"
150	B-S2	G	"
154	S1-T	G	"
157	B-A	A	8
160	B-S3	A	"
164	S3-B	A	"
169	S2-T	A	"
174	S3-A	A	"
177	S2-S1	D	"
179	T-A	G	9
181	S1-B	G	"
188	B-S3	A	"
189	A-S2	A	"
194	S2-S1	A	"
202	S3-S1	A	10
204	S2-S1	A	"
207	S1-S2	D	"
209	T-A	G	"
211	S1-B	G	"
218	S2-S1	A	"
220	A-S3	A	"
222	S3-B	A	"
224	S1-T	D	"
226	n/c	D	"

Table 50. Cadences in Cristobal de Morales'
"Inclina me, Domine, aurem tuam"³⁷

Measure	Voices	Degree	Text Phrase
7	S-T	A	1
12	S-B	A	"
14	A-B	A	"
16	A-T	A	"
19	S-T	D	"
29	T-B	D	2
35	A-B	G	"
37	S-A	D	"
43	A-S	A	3
45	B-T	A	"
47	T-A	C	"
54	S-T	C	"

(continued)

37. Smijers and Merritt, *Trieze livres de motets*, IX, 151-164.

64	T-B	D	4
71	A-S	F	"
77	S-T	D	"
86	S-A	D	5
94	S-A	A	"
96	n/c	A	"
Secunda pars			
107	B-A	D	6
109	A-B	F	"
123	S-A	D	7
127	A-B	A	"
133	A-B	D	8
144	S-A	A	9
147	S-A	C	10
150	A-S	C	"
156	S-A	D	"
158	n/c	A	"
Tertia pars			
164	S-T	C	11
167	S-A	E	"
169	n/c	A	"
174	S-A	A	"
182	S-T	D	"
187	A-B	A	12
190	A-S	A	"
191	T-A	D	"
193	S-B	A	"
201	T-B	D	13
206	S-A	D	"
212	n/c	F	"
222	A-B	D	"
225	S-T	D	"
229	S-T	A	14
232	S-T	D	"
236	S-T	A	"
238	n/c	D	"

Table 51. Cadences in Adrian Willaert's
"Qui habitat in adjutorio"³⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S-A	D	1
10	A-S	G	"
14	T-B	D	"
19	T-B	E	"
23	T-B	D	"
32	S-T	A	2
34	T-B	C	"
38	S-T	D	"
58	T-B	E	3
59	S-A	A	"
64	n/c	A	4
69	S-A	C	"
74	T-A	E	"
75	S-T	E	"
76	A-B	A	"
79	S-A	E	"
83	S-A	D	"
88	T-B	F	5
89	T-A	D	"
94	A-S	A	"
98	A-B	D	"
100	S-T	D	"
102	T-A	D	"
107	B-S	D	"
113	S-A	D	"
115	n/c	A	"
Secunda pars			
6	B-T	D	6
9	T-B	C	"
12	A-S	A	"
13	T-B	C	"
15	A-B	F	"
18	S-A	C	"
21	A-S	G	"
28	A-T	D	"
30	S-A	G	"
38	S-T	D	7
40	S-A	C	"
43	S-T	D	"
50	A-B	E	"
(continued)			

38. Hermann Zenck, *Adrian Willaert, Sämtliche Werke Publikationen älterer Musik IX* (Leipzig: Breitkopf & Härtel, 1968), 161-169.

51	T-B	E	"
52	S-A	A	"
57	A-B	A	8
60	B-T	A	"
65	A-S	C	"
72	T-B	D	"
75	T-S	D	"
76	S-A	D	"
87	S-T	A	9
92	S-A	D	"
95	T-S	G	"
97	A-B	D	"
103	T-B	C	10
106	A-B	G	"
113	B-T	D	"
117	A-B	G	"
119	S-T	D	"
123	n/c	G	"
Tertia pars			
13	A-B	D	11
21	T-B	D	"
27	T-S	D	12
29	T-S	D	"
34	S-A	C	"
36	A-T	D	"
39	T-B	C	"
45	A-S	A	13
48	T-B	E	"
53	S-T	A	"
56	T-S	G	"
62	S-A	D	"
70	S-T	D	"
83	S-T	C	14
90	A-S	G	"
93	T-A	G	"
98	S-T	C	"
101	A-S	A	"
110	S-B	A	15
112	T-A	D	"
114	A-B	F	"
116	S-T	A	"
120	S-A	E	"
122	T-B	E	"
126	S-T	D	"
129	n/c	A	"

Table 52. Cadences in Claudin de Sermisy's
"Domini est terra"³⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
5	S-A	G	1
7	A-T	D	"
9	T-B	D	"
11	B-A	D	"
21	S-A	G	"
28	A-S	D	2
31	S-A	A	"
35	T-B	G	"
37	B-S	G	3
38	S-A	A	"
41	T-B	D	"
43	A-S	D	"
49	A-B	A	"
51	T-B	C	"
59	A-T	D	4
65	S-A	B-flat	"
71	S-T	G	"
74	T-B	C	5
77	T-B	D	"
84	A-S	D	"
94	B-A	G	"
95	T-B	G	"
99	n/c	G	"
Secunda pars			
112	n/c	D	6
123	S-A	B-flat	7
127	n/c	F	"
133	S-T	B-flat	8
142	A-S	D	"
147	A-T	D	9
153	S-A	B-flat	"
157	n/c	F	"
163	n/c	B-flat	10
171	S-T	G	"
177	S-T	G	"

39. Smijers and Merritt, *Trize livres de motets*, IX, 112-122.

Table 53. Cadences in Jacobus Clemens' "Aperio Domine"⁴⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
22	S-T	F	1
29	S-Q	B-flat	"
36	S-T	B-flat	"
41	S-T	B-flat	"
43	T-S	B-flat	"
44	Q-A	B-flat	"
45	S-T	G	"
48	Q-A	F	"
50	Q-T	F	"
54	S-T	B-flat	2
56	Q-B	F	"
58	A-Q	G	"
62	S-T	G	"
64	T-Q	B-flat	"
75	S-T	F	"
89	S-B	D	3
93	S-T	B-flat	"
96	A-B	G	"
103	S-T	G	"
107	A-B	G	"
114	S-T	G	"
116	n/c	G	"
Secunda pars			
122	n/c	F	4
131	S-A	A	"
138	T-B	B-flat	"
149	S-T	G	"
152	S-B	D	"
156	S-T	B-flat	"
159	Q-B	G	"
166	S-T	G	5
170	Q-B	G	"
177	S-T	G	"
179	n/c	G	"

40. Bernet Kempers, XIII, 140-147.

Table 54. Cadences in Jacobus Clemens'
"Servus tuus ego sum"⁴¹

Measure	Voices	Degree	Text Phrase
Prima pars			
5	S-T	F	1
9	A-Q	B-flat	"
12	Q-B	B-flat	"
14	Q-A	B-flat	"
15	A-B	F	"
18	Q-T	B-flat	"
25	T-Q	B-flat	"
29	A-B	D	"
35	A-B	D	"
38	A-T	D	2
43	T-B	G	"
46	A-Q	D	"
49	Q-A	D	"
56	A-B	D	"
56	S-T	G	"
63	S-Q	G	"
66	n/c	G	"
Secunda pars			
77	A-Q	D	3
81	A-T	D	"
84	Q-B	A	"
86	S-Q	A	"
88	Q-B	D	"
90	n/c	D	"
97	Q-T	D	4
98	B-S	G	"
102	S-T	D	"
104	n/c	D	"
109	T-B	G	5
113	A-Q	D	"
116	Q-A	D	"
123	S-T	G	"
130	S-Q	G	"
132	n/c	G	"

41. Bernet Kempers, XIV, 41-42.

Table 55. Cadences in Jean Conseil's "Adjuva me, Domine"⁴²

Measure	Voices	Degree	Text Phrase
Prima pars			
7	A-B	D	1
10	S-T	G	"
17	A-B	G	"
25	S-T	G	"
31	S-B	D	2
36	S-A	B-flat	"
41	S-T	B-flat	"
43	A-S	G	3
45	B-T	G	"
54	S-T	G	"
Secunda pars			
59	S-T	A	4
67	T-B	D	"
76	S-A	D	"
81	S-A	D	5
84	T-B	D	"
87	S-T	D	"
95	S-T	G	"
103	S-T	G	"
108	S-B	D	6
112	S-T	G	"
117	S-B	D	"
121	S-T	G	"

Table 56. Cadences in Thomas Créquillon's "Dirige gressus meus"⁴³

Measure	Voices	Degree	Text Phrase
6	S-T2	D	1
8	T1-B	A	"
9	S-T2	D	"
13	T1-T2	B-flat	"
15	A-B	A	"
16	S-T1	D	"
18	A-T2	A	"
20	T2-T1	D	"
23	T1-T2	G	"

(continued)

42. Smijers and Merritt, *Trieze livres de motets*, XI, 55-61.

43. Walter, pt. 2, I, 267-282.

31	S-T2	C	2
32	S-T2	A	"
38	T1-T2	G	"
39	S-A	D	"
44	T1-A	D	"
45	S-T1	D	"
46	T2-A	G	"
48	T1-T2	D	"
55	T1-A	D	3
60	T1-B	D	"
62	A-T2	A	"
68	T1-B	D	4
76	S-T1	D	"
78	T2-B	D	"
83	S-T1	D	"
85	n/c	G	"

Table 57. Cadences in Thomas Créquillon's
"Hei mihi Domine"⁴⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
9	A1-B	G	1
12	A2-T	F	"
14	S-A1	B-flat	"
16	A2-T	E-flat	"
24	A1-B	A	"
26	A1-A2	C	"
29	A1-B	G	"
32	S-A1	G	"
34	T-A1	G	2
38	A1-B	B-flat	"
42	A2-A1	C	"
44	S-T	F	"
46	A2-T	D	"
49	A2-T	D	"
55	S-A1	G	"
58	n/c	G	"
Secunda pars			
67	A1-S	G	3
70	A1-T	D	"
72	S-T	G	"
77	S-T	C	"
82	S-A1	G	"
84	A1-A2	D	4
86	S-A1	G	"
89	A1-A2	D	"

(continued)

44. Walter, pt. 2, II, 415-426.

92	S-A1	G	"
95	n/c	G	"
104	S-A2	G	5
107	A2-B	A	"
110	S-A2	G	"
113	n/c	G	"

Table 58. Cadences in Mathieu Gascongne's
"Quare tristis es anima mea"⁴⁵

Measure	Voices Prima pars	Degree	Text Phrase
10	n/c	F	1
18	A-B	B-flat	"
21	S-A	B-flat	"
25	n/c	B-flat	"
30	n/c	D	2
35	n/c	D	"
40	A-B	F	"
44	S-T	B-flat	"
62	S-T	G	"
71	A-S	G	"
74	S-T	G	"
Secunda pars			
87	n/c	F	3
90	S-T	F	"
91	A-T	D	"
92	A-S	D	"
96	T-B	A	"
97	S-T	D	"
99	A-T	G	"
106	S-T	G	"
114	S-T	G	"
119	A-S	D	4
123	B-T	D	"
126	S-T	A	"
133	A-S	B-flat	"
138	S-T	F	"
141	A-S	A	"
142	S-T	A	"
144	S-T	G	"
Tertia pars			
149	A-S	C	5
152	S-A	B-flat	"
154	A-B	B-flat	"
156	B-T	F	"
159	T-B	D	"
164	T-B	G	"

(continued)

45. Smijers and Merritt, *Trize livres du motets*, XI, 1-13.

167	S-A	G	"
172	S-T	G	"
177	S-T	G	"
183	A-S	F	6
188	B-T	F	"
193	T-B	B-flat	"
198	A-S	D	"
200	A-B	A	"
203	S-T	D	"
205	A-B	A	"
208	S-T	D	"
211	n/c	D	"

Table 59. Cadences in Nicolas Gombert's
"Confitebimur tibi Deus"⁴⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
9	T-Q	D	1
14	A-Q	A	"
20	Q-B	D	"
22	S-Q	D	"
26	Q-B	C	"
28	Q-T	F	"
30	S-Q	D	"
31	Q-B	D	"
33	T-Q	D	"
35	S-Q	D	"
37	S-T	G	"
40	S-Q	C	2
42	S-Q	C	"
51	A-B	G	"
60	Q-B	D	"
63	S-T	A	3
65	Q-B	D	"
68	S-T	D	"
80	S-Q	G	"
82	S-T	G	"
83	n/c	G	"
Secunda pars			
92	S-T	F	4
94	A-T	G	"
95	Q-B	C	"
99	S-Q	D	"
106	S-Q	B-flat	"
112	T-B	B-flat	"
117	A-Q	B-flat	5
120	A-T	G	"
(continued)			

46. Schmidt-Gorg, VIII, 64-73.

123	S-T	C	"
127	S-B	G	"
128	Q-B	D	"
134	S-T	G	6
136	A-B	G	"
137	S-T	D	"
138	A-S	G	"
139	T-A	G	"
141	n/c	C	"
142	S-B	A	"
144	Q-B	C	"
145	S-T	A	"
148	S-T	G	"
150	S-Q	G	"
158	S-Q	B-flat	7
162	S-T	A	"
164	B-Q	B-flat	"
167	S-Q	B-flat	"
169	T-Q	B-flat	"
171	T-B	C	"
175	S-T	G	"
177	n/c	G	"

Table 60. Cadences in Nicolas Gombert's
"Peccata mea sicut sagitae"⁴⁷

Measure	Voices Prima pars	Degree	Text Phrase
6	A-S	G	1
12	T1-B1	D	"
16	T1-T2	D	"
19	S-T2	A	"
28	T1-B1	D	"
30	A-T1	D	2
35	T1-T2	D	"
37	T2-B2	G	"
40	S-T1	G	"
43	S-T2	G	"
46	T1-A	D	"
48	T1-B2	D	"
50	T1-B2	B-flat	"
68	A-T1	D	3
71	S-T1	G	"
77	A-T2	C	"
80	T2-B2	G	"
84	T2-B2	F	"
88	n/c	G	"

(continued)

47. Schmidt-Gorg, IX, 127-135.

Secunda pars			
93	T1-B1	D	4
97	T2-B2	G	"
100	S-T1	A	"
102	T2-B2	D	"
108	S-T1	G	"
110	B1-T2	G	5
112	T1-T2	D	"
115	S-T2	A	"
118	S-T2	D	"
122	S-T2	A	"
124	S-B1	A	"
127	S-T2	G	"
130	T2-B2	A	6
132	A-B2	A	"
137	A-B1	D	"
139	S-B1	G	"
139	T1-B2	D	"
144	A-T2	D	"
154	S-T1	G	"
160	S-T2	D	"
162	n/c	D	"

Table 61. Cadences in Jacotin's
"Credidi, propter quod locutus sum"⁴⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
9	S-A	A	1
16	S-B	D	"
21	B-T	F	"
25	A-T	D	"
28	A-S	D	"
30	A-T	G	"
44	S-T	D	2
48	S-A	G	"
50	B-T	G	3
55	S-A	B-flat	"
61	A-B	G	"
63	S-T	G	"
65	T-A	G	"
71	B-S	G	4
75	n/c	B-flat	"
80	A-S	D	5
82	A-S	D	"
	(continued)		

48. Smijers and Merritt, *Trieze livres du motets*, IX, 71-81.

87	S-T	D	"
90	n/c	D	"
Secunda pars			
99	S-T	F	6
111	S-T	D	"
113	A-B	D	"
120	S-T	A	7
129	S-T	D	"
133	B-A	G	"
135	B-A	G	8
139	T-B	B-flat	"
147	S-A	B-flat	"
155	A-T	D	"
158	S-T	D	"
159	S-A	G	9
166	A-T	G	"
172	T-A	B-flat	10
181	A-B	A	"
189	S-B	D	"
190	n/c	D	"

Table 62. Cadences in Josquin des Pres'
"Cantate Domino canticum novum"⁴⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
7	S2-S1	G	1
13	T-B	G	"
16	S2-A	B-flat	"
21	A-B	B-flat	"
28	S1-T	G	2
36	S2-A	G	"
46	S2-B	D	3
50	S1-S2	D	"
51	A-T	G	"
54	T-B	G	"
59	S1-T	G	"
61	S2-A	G	"
63	T-A	G	"
65	S2-B	D	"
68	S1-T	B-flat	"
74	S1-T	G	"
76	S2-B	G	"
83	S1-T	A	4
86	A-B	A	"

(continued)

49. Smijers, *Josquin*, ser. 3, XIX, 8-19.

93	S2-A	G	"
96	S1-S2	G	"
100	S1-T	G	5
110	S1-T	B-flat	"
112	A-B	B-flat	"
116	S2-S1	G	"
118	n/c	D	"
Secunda pars			
124	S1-S2	D	6
127	S1-T	G	"
129	S2-A	G	"
136	S1-T	G	"
142	T-B	D	7
145	A-B	G	"
151	n/c	G	"
157	A-T	D	8
161	T-B	G	"
167	S1-S2	D	"
170	S1-A	G	"
172	n/c	D	9
180	T-B	B-flat	"
186	S1-A	D	"
188	S1-T	G	"
190	T-B	G	"
193	A-B	C	"
201	S1-A	G	"
206	S2-A	A	10
209	S1-T	G	"
214	S2-S1	F	"
220	S1-T	G	"
224	n/c	G	"

Table 63. Cadences in Cipriano de Rore's
"In convertendo Dominus"⁵⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
10	S-T	B-flat	1
13	T-B	D	"
15	S-Q	G	"
24	A-S	D	"
30	Q-T	G	"
33	S-Q	A	"

(continued)

50. Bernhard Meier, *Cipriano de Rore, Opera omnia*, 8 vols., *Corpus mensurabilis musicae XIV* (Rome: American Institute of Musicology, 1959-1977), I, 40-47.

38	T-S	B-flat	2
42	T-B	A	"
43	S-Q	D	"
45	T-B	G	"
46	S-A	G	"
47	A-B	B-flat	"
49	S-Q	A	"
56	S-T	A	"
58	B-A	F	3
61	Q-B	C	"
67	S-T	G	"
75	A-T	D	"
77	S-Q	G	"
90	n/c	A	"
Secunda pars			
102	A-Q	D	4
106	S-T	G	"
109	A-B	D	"
112	A-S	F	"
121	T-A	D	"
124	S-T	A	"
125	Q-S	D	"
126	S-Q	D	"
143	T-B	F	5
145	S-B	F	"
153	S-T	G	"
158	T-S	G	"
161	Q-T	B-flat	"
163	A-Q	F	"
167	Q-B	G	"
177	S-T	G	"

Table 64. Cadences in Claudin de Sermisy's
"Beatus vir qui non abiit"⁵¹

Measure	Voices	Degree	Text Phrase
Prima pars			
11	S-A	E	1
17	T-B	C	"
26	S-T	A	"
32	A-B	E	"
33	T-B	C	"
43	S-T	A	"
53	B-T	E	2
58	T-A	D	"
61	n/c	E	"
67	S-T	G	"
(continued)			

51. Smijers and Merritt, *Trize livres du motets*, IX, 104-111.

76	T-B	A	"
80	S-T	A	"
Secunda pars			
84	S-A	C	3
86	T-B	C	"
92	T-B	D	"
96	S-A	A	"
106	T-B	C	4
111	T-B	A	"
117	A-B	E	5
129	S-T	A	"
137	S-T	A	"

Table 65. Cadences in Thomas Créquillon's
"Cor mundum crea in me"⁵²

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S-A	A	1
15	S-T	A	"
22	S-B	E	"
22	A-T	A	"
24	T-B	A	"
28	S-A	A	2
34	A-B	E	"
40	A-S	E	"
42	S-T	A	"
45	T-B	C	"
50	S-B	E	3
56	A-B	E	"
59	A-B	A	"
61	S-B	G	"
66	S-T	A	"
72	S-A	A	4
73	S-T	E	"
77	B-A	A	"
79	A-S	E	"
82	S-T	A	"
84	n/c	A	"
Secunda pars			
90	A-B	D	5
91	n/c	G	"
(continued)			

52. H. Lowen Marshall, *The Four-Voice Motets of Thomas Créquillon*, 4 vols., *Musicological Studies XXI* (Brooklyn, N.Y.: Institute of Medieval Music, 1970-1971), III, 30-39.

95	S-B	E	"
95	T-A	A	"
98	A-B	E	"
98	S-T	A	"
101	T-S	D	"
102	A-B	E	"
104	A-B	C	"
108	S-T	A	"
113	S-A	A	"
117	A-T	C	"
123	S-A	C	6
125	A-B	C	"
126	B-A	C	"
127	A-B	E	"
129	A-B	C	"
137	A-S	C	"
141	S-B	A	7
145	S-T	A	"
156	S-T	A	"
159	n/c	A	"

Table 66. Cadences in Thomas Créquillon's
"Erravi sicut ovis"⁵³

Measure	Voices	Degree	Text Phrase
Prima pars			
10	S-T	A	1
12	A-B	C	"
14	S-A	A	"
19	T-S	A	"
24	S-B	E	"
25	A-T	A	"
29	S-A	A	2
33	A-B	E	"
37	A-B	E	"
39	S-T	A	"
43	S-A	A	"
45	S-T	E	"
52	T-A	A	"
54	S-T	A	3
57	T-S	A	"
58	S-T	A	"
60	T-A	D	"
63	T-A	E	"
64	A-B	E	"
67	T-A	C	"
70	B-A	C	4
74	S-A	C	"
76	A-S	C	"

(continued)

53. Marshall, III, 54-62.

77	T-A	C	"
78	A-B	G	"
82	n/c	A	"
Secunda pars			
90	A-B	E	5
93	S-T	A	"
99	A-S	D	"
100	S-B	E	"
101	T-A	A	"
104	S-T	A	"
108	A-B	C	"
110	T-B	C	"
113	n/c	E	"
114	S-T	A	6
116	A-B	G	"
117	T-A	D	"
118	A-B	E	"
119	S-T	A	"
121	A-B	C	"
125	T-A	A	"
129	S-T	E	"
132	A-B	E	7
135	S-B	E	"
136	A-B	E	"
138	S-T	A	"
141	n/c	A	"

Table 67. Cadences in Josquin des Pres' "Beati quorum"⁵⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
16	A-B	A	1
23	A-S	A	"
29	S-A	E	"
37	n/c	E	2
44	A-B	E	"
52	T-B	G	3
61	S-A	C	"
73	B-T	E	4
83	S-T	E	5
95	Q-A	C	"
101	B-Q	G	6
103	T-S	G	"
107	T-A	E	"

(continued)

54. Smijers, *Josquin*, ser. 3, XVI, 1-15.

Secunda pars			
127	Q-T	C	7
131	S-B	E	8
134	A-T	E	"
139	A-B	E	"
139	Q-S	A	"
142	S-T	E	"
147	Q-B	E	"
153	Q-B	A	"
156	S-A	A	"
158	A-B	A	"
162	T-Q	A	9
167	S-A	C	"
172	T-S	E	"
182	T-Q	E	"
191	n/c	E	"
194	A-B	A	"
198	Q-B	A	"
199	n/c	A	"
210	S-Q	E	10
219	S-Q	A	"
223	B-T	E	11
241	S-Q	E	"
250	A-Q	E	"
257	S-Q	E	"
264	n/c	E	"

Table 68. Cadences in Josquin des Pres'
"Caeli enarrant gloriam dei"⁵⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
9	T-S	A	1
17	S-A	C	"
27	n/c	C	"
41	T-B	G	2
53	S-A	D	3
60	S-T	A	"
62	A-T	D	"
65	T-B	A	"
67	A-B	A	"
69	S-B	E	"
71	A-B	E	"
73	S-B	E	"
81	S-T	A	"

(continued)

55. Smijers, *Josquin*, ser. 3, XV, 146-160.

99	A-B	A	4
112	S-A	A	"
133	T-B	A	5
135	n/c	A	"
Secunda pars			
152	A-B	D	6
154	S-T	A	"
161	A-B	A	"
164	A-B	A	"
172	n/c	E	7
186	A-B	A	"
188	T-B	G	"
197	S-B	E	8
207	A-B	D	"
208	S-A	A	"
210	T-B	G	"
222	S-T	A	"
240	S-A	A	9
251	T-A	C	"
255	T-B	A	"
259	T-B	A	"
Tertia pars			
273	S-T	G	10
284	n/c	E	"
286	A-T	E	11
294	S-T	A	"
298	S-T	A	"
313	S-T	G	12
322	T-B	A	"
325	S-T	A	"
328	S-T	A	13
331	A-B	D	"
335	S-T	A	"
339	A-B	C	"
358	n/c	E	14
362	n/c	E	"

Table 69. Cadences in Josquin des Pres'
"Domine Dominus noster"⁵⁶

Measure	Voices	Degree	Text Phrase
9	S-A	A	1
16	A-B	E	"
23	Q-B	C	"
27	S-T	E	"
33	A-B	G	2
57	S-B	E	"
61	T-Q	E	"
91	A-B	C	3
105	A-B	E	4
119	A-B	D	"
143	S-A	C	"
158	A-D	E	5
159	n/c	E	"

Table 70. Cadences in Josquin des Pres'
"Domine, ne in furore tuo argas me"⁵⁷

Measure	Voices	Degree	Text Phrase
Prima pars			
8	T-S	C	1
10	T-B	C	"
15	S-A	C	"
31	A-B	A	"
41	T-S	C	2
45	n/c	G	"
54	T-B	C	"
63	S-B	A	"
75	A-T	C	3
85	A-T	A	"
91	S-B	A	"
94	S-B	A	"
96	S-A	E	"
120	S-B	C	4
122	S-A	E	"
125	B-T	A	"
126	n/c	A	"

(continued)

56. Smijers, *Josquin*, ser. 3, XXIV, 161-169.

57. Smijers, *Josquin*, ser. 3, VIII, 81-87.

Secunda pars			
134	n/c	A	5
137	A-T	G	"
139	A-S	C	"
142	S-B	C	"
145	T-A	C	"
146	n/c	C	"
150	T-S	C	6
156	S-B	G	"
163	A-S	C	7
169	n/c	G	"
180	n/c	A	"
200	S-B	A	8
205	S-T	E	"
208	n/c	E	"

Table 71. Cadences in Jean Richafort's
"Exaudi te Dominus"⁵⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
7	A-S	A	1
10	T-B	G	"
13	A-S	D	"
22	A-B	C	"
29	A-B	A	"
35	A-T	A	2
37	S-T	A	"
48	S-T	E	"
51	A-B	E	3
62	A-S	C	"
69	A-S	A	4
72	T-S	A	"
74	S-B	E	"
80	B-A	A	5
92	S-T	A	"
96	A-B	E	"
97	n/c	E	"
Secunda pars			
4	T-A	C	6
8	T-B	C	"
(continued)			

58. Martin Picker, *The Motet Books of Andrea Antico: Monuments of Renaissance Music VIII* (Chicago: University of Chicago Press, 1987), 224-239.

12	S-A	G	"
14	T-B	C	"
19	S-T	A	"
27	S-T	E	"
34	A-S	C	7
55	T-B	D	"
57	A-B	C	"
64	T-B	A	8
68	S-T	A	"
71	A-S	E	"
75	S-T	E	"
81	A-T	C	"
88	A-B	E	"
91	A-B	C	9
96	T-A	A	"
98	A-S	A	"
102	A-S	A	"
106	S-T	A	"
112	A-S	A	10
115	T-B	C	"
119	S-B	E	"
125	S-T	E	"
129	n/c	E	"

Table 72. Cadences in Thomas Stoltzer's
"Saepe expugnauerunt me"⁵⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
12	S2-S1	A	1
15	A-B	A	"
18	S1-T	C	"
21	S1-T	C	"
23	S1-T	A	"
27	A-S1	E	2
29	S1-T	E	"
30	A-B	A	3
31	B-S1	A	"
33	A-B	E	"
38	S2-T	G	"
48	S1-T	G	"
57	S2-A	C	"
67	A-S2	A	4
69	A-B	D	"
(continued)			

59. Lothar Hoffman Ebrecht, *Thomas Stoltzer ausgewählte Werke, Das Erbe deutscher Musik LXVI* (Kassel: Nagel, 1969), pt. 2 *Sämtliche Psalmotetten, II*, 104-109.

72	S2-A	A	"
76	S2-T	E	"
82	S1-T	G	"
84	n/c	C	"
Secunda pars			
90	T-B	C	5
95	T-B	A	"
104	S1-A	A	"
108	S2-T	C	6
123	S1-T	A	"
124	B-A	D	7
126	S2-S1	A	"
127	T-S2	A	"
137	S2-T	G	"
139	A-B	E	"
142	S2-T	E	"
148	S1-A	A	"

Table 73. Cadences in Jacobus Clemens' "Domine clamavi"⁶⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
5	A-S	E	1
8	S-T	E	"
13	S-B	E	"
16	A-B	A	"
19	S-T	A	"
21	A-T	A	"
23	S-T	A	"
24	n/c	E	"
33	S-B	E	2
40	S-T	A	"
44	A-B	E	3
46	S-B	E	"
49	A-T	E	"
51	A-B	E	"
54	S-T	E	"
57	A-B	E	"
57	S-T	A	"
60	S-T	E	"
62	n/c	E	"
Secunda pars			
6	A-T	A	4
16	S-T	E	"
17	T-A	A	"
23	S-B	E	"
(continued)			

60. Bernet Kempers, IX, 47-53.

23	A-T	A	"
25	T-B	C	"
27	S-T	A	"
31	S-T	A	"
35	A-B	E	5
37	S-B	E	"
38	A-T	A	"
40	A-T	E	"
42	A-B	E	"
42	S-T	A	"
45	S-B	E	"
45	T-A	A	"
48	A-B	A	"
51	S-T	E	"
52	n/c	E	"

Table 74. Cadences in Josquin des Pres'
"Deus in nomine tuo salvum me fac"⁶¹

Measure	Voices	Degree	Text Phrase
Prima pars			
8	T-B	A	1
17	B-T	A	"
23	T-S	E	2
28	B-A	A	"
33	S-T	E	"
39	A-B	A	"
43	T-S	A	3
46	T-B	A	"
50	A-B	E	"
50	S-T	A	"
61	A-S	G	"
64	A-B	D	"
77	A-B	D	4
81	A-B	A	"
89	A-S	D	5
96	B-T	D	"
99	S-A	A	"
105	S-A	A	"
108	T-B	A	"
114	T-B	A	"
122	S-T	A	"
124	S-T	A	"
125	n/c	A	"
Secunda pars			
133	S-T	A	6
138	T-B	D	"
(continued)			

61. Smijers, *Josquin*, ser. 3, X, 127-135.

147	B-A	D	"
150	A-T	D	"
158	S-A	A	7
167	T-B	A	"
174	T-S	A	"
178	A-B	A	"
182	T-B	G	"
185	S-T	G	"
198	S-T	A	"
207	A-S	E	8
210	S-A	A	"
218	B-T	E	"
221	T-B	A	"
251	S-T	E	9
253	n/c	E	"

Table 75. Cadences in Josquin des Pres'
"Domine, exaudi orationem meum"⁶²

Measure	Voices	Degree	Text Phrase
Prima pars			
17	A-S	F	1
30	A-S	A	"
33	A-B	A	"
36	S-T	E	"
44	S-B	A	"
48	S-A	E	2
55	A-T	E	"
64	S-T	A	"
67	A-B	D	"
71	A-B	D	"
83	S-T	D	"
88	A-T	D	"
96	A-B	E	"
99	A-B	E	"
Secunda pars			
115	n/c	D	3
132	S-T	G	"
151	S-A	C	4
163	S-A	A	"
165	T-A	D	"
180	A-B	A	"
182	A-T	E	"
191	T-B	A	5
200	S-A	A	"
211	T-S	G	"
(continued)			

62. Smijers, *Josquin*, ser. 3, XV, 184-197.

213	A-S	C	"
224	S-A	G	"
228	T-S	G	6
229	B-T	G	"
231	S-T	G	"
234	A-B	D	"
236	A-T	F	"
247	S-A	E	"
251	T-B	G	"
253	A-S	C	"
257	A-B	A	"
Tertia pars			
272	n/c	D	7
294	S-T	A	"
303	A-S	E	8
312	A-B	E	"
316	S-A	G	"
319	T-B	C	"
321	S-A	E	"
322	B-T	A	"
324	T-B	A	"
339	S-T	E	"
341	n/c	E	"

Table 76. Cadences in Josquin des Pres'
"Domine, ne projicias me"⁶³

Measure	Voices	Degree	Text Phrase
Prima pars			
8	T-S	G	1
10	A-B	E	"
12	S-T	A	"
13	A-B	D	"
19	S-T	G	"
23	S-T	E	"
35	S-A	G	2
43	T-B	C	"
47	S-A	C	"
50	A-B	G	"
53	S-A	C	3
55	A-B	C	"
59	S-A	A	"
71	S-T	E	"
74	A-S	C	4
78	A-B	D	"
87	A-B	A	"

(continued)

63. Smijers, *Josquin*, ser. 3, XVI, 23-31.

Secunda pars			
91	A-B	E	5
96	A-B	C	"
98	A-B	E	"
102	A-B	C	"
111	S-A	D	"
114	S-T	F	"
116	A-B	G	"
123	S-T	A	6
132	S-T	G	"
141	T-B	D	7
144	A-S	D	"
146	B-T	E	"
156	T-B	C	"
164	S-A	C	8
173	A-B	D	"
177	S-T	G	"
181	B-A	A	"
183	A-T	D	"
185	T-S	D	"
188	S-A	A	"
195	A-B	A	"
202	A-B	G	9
206	S-T	A	"
215	n/c	E	"

Table 77. Cadences in Josquin des Pres'
"Qui regis israel, intende"⁶⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
13	S2-T	E	1
22	S2-S1	E	"
25	T-A	D	"
27	T-A	E	"
35	T-A	A	"
43	S2-T	A	2
50	T-B	A	"
60	S1-A	E	3
72	B-S1	D	"
78	A-B	F	4
87	T-B	A	"
90	S1-T	D	5
92	A-B	A	"
94	S1-A	A	"
96	S2-T	F	"

(continued)

64. Smijers, *Josquin*, ser. 3, XVI, 16-22.

99	S1-B	E	"
102	S2-T	A	"
109	A-B	A	"
110	n/c	A	"

Table 78. Cadences in Mathieu Lasson's
"In manibus tuis sortes meae"⁶⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
10	S-B	E	1
12	S-T	A	"
19	S-T	E	"
20	T-A	A	"
21	S-B	E	"
22	A-T	A	"
25	T-A	A	"
26	B-S	A	"
29	n/c	A	"
30	A-B	E	"
34	S-T	A	"
42	S-A	C	2
49	T-B	A	"
51	A-T	C	"
54	S-T	A	"
57	T-A	C	"
63	A-T	E	3
66	S-T	C	"
68	A-B	E	"
69	S-T	A	"
74	S-T	A	"
75	B-S	A	"
76	T-A	A	"
78	S-T	A	"
79	A-S	A	"
81	S-T	A	"
82	n/c	A	"
Secunda pars			
91	T-A	A	4
99	A-T	C	"
101	T-B	C	"
104	S-A	C	"
107	S-T	A	"
118	S-A	A	5
123	T-B	A	"
126	n/c	E	"
133	n/c	A	"

65. Smijers and Merritt, *Trizee livres du motets*, XI, 176-183.

Table 79. Cadences in Pierre de Manchicourt's
"Paratum cor meum"⁶⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
10	S-T	A	1
13	S-T	A	"
18	S-T	A	"
25	S-A	A	2
31	n/c	A	"
33	A-T	D	3
42	A-S	E	"
46	T-A	A	"
48	A-B	A	"
51	S-T	A	"
57	A-B	E	4
60	T-B	D	"
63	S-A	A	"
72	A-B	C	"
75	T-B	A	"
(continued)			
84	T-B	D	5
86	T-B	A	"
89	S-T	E	"
92	n/c	E	"
Secunda pars			
107	S-T	E	6
108	T-B	A	7
113	S-A	A	"
118	S-T	A	"
120	S-T	A	"
134	T-B	A	8
143	A-B	A	"
146	A-T	E	"
148	S-T	E	"
156	S-T	A	9
159	S-T	A	"
165	S-T	E	"
167	n/c	E	"

66. Smijers and Merritt, *Trieze livres du motets*, XIV, 97-107.

Table 80. Cadences in Dominique Phinot's
"Exaudiat te Domine"⁶⁷

Measure	Voices	Degree	Text Phrase
Prima pars			
5	A2-A1	E	1
10	S-T2	C	"
13	A1-T2	D	"
20	T1-B	E	"
28	S-T2	A	"
40	A1-B	E	2
49	S-T1	A	"
60	A1-B	E	"
62	S-T1	B	"
75	A1-B	C	3
82	S-T1	G	"
85	T2-B	C	4
91	T2-B	G	"
92	T1-S	G	"
94	S-A1	A	"
101	A1-S	E	"
105	S-A1	A	"
110	T1-A2	G	"
115	S-T1	G	"
119	n/c	G	"
Secunda pars			
126	S-A1	G	5
134	T1-T2	D	"
146	S-A1	G	"
150	T1-B	D	6
152	A1-S	D	"
158	S-T1	G	"
159	n/c	C	7
169	S-T2	G	"
177	n/c	E	"
181	T2-T1	A	8
195	A1-T1	E	"
205	T1-A2	G	"
208	T2-B	E	"
209	A1-A2	G	"
211	T1-S	E	"
217	A2-S	C	9
222	S-T1	A	"
225	n/c	E	"

67. James Hofler, *Dominique Phinot, Opera omnia*, 1 vol. to date, *Corpus mensurabilis musicae* LIX (Rome: American Institute of Musicology, 1972-), I, 1-10.

Table 81. Cadences in Claudin de Sermisy's
"Benedic anima mea Domino"⁶⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
7	A-B	C	1
14	T-S	F	"
18	S-T	F	"
21	B-A	F	2
30	A-B	F	"
36	S-T	F	"
52	n/c	C	3
Secunda pars			
63	S-B	G	4
64	A-T	C	"
76	A-S	C	"
90	A-S	D	5
95	S-T	F	"
100	S-T	F	"

Table 82. Cadences in Claudin de Sermisy's
"Deus, in adiutorium meum intende"⁶⁹

Measure	Voices	Degree	Text Phrase
6	A-S	F	1
10	B-T	F	"
17	S-T	F	"
24	T-B	A	2
36	S-A	C	"
42	A-T	F	"
49	S-T	F	"
59	A-B	C	3
64	T-B	C	"
70	T-B	F	"
80	n/c	F	4
85	A-B	C	"
92	S-A	A	5
98	S-T	F	"

(continued)

68. Smijers and Merritt, *Trize livres du motets*, IX, 123-129.

69. *Ibid.*, IX, 130-135.

104	S-T	F	"
105	n/c	F	"

Table 83. Cadences in Jacobus Clemens'
"Confundantur omnes"⁷⁰

Measure	Voices	Degree	Text Phrase
Prima pars			
17	S-T	C	1
25	S-A	C	"
30	B-A	C	"
31	S-B	G	"
37	T-A	C	"
45	A-B	E	2
46	A-B	C	"
56	A-B	G	"
56	n/c	C	"
58	T-A	C	"
59	B-A	C	"
60	T-B	G	"
64	A-B	C	"
72	A-B	C	3
75	S-B	G	"
75	A-T	C	"
77	T-A	C	"
88	n/c	G	"
106	S-T	C	"
108	n/c	C	"
Secunda pars			
124	n/c	C	4
137	T-B	C	"
144	T-B	C	"
161	S-T	C	5
165	S-T	C	"
167	n/c	C	"

70. Bernet Kempers, XII, 99-106.

Table 84. Cadences in Thomas Créquillon's
"Deus virtutem convertere"⁷¹

Measure	Voices	Degree	Text Phrase
Prima pars			
8	S-A	C	1
10	S-T	C	"
11	A-B	A	"
17	Q-B	C	"
19	A-T	A	"
20	S-Q	F	"
22	S-B	A	"
24	T-Q	C	"
26	A-T	C	"
29	S-T	C	2
31	Q-B	D	"
34	Q-A	G	"
35	A-T	G	"
37	A-Q	G	3
38	A-T	A	"
40	S-Q	D	"
42	A-T	G	"
46	A-T	A	"
50	S-Q	C	"
56	T-Q	C	"
60	n/c	C	"
Secunda pars			
67	S-Q	C	4
69	S-Q	G	"
71	Q-T	C	"
75	Q-A	C	"
79	T-B	C	"
82	S-T	C	"
85	S-T	C	5
87	T-Q	F	"
89	A-T	A	"
92	S-T	G	"
97	T-A	G	"
99	S-Q	C	"
103	S-Q	C	"
104	A-B	G	"
106	n/c	C	"
108	S-T	E	5
111	S-T	C	"
115	A-T	G	"
119	S-Q	C	"
121	A-T	G	"

71. Walter, pt. 2, I, 254-266.

Table 85. Cadences in Nicolas Gombert's
"Inclina, Domine, aurem tuam"⁷²

Measure	Voices	Degree	Text Phrase
Prima pars			
6	S-A	C	1
9	A-Q	F	"
12	Q-B	F	"
22	S-Q	C	"
26	A-S	F	"
28	S-T	F	"
33	S-A	C	2
37	S-Q	C	"
40	Q-A	F	"
43	S-A	C	"
54	A-B	F	3
56	S-Q	C	"
62	A-B	C	"
67	A-Q	C	"
68	A-S	F	4
70	T-B	F	"
72	T-B	C	"
74	A-S	F	"
76	Q-T	F	"
78	A-B	C	"
81	Q-B	C	"
89	T-A	C	5
99	n/c	C	"
Secunda pars			
106	Q-S	F	6
108	Q-T	B-flat	"
109	Q-B	F	"
113	S-A	C	"
117	A-S	F	"
118	Q-B	C	"
125	Q-B	F	"
126	Q-B	C	7
128	S-Q	C	"
135	Q-B	C	"
137	Q-T	F	"
138	S-B	A	"
139	Q-S	F	"
140	A-T	A	"
144	T-S	F	8
156	A-S	F	"
158	Q-S	F	"
160	A-T	F	"
161	n/c	F	"

72. Schmidt-Gorg, X, 8-16.

Table 86. Cadences in Josquin des Pres'
"Benedicite omnia opera Domini Domino"⁷³

Measure	Voices	Degree	Text Phrase
Prima pars			
9	n/c	C	1
13	A-B	F	"
15	n/c	F	"
22	A-S	F	"
24	S-T	F	"
34	S-A	C	2
40	n/c	F	"
45	n/c	F	"
66	S-T	F	"
83	S-A	F	3
85	T-B	F	"
87	n/c	F	"
106	n/c	F	"
113	B-A	F	4
115	A-T	F	"
117	S-T	F	"
124	A-T	F	"
126	S-T	A	"
129	S-T	F	"
136	T-B	C	"
138	S-T	C	"
140	A-B	F	"
148	n/c	F	"
163	A-B	C	"
164	S-T	F	"
174	A-S	F	5
181	S-T	C	"
183	T-A	C	"
185	B-A	C	"
187	A-T	C	"
199	S-T	F	"
201	n/c	F	"

73. Smijers, *Josquin*, ser. 3, XIII, 86-95.

Table 87. Cadences in Josquin des Pres'
"Dominus regnavit"⁷⁴

Measure	Voices	Degree	Text Phrase
15	S-A	F	1
29	T-B	F	"
41	S-A	F	"
45	T-B	F	"
58	S-T	F	"
71	S-T	F	2
84	S-T	F	"
102	S-T	F	3
114	S-T	F	"
130	B-T	F	"
134	A-S	F	"
136	B-T	F	4
139	A-S	F	"
141	B-T	F	"
144	A-S	F	"
147	S-T	F	"
156	S-A	F	5
160	T-B	F	"
167	S-A	F	"
171	T-B	F	"
175	S-T	F	"
176	n/c	F	"

Table 88. Cadences in Josquin des Pres'
"In Domini confido"⁷⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
8	A-B	C	1
12	A-S	G	"
17	S-A	C	"
20	T-B	C	"
23	S-A	C	"
41	S-A	C	2
42	T-S	C	"
49	S-T	C	"
63	A-B	G	3
69	A-S	G	4
73	B-T	G	"
(continued)			

74. Smijers, *Josquin*, ser. 3, XVII, 33-40.75. Smijers, *Josquin*, ser. 3, XIX, 20-26.

77	A-B	G	"
82	T-B	C	"
86	n/c	C	"
Secunda pars			
95	A-B	C	5
98	T-B	C	"
105	S-T	C	"
120	T-B	C	6
123	A-S	C	"
126	T-S	C	"
139	A-B	G	7
147	T-B	C	"
151	S-T	C	"
153	A-B	C	"
168	S-T	C	8
170	A-B	G	"
173	S-T	C	"
178	n/c	C	"

Table 89. Cadences in Josquin des Pres'
"Laudate pueri Dominum"⁷⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
5	A-S	F	1
12	n/c	D	"
22	S-T	F	"
25	S-T	F	2
31	T-B	F	"
34	S-T	C	"
36	S-T	F	"
39	S-T	F	"
59	A-B	F	3
62	S-T	C	"
63	B-A	F	"
68	S-A	A	4
73	T-B	D	"
77	A-B	C	"
82	S-B	C	"
88	n/c	F	"
92	A-B	F	5
99	S-T	F	"
103	S-T	F	"

(continued)

76. Smijers, *Josquin*, ser. 3, XVIII, 61-69.

Secunda pars			
107	T-B	F	6
109	T-B	C	"
110	A-T	F	"
120	T-A	C	"
122	S-T	F	"
135	B-A	C	7
137	S-T	C	"
143	B-A	F	"
145	S-T	F	"
150	S-T	F	"
161	S-T	F	"
168	S-T	C	8
175	S-T	A	"
180	A-T	F	"
184	S-A	C	9
187	S-T	G	"
189	A-B	F	"
197	n/c	D	"
203	n/c	F	"

Table 90. Cadences in Ludwig Senfl's
"Deus in adjutorium"⁷⁷

Measure	Voices	Degree	Text Phrase
Prima pars			
16	T-B	C	1
18	S-A	C	"
31	S-T	F	"
35	T-B	C	2
38	S-A	C	"
45	T-S	C	"
50	A-B	F	3
55	S-T	F	"
75	n/c	F	"
Secunda pars			
101	T-B	C	4
103	S-T	C	"
105	A-B	C	"
106	S-T	F	"
115	T-S	F	"

(continued)

77. Edwin Löhner and Otto Ursprung, *Ludwig Senfl, Sämtliche Werke*, 11 vols. (Wolfenbüttel: Mösseler, 1962-1974), III, 48-52.

126	A-B	C	5
142	S-A	C	"
147	S-T	F	6
153	S-A	C	"
158	S-T	F	"
162	n/c	F	"

Table 91. Cadences in Jacobus Clemens'
"Dominus qui habitabit"⁷⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
13	A-B	C	1
16	S-A	E	"
27	Q-B	C	"
30	A-Q	G	"
33	S-T	C	"
39	A-Q	G	2
43	Q-B	C	"
45	Q-S	G	"
49	A-B	G	"
55	S-Q	F	"
62	T-S	C	"
65	Q-S	C	"
68	Q-B	C	"
69	T-S	C	"
73	S-Q	C	"
75	n/c	C	"
Secunda pars			
93	S-T	C	3
94	Q-B	C	"
100	S-T	C	4
104	S-Q	C	"
119	Q-T	C	"
121	T-S	C	"
124	A-T	G	"
126	Q-B	G	"
127	S-Q	C	"
135	n/c	F	5
137	S-A	F	"
139	S-T	C	"
149	S-T	C	"
150	n/c	C	"

78. Bernet Kempers, XIII, 97-103.

Table 92. Cadences in Jacobus Clemens'
"Levavi oculos meos"⁷⁹

Measure	Voices	Degree	Text Phrase
5	A1-S1	C	1
6	S1-A2	E	"
7	A1-S2	C	"
9	S2-T	G	"
15	S1-A2	G	"
18	S2-A2	G	"
20	S1-A2	C	"
	(continued)		
26	A2-B	C	"
28	S2-T	C	"
33	A1-S1	C	2
37	A2-B	G	"
38	T-S2	G	"
40	A1-T	E	"
41	A1-T	D	"
43	S1-B	D	"
46	S1-A1	G	"
52	S1-A1	G	3
56	A2-B	G	"
58	S2-A1	G	"
59	S1-T	C	"
62	A1-B	D	4
64	A2-B	G	"
66	S2-T	G	"
67	A2-S1	C	"
70	A1-T	E	"
72	T-B	G	"
73	A2-S1	G	"
77	S1-A2	G	"
79	n/c	G	"

Table 93. Cadences in Nicolas Gombert's
"Ad te levavi oculos"⁸⁰

Measure	Voices	Degree	Text Phrase
7	A-S	F	1
9	A-S	F	"
12	S-A	C	"
15	Q-S	C	"
16	A-S	F	"
17	Q-B	F	"
19	S-A	F	"
21	Q-S	F	"
22	S-A	F	"
	(continued)		

79. Bernet Kempers, XIII, 112-121.

80. Schmidt-Gorg, VIII, 73-80.

30	S-A	A	2
31	S-Q	F	"
34	T-Q	F	"
37	T-B	C	"
39	S-T	C	"
41	T-A	C	"
45	S-A	C	3
49	Q-B	C	"
50	S-A	F	"
53	S-Q	F	"
56	Q-B	F	"
60	S-A	C	"
62	S-B	A	"
68	Q-B	A	"
70	Q-B	F	"
76	A-Q	F	"
78	S-T	A	"
80	Q-T	F	4
83	S-T	C	"
86	A-B	C	"
88	A-Q	F	"
91	S-T	F	"
98	A-B	C	"
100	n/c	C	"
105	S-T	C	5
117	A-Q	F	"
121	Q-T	C	"
123	S-T	C	"
126	Q-B	F	"
129	T-A	C	"
133	Q-T	A	"
134	T-Q	F	"
139	S-T	F	"
142	n/c	F	"

Table 94. Cadences in Nicolas Gombert's
"Deus ultionum Dominum"⁸¹

Measure	Voices	Degree	Text Phrase
Prima pars			
5	A-T	F	1
7	T-B	A	"
13	A-S	F	"
16	A-S	F	"
22	A-B	C	2
24	T-S	C	"
30	A-T	F	"
42	A-T	F	3
47	A-T	F	"

(continued)

81. Schmidt-Gorg, X, 20-26.

48	S-T	C	"
50	A-T	F	"
56	A-B	C	4
59	T-A	C	"
64	A-B	F	"
71	A-S	D	5
73	T-A	G	"
79	n/c	C	"
Secunda pars			
87	S-A	F	6
93	A-T	F	"
94	S-B	F	"
98	T-S	F	"
103	T-B	C	"
105	T-A	F	"
116	T-B	A	7
117	A-S	F	"
124	T-B	C	"
132	A-S	C	"
140	T-B	A	8
141	A-S	A	"
144	T-B	G	"
149	T-B	C	"
153	A-T	F	"
155	T-A	F	"
160	T-A	F	"
163	n/c	F	"

Table 95. Cadences in Cristobal de Morales'
"Beatus omnes qui timent Dominum"⁸²

Measure	Voices	Degree	Text Phrase
Prima pars			
11	A2-B	C	1
16	S2-T	A	"
20	S1-B	C	"
26	S1-S2	F	"
32	T-S1	C	2
35	S2-S1	F	"
38	S1-B	D	"
41	S1-S2	F	"
44	A2-B	C	"

(continued)

82. Higinio Angles, *Cristobal de Morales, Opera omnia*, 8 vols., *Monumentos de la música española*, vols. XI, XIII, XV, XVII, XX, XXI, XXIV, XXXIV (Rome: Consejo superior de investigaciones científicas, 1952-1971), V (XX), 153-164.

50	A2-B	C	"
51	S2-T	F	"
56	A1-S1	C	3
62	B-S2	F	"
64	S2-A1	C	"
69	A2-S2	C	"
74	S1-A2	F	"
76	T-S2	C	"
77	A1-B	C	"
81	A2-B	C	4
83	A1-B	F	"
85	A2-S1	C	"
90	T-B	F	"
93	A2-S2	C	"
97	A1-S2	F	"
100	S1-T	F	"
102	n/c	F	"
Secunda pars			
111	A1-S2	F	5
115	T-A1	F	"
118	A2-B	F	"
129	n/c	F	6
140	T-B	F	"
145	S2-T	F	"
152	B-S2	F	7
154	n/c	F	"
161	A2-B	C	"
167	T-B	A	"
171	A2-B	C	"
175	T-S1	C	"
177	T-B	C	"
178	S2-A2	F	"
180	n/c	F	"

Table 96. Cadences in Adrian Willaert's
"Dominus regit me-Parasti"⁸³

Measure	Voices	Degree	Text Phrase
Prima pars			
4	A-B	C	1
5	S-T	F	"
10	S-T	F	"
16	n/c	A	"
27	S-T	F	"

(continued)

83. Zenck, 83-87.

30	n/c	C	2
36	A-S	C	"
38	T-B	C	"
45	T-B	F	"
59	n/c	C	3
76	T-B	A	4
80	S-T	F	"
90	T-S	C	5
94	A-B	B-flat	"
96	T-B	F	"
98	n/c	F	"

Secunda pars

103	T-B	C	6
105	B-T	F	"
112	T-B	C	"
114	A-S	C	"
117	T-A	F	"
120	T-A	C	7
122	A-S	F	"
124	S-T	C	"
131	n/c	F	"
141	A-S	C	8
147	S-T	C	"
152	A-S	C	"
157	B-T	C	"
161	A-B	F	9
164	T-B	G	"
165	S-A	C	"
166	T-B	C	"
170	S-A	F	"
174	T-B	F	"
177	S-T	F	"
183	S-T	F	"

Table 97. Cadences in Antoine Brumel's
"Laudate Dominum de caelis"⁸⁴

Measure	Voices	Degree	Text Phrase
Prima pars			
7	T-S	G	1
8	S-T	G	"
11	T-B	D	"
14	S-A	D	"
23	A-S	G	"
26	T-B	G	"
27	A-T	G	"
27	T-B	G	"
30	A-B	G	"
31	S-T	G	"
34	S-A	D	2
35	T-B	D	"
36	S-T	G	"
38	A-B	C	"
42	T-B	G	"
47	S-A	G	"
52	A-B	G	"
56	T-B	C	"
57	S-A	C	"
61	S-T	G	"
69	S-A	G	3
73	S-T	G	"
73	T-B	G	"
74	T-S	D	"
75	S-T	D	"
77	T-B	G	"
87	S-T	C	"
89	A-S	D	"
93	A-B	G	"
Secunda pars			
97	A-B	G	4
101	T-B	G	"
105	S-A	G	"
109	T-B	C	"
110	S-A	G	"
113	S-A	C	"
117	A-B	D	"
118	S-T	G	"
120	T-B	D	5
122	A-S	D	"
127	T-B	G	"
133	B-T	G	"
(continued)			

84. Barton Hudson, *Antione Brumel, Opera omnia*, 6 vols., *Corpus mensurabilis musicae V* (Rome: American Institute of Musicology, 1969-1972), V, 53-62.

140	A-B	G	"
143	S-T	A	"
146	S-T	G	"
147	S-T	G	"
150	n/c	G	"

Table 98. Cadences in Jacobus Clemens' "Fac mecum signum"⁸⁵

Measure	Voices	Degree	Text Phrase
Prima pars			
5	S-T	D	1
7	A-T	A	"
8	A-B	G	"
11	T-B	D	"
13	A-T	F	"
15	S-Q	D	"
23	S-Q	D	2
30	Q-B	D	"
32	Q-A	D	"
33	Q-B	D	"
39	T-A	G	3
41	Q-A	G	"
50	S-T	G	"
55	S-Q	D	4
56	A-T	G	"
57	Q-B	D	"
60	T-A	D	"
62	S-T	D	"
65	A-T	G	"
67	n/c	G	"
Secunda pars			
73	Q-A	G	5
77	Q-B	D	"
79	S-Q	D	"
83	S-Q	D	"
85	A-T	A	"
89	S-T	G	"
96	A-T	A	6
97	S-Q	D	"
101	Q-B	C	"
104	S-Q	D	"
106	Q-B	F	"
109	A-Q	A	"
110	S-T	D	"
113	S-T	D	7
114	T-Q	D	"
(continued)			

85. Bernet Kempers, XIII, 133-139.

116	A-B	A	"
116	T-Q	D	"
118	A-B	A	"
120	S-Q	G	"
121	Q-B	D	"
123	A-B	A	"
124	A-B	F	"
125	A-B	D	"
129	S-Q	G	"
131	Q-A	D	"
133	Q-A	D	"
138	S-T	G	"
141	n/c	G	"

Table 99. Cadences in Claudin de Sermisy's
"Deus misereatur nostri"⁸⁶

Measure	Voices	Degree	Text Phrase
Prima pars			
11	S-T2	G	1
14	A-T2	D	"
15	T1-B	G	"
24	A-B	C	"
29	S-T1	G	"
39	A-B	C	2
51	S-T1	G	"
54	B-S	G	3
60	n/c	C	"
64	T2-A	G	"
66	S-A	G	"
69	S-A	C	"
73	T1-B	G	"
75	n/c	G	"
Secunda pars			
86	A-B	C	4
92	T1-B	G	"
93	A-T2	D	"
101	S-T2	G	"
103	T1-A	C	5
106	T1-A	C	"
110	S-T1	G	"
111	A-T2	C	"
113	T1-T2	D	"
117	S-T1	A	"
122	T1-A	G	"

(continued)

86. Smijers and Merritt, *Trieze livres du motets*, III, 140-150.

129	A-S	C	6
134	S-T1	G	"
140	S-T1	C	"
147	T2-B	G	"
152	S-T2	G	"
159	T2-T1	G	"
165	S-T1	G	"
168	n/c	G	"

Table 100. Cadences in Claudin de Sermisy's
"Quare tremuerunt gentes"⁸⁷

Measure	Voices	Degree	Text Phrase
Prima pars			
11	Q-B	A	1
14	T-A	C	"
20	T-B	G	"
25	S-T	G	"
30	T-B	C	2
35	A-S	G	"
41	A-Q	C	"
45	B-S	G	"
46	S-T	C	"
47	Q-T	C	"
49	S-Q	G	"
54	A-T	E	3
63	S-T	G	"
70	A-B	D	"
72	A-S	G	"
74	S-T	C	"
80	T-Q	G	4
86	A-S	D	"
92	S-T	A	"
94	T-Q	G	"
97	S-Q	G	"
98	n/c	G	"
Secunda pars			
104	Q-B	D	5
106	T-B	G	"
108	Q-T	D	"
115	Q-B	G	"
118	Q-B	D	"
119	Q-B	D	"
128	B-Q	G	6
133	Q-T	G	"
139	T-B	A	"

(continued)

87. H. Colin Slim, *A Gift of Madrigals and Motets* (Chicago: University of Chicago Press, 1964), 187-207.

143	T-Q	D	"
146	B-T	G	"
151	T-B	G	"
154	Q-B	D	"
157	Q-T	C	"
161	T-B	C	"
170	T-B	D	7
177	T-B	G	"
184	T-B	G	"
191	Q-B	C	"
193	n/c	C	"
206	T-Q	G	8
215	Q-B	D	"
223	T-A	C	"
225	B-T	G	"
227	S-Q	G	"
242	T-B	D	9
250	A-Q	D	"
256	S-T	G	"
259	T-A	C	"
261	S-Q	C	"
273	A-B	D	"
274	S-Q	G	"
276	n/c	G	"

Table 101. Cadences in Thomas Créquillon's
"Delectare in Domino"⁸⁸

Measure	Voices	Degree	Text Phrase
Prima pars			
6	T-S	C	1
11	S-T	G	"
16	T-A	C	"
19	S-T	G	"
21	T-B	C	2
28	A-B	E	"
33	A-B	G	"
36	S-T	C	"
50	T-A	C	3
56	S-A	C	4
58	T-A	C	"
61	S-T	G	"
65	T-S	G	"
67	n/c	G	"

(continued)

88. Marshall, III, 74-81.

Secunda pars			
74	S-T	E	5
77	S-T	G	"
77	A-T	C	"
80	A-T	G	"
86	T-A	C	"
91	S-T	G	6
104	A-S	E	"
106	S-T	A	"
110	n/c	G	"
114	S-A	D	7
116	S-T	G	"
120	S-T	A	"
124	S-T	G	"
128	S-T	G	"
130	n/c	G	"

Table 102. Cadences in Jean Mouton's
"Confitemini Domino"⁸⁹

Measure	Voices	Degree	Text Phrase
Prima pars			
16	A-S	C	1
21	B-T	D	"
25	S-T	G	"
32	A-S	D	2
38	B-T	D	"
41	S-B	G	"
43	T-S	C	"
48	A-B	G	"
72	S-T	A	3
75	S-T	G	"
Secunda pars			
92	T-B	A	4
99	S-T	G	"
113	T-B	D	"
119	S-T	A	5
125	A-B	C	"
130	A-B	D	"
130	S-T	G	"
136	S-T	G	"

89. Smijers and Merritt, *Trize livres du motets*, IX, 47-54.

APPENDIX B

GALLUS DRESSLER'S *PRAECEPTA MUSICAE POETICAE*¹

Praecepta Mu
sicae poeticae a D: Gallo
Dresselero Nebreo:
cantore Scholae Magde-
burgensis privatim
praelecta et foeli[ci]
ter 21. Octob:
anno post
partum
virginis
1563
inchoata.

Praefatiuncula.

¹Musica omnibus temporibus apud bonos et doctos in magno precio fuit. Nostro tempore adeo necessaria est, ut huius artis ignari ad gubernacula scholarum et ecclesiarum vix adhiberi possint nec tantum illis qui scholasticis et ecclesiasticis officijs praeficiuntur verum omnibus

1. Following the text published by Hans Engelke, "Einige Bemerkungen zu Dresslers 'Praecepta musicae poeticae'," *Geschichtsblätter für Stadt und Land Magdeburg* XLIX/L (1914/1915), 213-250, 396-401.

studiosis Musicae studium utile est, sicut enim Musicae medius locus, qui habetur honestissimus inter artes liberales a doctis tribuitur ita haec ars omnibus reliquis studijs est ornamento, et nemo non videt Musica ingenia a plerisque humanis et doctis viris amari, Nec audiendi sunt Centauri et Cyclopes qui Musicam et alias artes extreme contemnunt, quia tales contemptores monstris quam hominibus similiores sunt et qui artes bonas contemnunt ipsum Deum autorem contumelia afficiunt. Cum igitur haec ars adeo utilis et gratiosa sit ut suos cultores in omni genere vitae promoveat, eosque charos omnibus bonis afficiat, officium meum requirit ut nostros auditores in tempore ad hanc artem discendam invitent. Duae autem sunt Musicae partes videlicet practica et poetica quae in scholis proponi solent, quibus tandem theorica in consideratione consistens, ab aetate profectioribus adiungitur. Inter has duas partes cum alteram praelegendam constituisssem poeticae praelectio hoc tempore propter sequentes causas praelata est

¹²¹ Quia practica Musica proxime a nobis explicata fuit

¹³² Quia aliquot adolescentes a me hoc petiverunt quibus mea opera deesse nolui

¹⁴³ Cum ante biennium a me huius artis praecepta proposita sint, volo ut quaedam utilia et discentibus necessaria plenius explicata et exemplis illustrata adjiciantur, tandem non mediocre calcar addiderunt viri

aliquot qui judicant huius artis praecepta non parum adolescentibus profutura. Etsi de utilitate totius Musicae supra dictum est, tamen in specie hunc quatuor causas adjiciam, propter quas adolescentes poeticam prae reliquis amare et discere debeant

¹⁵¹ haec ars docet rationem componendi novas harmonias

¹⁵² addit iudicium quae cantiones sint artificiosae quae vulgares, quae falsae

¹⁷³ Ostendit qua ratione errores sint corrigendi

[a note appears in the margin in this place, which Engelke could not decipher]

¹⁸⁴ haec ars facit canentes certiores, et si forte a scopo aberratur, monstrat viam redeundi ad metam, hoc enim praestare potest cognita consonantiarum et clausularum proprietate.

¹⁹Privatim autem esse hanc lectionem volumus, quia novis [nobis] auditoribus non convenit, et in tam frequenti auditorio in quo dissimiles auditores sunt, debita cura diligentia haec praecepta non posse explicari arbitror, ut etiam sciri possit, qui auditores idonei habeantur et qui cum fruge hanc lectionem audire possint, brevibus significabo, cum ex practica Musica extruantur praecepta poeticae, necesse est huius artis tyronem prompta practicae aliquomodo degustasse, et ad illa praecepta usum canendi accedere oportet ut his non excellentiam, quae in pueris non potest esse, sed mediocritatem requirimus, quae si quis se

instructum putat, ad hanc lectionem cum utilitate accedere potest, Non sinant se queri stolidis quorundam dehortantum convenire, Item Musicam impedire cursum reliquarum artium, regium est discere artes liberales et testantur historiae principem Themistoclem indoctiorem habitum quod exercitia quaedam Musices recussasset, nolumus Musicam impedire reliquorum studiorum cursum, imo volumus ut eum adjuvet promoveatque, neque authores sumus ut relictis alijs artibus studiosi hanc solam excolant, sed potius ut reliquis studiis adjunget huius mediocrem cognitionem, quod quidem jactura temporis succisivis horis fieri potest, et adolescentes hoc studium omnibus piis et doctis commendabit, aggrediar deo volente quod foelix et faustum sit hoc nostrum institutum in hoc primae classis auditorio et singulis septimanis praelectioni die Jovis horam pomeridianam duodecimam usque ad primam destinamus, initium facturi proximo die Jovis, et cum privati sint labores aequum est, ut privato aliquo precio gratitudinem auditores declarent praesertim quibus facultas non deest, pauperes quibus fortuna sumptus denegat in numerum auditorum libenter recipio, modo eum referre nequeant, agant gratias, tandem quo sciant quid in hac praelectione expectare debeant, et quo ordine traditurus sim hanc artem, placuit capitum ordinem et summam subjicere.

¹¹⁰Dividimus praecepta Musicae poeticae in XV capita

- I. caput agit de definitione et divisione
contrapuncti
- II. de sonis et consonantijs
- III. de dissonantibus et Syncopatione
- IIII. de differentia inter vera et falsa intervalla
- V. de usu sextae et quartae
- VI. de partibus cantilenarum
- VII. de commixtione consonantiarum
- VIII. de constitutione et divisione clausularum
- IX. de usu clausularum
- X. de pausis
- XI. de inventione fugarum
- XII. de fingendis exordijs
- XIII. de media parte cantilenarum constituenda
- XIV. de fine harmoniarum
- XV. qua ratione tyrones in hoc studi cum fruge
progredi possint.

Caput I

de definitione et divisione Musicae

¹Quid est Musica poetica?

Est ars fingendi musicum carmen. Differt a reliquis Musicae partibus. Theorica considerat, practica canit. Haec vero novas harmonis componit, et opus absolutum vel authore mortuo post se relinquit. Poetica musica duplex est, videlicet sortisatio et compositio. Sortisatio (ut ipsa appellatio indicat) est subita et impulsa supra cantum

aliquem per diversas voces extemporalis pronuntiatio. Haec apud exteros [magis] suavior est quam apud nos, et cum ex usu magis quam praeceptis pendeat [et oriatur ex compositione] minimeque vitiis careat [omissa hac ad compositionem accedamus] nam scripto comprehendere et studiosis tradere non est usitatum.

¹²Quid est compositio?

Est diversarum harmoniae partium per discretas concordantias secundum veram rationem in unum collectio, et habet unam tantum speciem quae appellatur contrapunctus.

¹³Quid est contrapunctus?

Est ratio flectendi cantabiles sonos proportionabili dimensione ac temporis mensura. Tria considerentur in hac definitione, primo ut soni usurpentur quos humana voce possumus assequi ideo dicitur cantabiles sonos, secunda ut proportio conveniens observetur in dimensione concordantiarum ne oriatur confusio ideo additur proportionabili dimensione Tertio ut temporis ratio habeatur (Tempus vocatur dimensio brevis) juxtas quod totus cursus harmoniarum est dirigendus ideo dicitur temporis mensura.

¹⁴Quotuplex est contrapunctus?

Triplex est, Simplex, floridus seu fractus et coloratus.

¹⁵Quid est simplex?

Est qui singulis notulis parem quantitatis valorem tribuit, ut cum choralis notula contra choralem ponitur.



¹⁶Quid est floridus seu fractus contrapunctus?
 Est qui supra cantum figurales notulas admittit.
 Exemplum contrapuncti floridi seu fracti.



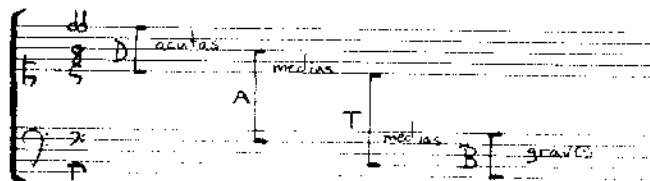
¹⁷Quid est coloratus contrapunctus?
 Est qui harmoniam ex diversis notularum et signorum
 quantitativibus constitutam profert. Ad hanc partem
 referuntur Missae figurales et cantiones quae mutetae
 appellantur nec non Gallicae Italicae et aliae cantiones
 miram diversitatem praeferentes. Exemplum.²

2. Engelke does not render this example because of extreme illegibility, but nonetheless identifies it as Dressler's own "Amen dico vobis," available from Robert Eitner, Gallus Dresslers XVII Cantiones sacrae (Wittenberg: Georg Rhau, 1565), Publikationen älterer praktischer und theoretischer Musikwerke (Leipzig: Breitkopf & Härtel, 1900), XXIV, 74ff.

Caput II

de sonis seu de vocibus et consonantijs

¹Cum haec ars versetur circa sonos seu voces de his omnium primo est dicendum. Est autem sonus sive vox qualitas constans ex motu, qui vel humana voce vel instrumento excitatus auribus concentum praebet. Hujusmodi voces sunt triplices: acutae, mediae et graves. Acutae dicuntur superiores quas motus celerior profert, quam ob causam citius penetrant, et velocius aures ingrediuntur, graves dicuntur inferiores soni quos tardior motus procreat, quam ob causam tardiores et hebetiores sunt. Mediae voces appellantur quae mediocritatem inter gravitatem et acumen obtinent. Hic vocibus ita Franchinus in scala locum designat, ut graves locum rarum clavium quae magnis litteris pinguntur occupent, acutae vero superiores et geminatas, mediae autem inter utrasque medium possideant, et ut pueri et vocum ambitum diligentius intelligant hoc loco subjeciemus paradigma, designans Discanto acutas, Alto et Tenori medias, Basso vero inferiores voces.



¹²Ex his vocibus oriuntur consonantiae, quia revera consonantiae sunt mixturae acutorum gravium et mediorum sonorum suaviter uniformiterque auribus accedentium.

¹³Quot sunt consonantiae?

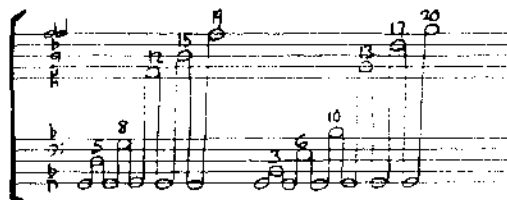
12 (Revera est unisonus 5, 3, et 6).

¹⁴Unisonus, 3, 5, 6, 8, 10, 12, 13, 15, 17, 19 et 20.

Etsi in Unisono nulla fit mixtura gravis acutique soni, tamen inter consonantias honoris causa recensetur, est enim omnium consonantiarum sicut in Arithmetica unitas numerorum origo. Consonantiae sunt triplices Aequisonae, Consonae et concinnae.

¹⁵Aequisonae appellantur Diapason (8) et Disdiapason (15) quia eundem sonum ex duobus vel tribus sonis constituunt, et consonae dicuntur diapente (5) (honoris causa latini retinent vocabula graeca) cum Diapason (12) propterea quod compositum seu mixtum reddant sonum. Concinnae appellantur 3, 6, 10, 13 et 20 qui etsi per se minus stabilem locum habent (*Man kan nicht drin aushalten*) tamen aequisonis et consonis exprimus haud ingratum concentum, hinc constat non immerito aequisonas et consonas perfectas, concinnas, vero imperfectas appellari, Vt vero tyrones eo facilius incipiant novas harmonias componere, in tabulis perfectas et imperfectas representabimus consonantias, quo recte numerare et supputare singulae discantur.

perfectae consonantiae:

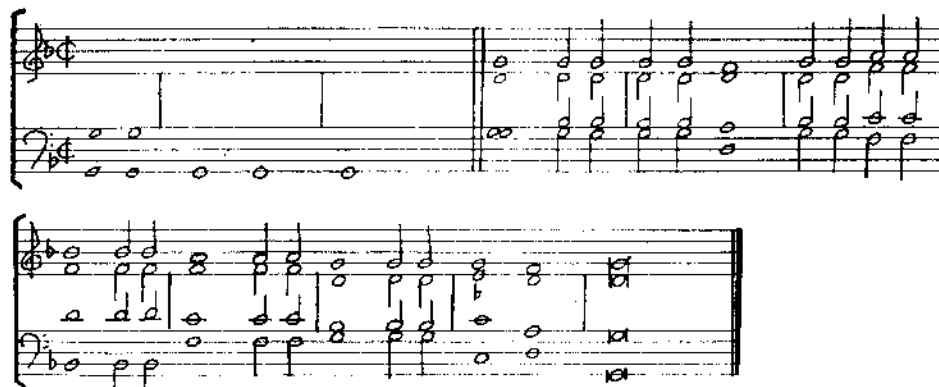


¶ Sequuntur nunc aliquot Regulae

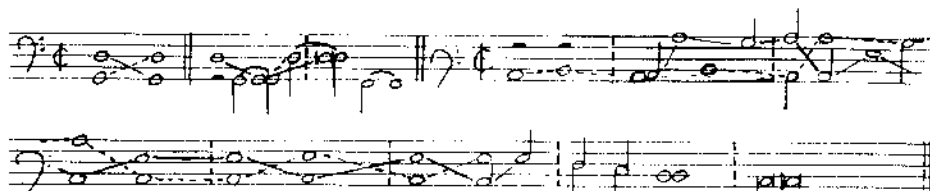
1) perfectae consonantiae eiusdem speciei ascendendo et descendendo se invicem non possunt sequi et plerumque cantum incipiunt et claudunt, exempli causa.



¶ 2) plures concordantiae perfectae eiusdem speciei et immobiles se invicem sequuntur (hoc est quando neque ascendunt neque descendunt).



¹⁸³) perfectae consonantiae diversis motibus incedentes sequi se possunt.



¹⁸⁴) Imperfectae consonantiae plures se invicem sequuntur modo in perfectas tandem exeant. Non desunt qui consonantias triplices faciant easque dividant in

Simplices	1	secundarias	8	triplicatas	15
	3		10		17
	5		12		19
	6		13		20

quia sono conveniunt.

¹⁸⁰Haec divisio prodest ad intelligendam consonantiarum cognitionem, cum enim idem iudicium sit de octavis. Apparet secundarias et triplicatas nam induere, intellectisque simplicibus reliquas facile posse iudicari. In

consonantiarum numerum recipitur quarta duabus
condicionibus, videlicet ut infra se tertiam vel quintam
habeat, de qua re infra pluribus agemus.

III caput
de dissonantiis

¹Est diversorum sonorum mixtura n^{al}iter aures
offendens. Sunt autem 9: 2, 4, 7, 9, 11, 14, 16, 18, 21
sicut consonantiae ita et dissonantiae in tres partes secari
possunt, videlicet in

Simplices	2	Secundarias	9	Triplicatas	16
	4		11		18
	7		14		21

²Etsi dissonantiae nullum stabilem habent locum in
contrapuncto, certis rationibus admissae non solum nullam
laesionem auribus afferunt, sed eosdem suaviter delectant.

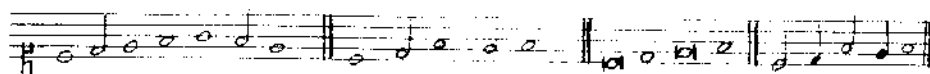
³Quibus rationibus admittuntur?

Duabus rationibus: videlicet syncopatione et
celeritate.

⁴Quid est syncopatio?

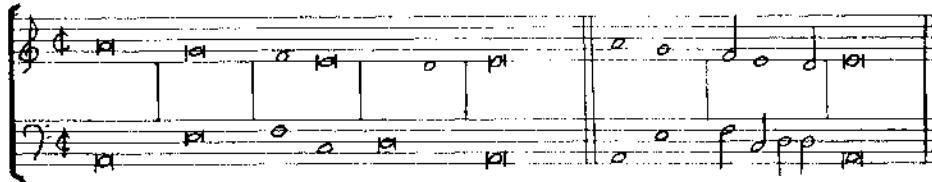
Est reductio minoris notulae ultra majores ad aequalem
cui annumeratur, ut si minima ultra semibreve quae ad ante
cedentem quo tactus absolvatur referenda est.

Exempli gratia





⁹⁴) Clausula mi in discanto ex Basso admittit 9 syncopatam, videlicet quando ex 8 in 12 convenitur nonnumquam ad alias clausulas transfertur syncopatio, cuius rei infinita exempla in Clementis et aliorum cantionibus reperiuntur. Exemplum hujus regulae:



¹⁰Has regulas de syncopationibus traditas Tyrones observent, quia ex his clausulae constituuntur, quae maximam suavitatem pariunt.

¹¹Quae dissonantiae admittuntur in contrapuncto propter celeritatem?

Quatuor videlicet <minim, semiminim, fusa, semifusa>.

¹²1) Regulae. Dissonantiae in ordinario vocum musicalium ascensu et descensu admittuntur in elevatione et non in depressione tactus, nam necesse est in depressione tactus poni consonantias quibus tamquam fundamento harmonia nitatur et insistat. Exemplum de celeri transitu.



¹³²) In syncopationibus admittuntur dissonantiae etiam in depressione tactus. Exemplum:



¹⁴³) Sine periculo et sine aurium offensione in singulis tactibus binae semiminimae dissonantes leguntur altera in depressione altera in elevatione tactus, quae semiminimae constituunt tactum duae depressione et totidem elevationi debentur, si priores duae videlicet altera in depressione altera in elevatione consonuerint, reliquae zduaea eleganter leguntur. Exemplum:



¹⁵⁴) Nonnumquam et prior semiminima in elevatione dissonans inseritur, sed hoc loco tyrones oportet exempla autorum observare, inde quid usus praebet discendum est.



Caput IIII

de prohibitis intervallis, videlicet tritono, semidiapente et diapason.

Etsi doctrina de constituendis intervallis alibi traditur, tamen ne tyrones puerili numeratione decepti pro consonantiis dissonantias contrapuncto inscientes inserant, paucis necessaria attingere visum fuit, prodest enim discentibus vera discrimina intervallorum considerare et posse veris rationibus prohibita intervalla a veris et concessis discernere. Sunt autem tria intervalla, quae ex numero consonantiarum ejiciuntur videlicet tritonus, hoc est mi contra fa in quarta, Semidiapente, hoc est mi contra fa in quinta, Semidiapason, hoc est mi contra fa in octava. Quanquam si tantum puerili supputationi quae ex distantia linearum et spaciolorum constat, confides, nullum videtur esse discrimen inter veram et falsam quartam, veram et falsam quintam, veram et falsam octavam: tamen vi diligentius introspectas numerum tonorum et semitonorum facile et

discrimen et erratum deprehendes. Vera quinta constituitur et duobus tonis et semitonio: Falsa quarta constituitur ex tribus integris tonis, nec ullum semitonium admittit, inde et tritonus dicitur. Vera quinta constituitur ex tribus tonis et semitonio. Falsa quinta constat ex duobus tonis et duobus semitoniis et dicitur semidiapente, item mi contra fa in quinta. Vera octava ex diatessaron et diapente constituitur, hoc est quinque tonis et duobus semitoniis. Falsa vel ex tritono et diapente, vel ex Diatessaron et semidiapente constituitur et appellatur mi contra fa in 8va.



Caput V

De usu quartae et sextae

¹Quarta inter Dissonantias numeratur, sed duabus conditionibus in numerum consonantiarum recipitur recepta adeo utilis et necessaria est ut sine hac harmonia quatuor vocum constitui nequeat.

²Regula. 1) Nulla quartae in contrapuncto est dissonantia.

³2) Efficitur consonantia quando quintam vel teriam infra se habet, ad hanc superiorem regulam exemplum [?] referatur, quia de octavis idem est iudicium.

¹⁴³) plures quartae possunt se invicem sequi una cum inferiori tertia quae tandem in octavam plerumque exeunt, nec in compositione alio modo conceditur, ut tres voces simul vel ascendant vel descendant in consonantiis ejusdem speciei, hujusmodi autem concentus Musici appellant Faulx Bourdon.

¹⁵⁴) Crebrius hoc fit descendendo rarius vero ascendendo, exempla tamen reperiuntur in Gomberti Muteta "Deus virtutum" in fine secundae partis, item in Clementis cantione "Ascendit Deus in jubilatione" statim initio secundae partis.

¹⁶De usu Sextae.

Etsi 6 et 13 numerantur inter imperfectas consonantias: tamen debiliorem tertia et decima videntur referre harmoniam, cum vero 6 usurpata suavissima sit, et eadem

alieno loco inserta auribus minus probabilem praebeat consonantiam, regulis paucis usum 6 tyronibus monstrabimus.

³Regula

¹71) Sexta in Delitijs est Discanto cum Tenore, et adeo suavem profert harmoniam ut fere integrae cantiones ex hujuscemodi concentu constent, et in Tenore cum Discanto praeter sextas nihil audiatur nisi quod in clausulis ex 6 in octavam conveniatur.

¹82) Conceditur 6 et reliquis vocibus ea tamen lege ut in octavam conveniant, hoc plerumque solet fieri in vocibus obtinentibus clausulam Tenoris et Discanti.

¹93) Binae voces sine interventu aliarum recipiunt Sextam sive in Octavam sive in aliam consonantiam conveniatur.

¹04) Sexta nisi infra se alia habeat consonantias imbecillior est quam ut suavem concentum edere possit ideoque Bassus in stabili loco sextam vel 13 non recipit in celeri vero transitu recipiuntur 6 et 13 sed ut in alijs ita et in his autoritas Musicorum observanda et imitanda est.

Exemplum 1. Regulae.



3. Engelke's edition renders this "monstrabinus."



Caput VI.

De partibus cantilenarum.

¹Sicut 4 elementa corpus perfecte mixtum ita 4 voces plenam harmoniam constituunt, reliquae voces omnes propria loca non habent sed in certis sedibus vagantes clausulas et consonantias ab aliis [?] hoc evidenter probatur ex clausulis, in quibus 4 tantum voces legitima hospitia sibi usurpant. Hae 4 partes usitatis nominibus appellantur Tenor et Discantus, Bassus, Altus.

²Quid est Tenor?

Est vox media cujuslibet cantilenaе, dictus a tenendo, quod omnium in se partium consonantiam respective teneat.

³Quid est Discantus?

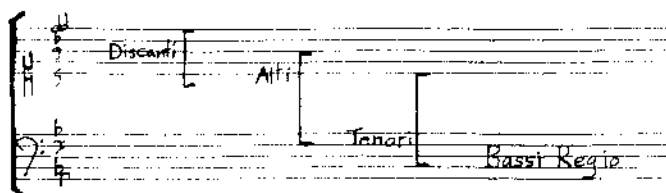
Est cujuslibet cantilenaе vox suprema, puerili voce modulanda.

⁴Quid est Bassus?

Est cantilenaе vox infima graviore voce canenda.

¹⁵Quid est Altus?

Est cantilenae pars ante supremam cum Basso quam saepissime in octavam conveniens. Et quia haec vox, cum Tenor saepius quartam habeat, a quibusdam contratenor dicitur, quod raro cum Tenore conveniat, etsi intra certos limites hae voces non possunt concludi: tamen pueris ambitum et locum singularum vocum ostendant, prodest enim discentes in conspectu habere certas regulas, ad quas suos conatus referant.



¹⁶Haec in genere de domicilio cujusque vocis commonuisse satis sit ut discant Tyrones Discantum cum Tenore et Altum cum Basso in octava iisdem fere limitibus includi, ita ut Altus quintam infra Discantum Bassus quintam infra tenorem possideant. Quicquid restat ad percipiendum cursum singularum cantilenarum id ex ambitu tonorum petendum est inde enim certa fundamenta sunt extruenda et transpositio una cum licentia et alijs rebus necessariis observanda sunt. Imprimis et opera dabitur ut ita vel in altum ascendamus vel in profunditatem descendamus ut humana voce singula intervalla sine difficultate pronuntiari queant.

¹⁷Quaquam commixtio consonantiarum certis regulis comprahensa docebit rationem conjungendi voces, tamen sciant Tyrones singulis vocibus peculiare Consonantias et de his esse, quibus prae reliquis saepe utuntur iisque delectantur. Discantus cum Tenore sextam, Altus cum Basso octavam exoptat, Bassus prae reliquis vocibus gravitatem et majestatem prae se ferre videtur ideoque ex optimis et suavissimis consonantiis est extruendus. Sextam et decimam tertiam et in loco stabili non admittit.

¹⁸Quae vox est omnium primo fingenda?

Veteres judicarunt Tenorem omnium primo inveniendum, secundo loco discantum tertio Bassum, ultimo Altum addendum. Inde Tenore nomen adeptus videtur a tenendo quod ad eum tanquam ad cerebrum (ceterae partes) respiciunt. In contrapuncto simplici vel florido haec veterum sententia potest et debet observari sed quilibet vox cui thema componendum attribuitur tenor iure quodam appellanda est sive Discantus sive Bassus vel quaecunque vox fuerit, verum in contrapuncto colorato ubi mira varietas incidit, non Tenoris tantum sed et aliarum omnium vocum ratio habenda est, quando igitur figuralis harmonia componitur imprimis, Observetur ambitus tonorum qui per clausulas et repercussiones usitatas repraesentatur quo pacto omnium vocum ita ratio habeatur ut singulae suavitatem prae se ferre videatur. In cantionibus quae ex fuga constant, vox fugam incipiens vel continuans primaria et praecipua est,

cui reliquae omnes quotquot fuerint parere coguntur, de qua re infra agetur.

⁹Quot lineis utuntur poetae, supra quas componunt?

Exercitati supra quinque lineas componunt quae res cum incipientibus numerandi paret difficultatem concedimus ut 10 lineis utantur, et hoc a bonis et candidis non reprehendi potest, quia cum intra schalam, quae ex 10 lineis constat totum harmoniae corpus includatur, nemo non videt incipientibus facilius esse de conjunctis consonantiis quasi in tabula positis iudicare in hoc genere mediocriter exercitati si as quinque lineas se assuefacere voluerunt, liberum erit. Quo autem voces perspicue distinguantur ad vitandas confusiones Discanto et Basso quadratas notulas, Tenori triangulares, alto rotundas destinamus.

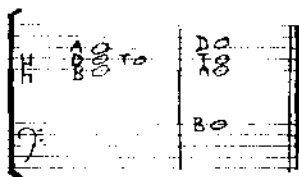
Caput VII.

De commixtione consonantiarum.

¹Etsi consonantias supra una cum usu quarte et sextae recensuimus: tamen prodest tyronibus initio harmoniarum commixtiones demonstrari. Ordine igitur declarabimus qua ratione reliquae voces affingantur, quomodo Discantus et Tenor in unisono, tertia, 4, 5, 6, 8 et 10 conveniunt.

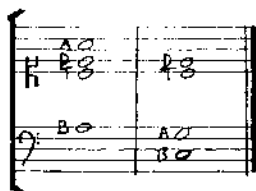
Regulae.

²Cum Discantus et Tenor in unisono coocantur dupliciter Bassus et Altus formatur, primo Bassus 3 infra Tenorem occupat, secundo Bassus quintam infra, Altus quartam supra vel tertiam infra Tenorem possidebit.



II.

¹³Collocato Tenore cum Discanto in 3 bassus in 3 infra,
 Altus in 6 supra tenorem ponetur: Secundo Bassus infra 8
 Altus infra tenorem 4 vel 6 sibi vendicat
 exemplum.



III.

¹⁴Quando Tenor et Discantus per 4 distant Bassus infra
 5, Altus infra Tenorem 3 habebit.
 exemplum:



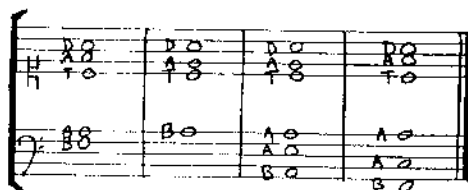
IIII.

¹⁵Discanto cum Tenore 5 obtinenti Bassus infra in 8,
 Altus in 3 supra vel in 4, 6 infra Tenorem subjicitur.



V.

¹⁶Das ist die beste, die man haben kann, discantus et Tenor habentes 6 Basso et Alto quadruplicem constitutionem concedimus: primo Bassus in 5 infra, Altus in 4 supra vel 3 infra Tenorum annectantur: secundo Bassus 3 infra, Altus 3 supra Tenorem postulant: Tertio bassus 10 infra, Altus 3 supra vel 3 vel 6 infra Tenorem obtinent: quarto Bassus 12 infra, Altus 4 supra vel 3 et 6 infra tenorem occupent.



VI.

¹⁷Cum Discantus et Tenor 8 obtinent quinque modis Bassus cum Alto potest addi:

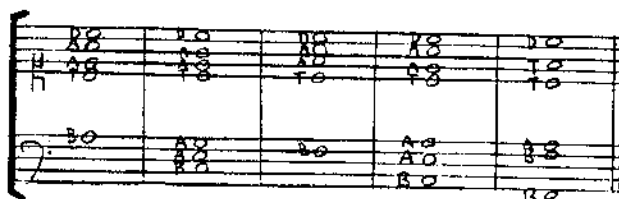
I. Bassus 3 infra, Altus 7 vel sextam supra obtinent.

II. Basso 6 infra, alto 6 vel 4 supra vel 3 infra Tenorem assignatur.

III. Bassus 8 infra: Altus 3 sive 5 supra vel 4 et 6 infra Tenorem possidet.

IIII. Bassus 10 infra, altus 3 vel 4 supra, vel 3 vel 6 infra tenorem obtinent.

V. Bassus 12 infra altus 4 supra vel 3, vel 6 infra Tenorem canant.



VII.

1^aTenore sub Discanto 10 sonante bassus 3 infra et Altus 3 vel 6 supra Tenorem repraesentabit.

2) Bassus 8 infra, Altus 3 vel 5 supra Tenorem possidebit.

3) Bassus 10 infra, altus 3 vel 6 supra, vel 3 vel 6 infra tenorem obtinent.

exemplum:



1^aHae 7 regulae docent commixtionem consonantiarum et tyronibus incipientibus componere multum lucis afferunt, neque tamen ignorent pueri voces invicem mutare nonnunquam suas consonantias et Bassum tenoris et eccontra tenorem

Bassi occupare locum, idem etiam a reliquis vocibus committi potest. Sed latius de his tyrones docebunt probatorum musicorum exempla, ex quibus quicquid restat prehendum est.

Caput VIII.

De constitutione et divisione clausularum.

¹Post commixtiones consonantiarum formationem clausularum monstrare operae pretium videtur; nam clausulae cantum non solum mirifice ornant verum et partes totius harmoniae convenienter connectunt.

²Quid est clausula?

Est cantilenae particula in fine vel quies perfecta repetitur vel est vocum diversarum in consonantiis perfectis conjunctio.

³Quot notulae a singulis vocibus ad constituendam clausulam requiruntur?

Tres voces Tenor, Bassus et Altus binas regulas requirunt, videlicet penultimam et ultimam quibus hospitium certum designatur: sed Discanto accedente syncopatione tres notulae conceduntur antepenultima, penultima et ultima, haec infra exemplis declarabuntur.

⁴Quotuplices sunt clausulae?

Duplices, perfectae et semiperfectae, perfectas appellamus in quibus singulae voces perfectas consonantias occupant ijs quae plerumque cantum claudimus.

⁵Semiperfectas discendi causa nominamus quando discantus in imperfecta consistit consonantia hujuscemodi

clausulae vel in medio tantum inseruntur vel in fine primae partis, ubi secunda pars expectatur. Perfectae ibidem sunt duplices: Durae et molles. Durae quando Tenoris ultima et paenultima notulae distant per tonum ut sunt clausulae exeuntes in UT, RE, FA, SOL, LA.

¹⁶Qua ratione constituuntur perfectae et durae clausulae?

Discantus et tenor ex 6 in 8 conveniunt, ac si incidit syncopatio in Discanto tunc 7 syncopata excusatur, Bassus inferiori loco cum Tenore ex 5 in 8 vel unisonum concedit, Altus vero supra tenorem in penultima 4 in ultima 5 vel 3 possidet. [verte et vide exemplum.] Durae clausulae sunt etiam duplices videlicet longinquiores vocamus eas in quibus Bassus cum Discanto in Disdiapason [in octavam] detruditur, sicut supra exemplum est declaratum [Durae clausulae possunt recipere formationem mollium sed non econtra molles possunt recipere formationem durarum propter Semidiapentem]

viciniores, cum omnium vocum harmonia intra octavam includitur, quae clausulae miram pariunt suavitatem propter vicinas consonantias.

¹⁷Quomodo constituuntur viciniiores [clausulae]?

Nulla instituitur alia formatio, sed voces invicem suum locum commutant, exceptio basso qui suis terminis propter gravitatem et contentus. [Qua ratione omnes voces invicem locum mutant.] Tenor occupat clausulam Discanti, Discantus alti, et Altus Tenoris sibi vendicat locum, ita tamen voces coartentur⁴ ut intra disdiapason omnes voces maneant.



¹⁸Molles clausulae nominamus quando tenoris notulae ultima et penultima distant per semitonium quod tantum accidit in clausula MI.

¹⁹Quomodo formantur hujusmodi clausulae?

[est Clausulo MI.]

Discantus et Tenor ut supra ex 6 in octavam conveniunt et Septima syncopata admittitur, Bassus vero infra Tenorem ex 3 in quintam detrudit, Altus supra Tenorem tertiam in penultima et in ultima quartam vel sextam sibi vendicat.

4. Engelke's edition reads "coardentur."

¹¹⁰Nonnumquam Bassus et altus ad hunc modum adduntur id que fere in medio et non fine accidere solet.



¹¹¹Durae clausulae possunt recipere formationem mollium sed non econtra propter semidiapente:

Regula.

¹¹²In mollibus et duris clausulis Discantus et Tenor suas clausulas invicem mutare possunt Alto et Basso retinentibus suam stationem. [in octava, ita ut Altus et Bassus integra sua intervalla retineant.]



[De Semiperfectis.]

¹¹³Quomodo formantur semiperfectae clausulae?

Dixi me appellare semiperfectas clausulas, quando Discantus in imperfectis consonantijs facta collatione cum reliquis vocibus consistit, Tales clausulae sic constituuntur, Tenor Discanti, Bassus Tenoris assumit

clausulam (et 7 syncopata admittitur) Discantus autem et tripliciter addi potest et haec formatio quae in omnibus vocibus musicalibus tonis et semitonijis.

[Engelke notes a gap in the manuscript at this point.]

¹⁴¹) Cum Tenore ex 5 in tertiam Discantus concurrit et tunc Altus in ultima et penultima quartam infra Tenorem obtinet vel in penultima [tertiam] supra in ultima quartam infra tenorem possidebit, ut sequentia declarant exempla. Et cum idem iudicium sit de octavis ex 12 in 10 cum tenore discantus convenit.

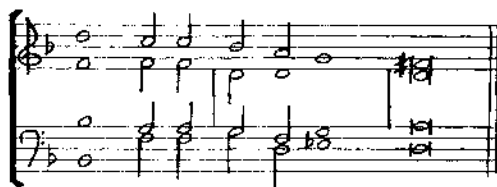


¹⁵²) Ultimam et penultimam in tertia supra tenorem collocat, vel cum idem sit iudicium de octavis pro tertiis decimam usurpat. Altus ut supra duplicem sedem retinet.



¹⁶³) Quando cum tenore ex decima in quintam cadit discantus, tunc altus in penultima quintam supra tenorem, in ultima tertium supra sibi vendicat.

¹²⁰Altus et Tenor invicem sua loca possunt mutare.



¹²¹Discantus potest etiam alio modo addi.

Caput IX.

De usu clausularum.

¹Non sibi persuadeant adolescentes concentus musicales esse temerariam et fortuitam consonantiarum coaceriationem. Sicut enim oratio habet octo partes orationis, item periodus cum commatis et virgulis, quibus ceu membra articulis coniungitur, ita etiam concentus musicalis octo vel etiam plures habet tonos, item intervalla et clausulas ex quibus harmonia constituitur. Quod autem in oratione est periodus et comma id in poetica musica sunt clausulae, quae tamquam partes integrum corpus constituunt. Non igitur sufficit tantum scire compositionem clausularum, sed discentes docendi sunt quo ordine clausulae jungantur ut justam et auribus harmoniam reddant: Duo autem spectanda sunt in positu clausularum quorum alterum ut verbis alterum ut concentui convenienter respondeant ac aequae cohaereant.

¹²Primo verbis ita respondeant ut non quibus vocabulis, verum, quoad fieri potest integrae locutiones subjiciantur, nam sicut in clausulis fere singulae voces perfectas

consonantias occupant: ita etiam verbis quibus clausulae applicantur quandam perfectionem inesse volumus. Quid autem sit comma, virgula et periodus, quibus clausulae destinantur, id potius ex grammatica quam ex musica discendum est. De his brevibus tantum monuisse sufficiet. Secundo dixi cum harmonia clausulas debere convenire idque volumus in recto et non alieno loc clausulae inserantur. Quo/Qua autem ordine/serie concentus clausulas admittat, cognoscitur ex doctrina tonorum, quorum quilibet certum clausularum delectum [?] habet. Etsi igitur hortamur nostros auditores ut ex scripto, quo hoc negotium comprehensum edidimus, rem cognoscant. Tamen tyronum gratia, qua possimus brevitatem et simplicitatem significabimus quae clausulae singulis locis conveniunt.

¹³Antequam autem ad ipsos tonos accedamus, clausulas faciamus triplices, quae in quemlibet tonum cadere possunt videlicet principales minus, principales et peregrinas.

¹⁴Principales appellamus in quibus praecipuum fundamentum toni consistit ut sunt clausulae quae ex speciebus diatessaron et diapente vel ex repercussionibus extruuntur.

¹⁵Minus principales vocamus quae etiamsi ex praecipuis fontibus non effluunt, tamen mediae parti cantionis sine offensione inseruntur. [His utuntur musici cum iudicio.]

¹⁶Peregrinas dicimus quae proprium locum non habent sed ex alio tono tamquam ex peregrino advehuntur ut si quis SOL

clausulam in clave G vel clausulam FA in Clave C primo vel 2do tono inserat.

¹⁷Quas clausulas recipit primus Tonus?

Primus tonus formatus ex diapente RE LA et diatessaron RE SOL. Regulariter exit in clave D. [et repercussiones habet RE LA] Ideoque clausulas principales habet RE in clave D, FA in A, SOL in D superiori, minus principales habet clausulas FA in clave F, MI in E, reliquae quaecunque fuerunt peregrinae sunt. Hoc de primo tono. [Omnes authentici (1, 3, 5, 7) finiuntur in infima notula diapason [?] plagales in quartam [?] supra (2, 4, 6, 8).]

¹⁸Quas clausulas recipit secundus tonus?

Formatur ex diatessaron RE SOL, diapente RE LA crebrius RE FA, repercussionem semiditonum et tandem regulariter exit in D, plerumque transponitur ad quartam in figurali cantu. Ideo hic tonus principales habet clausulas, Quando transponitur, RE in clave G, FA in Clave B, re in Clave D inferiori [ut superiori loco] Minus principalem clausulam habet mi in clave A. [Exemplum quare in aliis annotationibus.]

¹⁹Quas clausulas recipit tertius tonus?

[margin note: In me transierunt Orlandi Est 3 toni. Et *alzeit bedur.*]

Formatur ex diapente MI MI et diatessaron MI LA repercussionem repetit suam MI FA per sextam. Regulariter exit in Clave E, igitur principales recipit clausulas MI in

clave e, MI in B, fa in clave C. Minus principales SOL in Clave G, RE in clave A.

^{f10}Quas clausulas recipit quartus Tonus?

Componitur/Formatur ex diatessaron MI LA et diapente MI MI, repetit saepius MI LA et habet principales Clausulas Mi in clave E et LA in Clave A. Minus principales clausulas habet SOL in G, FA in c [?] inferiori loco *das ach god vom himel sieh derein ist ein recht exemplum drauf.* [Hic pertinent cantiones Domine Jhesu. *her wie lange.*]

^{f11}Quas recipit clausulas quintus Tonus?

[a margin note indicates "ionicum" instead of "quintus."]

Formatur ex diapente UT SOL et quarta UT FA, repetit FA SOL per quintam. Ideo principales habit clausulas FA in F, SOL in C inferiori et superiori. Minus principalem clausulam habet MI in Clave A. Reliquae sunt peregrine omnes. Exemplum. *Ein veste burch ist unser.* [Mane nobiscum Domine.]

^{f12}Sextus Tonus quas clausulas recipit?

Sextus tonus constituitur ex quarta UT FA, quinta FA SOL, recipit tertiam FA LA. Exit in Clave F. Ideoque recipit clausulas principales FA in Clave F, MI in Clave A, SOL in C inferiori vel superiori loco. [Exempla Lazare veni foras. Deus in adiutorium [? unreadable].]

^{f13}Septimus Tonus quas recipit clausulas?

Septimus Tonus formatur ex quinta UT SOL et

diatessaron/quarta RE SOL Exit regulariter in Clave G [et repetit repercussionem UT SOL]. Ideo recipit principales clausulas UT in G, SOL in D superiori et inferiori, minus principalem clausulam habet FA in C. Repetit UT SOL. [7 u. 8. tonum *braucht man bdur.*] Exemplum: Cum sancto spiritu.

¹⁴Octavus tonus extruitur ex diatessaron/quarta RE SOL et diapente/5 UT SOL. Repetit [repercussionem] UT FA quartam. Exit regulariter in G, admittit principales Clausulas UT in G, RE in D in inferiori et superiori, FA in C superiori.

Sequitur nunc X Caput.

De pausis.

¹Sicut in communi vita non parvae est artis recto tempore tacere, ita etiam in Musica silentium habet suum locum et laudem [?] appellamus autem ista signa quibus silentium induitur pausas, de quarum definitione et numero in practica dicitur. Inventae autem sunt pausae propter quinque causas, primo respirandi gratia tot/tantum enim notulae/notularum contrapuncto inserantur poni debet quot/quantum uno anhelitu pronuntiari possunt/potest ne propter spiritus defectum difficultas oriatur quae plerumque vel confusionem vel asperitatem/insuavitatem parit. Secundo sextum applicandi gratia non raro pausae interponuntur.

²Decorum enim est notulas verbis apte/recte applicari et ejusmodi applicatio multum habet gratiae. Tertio propter prohibita intervalla vitanda.

¹³Nonnumquam tamen ipsa necessitas postulat silentium ne contra regulas artis peccemus/delinquatur. Quarto propter fugas constituendas pausis carere non possumus. Oportet enim intervenire pausas quo fugae ab auribus percipiantur et praesertim in initiis cantilenarum. Quinto elegantiae et suavitatis causa inseruntur [etiam] pausae et non raro omnes voces silent propter emphasin et vocabulorum significationem. Exemplorum infinitam copiam subpeditabunt probatorum musicorum compositiones.

Caput XI.

De inventione fugarum.

¹⁴Tribus ornamentis Clementis cantiones maxime excellunt: Syncopationibus, vicinis clausulis et fugis. De syncopatione et clausulis supra dictum est: Restat ut de fugis dicamus Wenceshajj versus: "Inserere saepe fugas et erit subtile poema." Nam in poetica Musica nihil artificis est dignius quam fugas inserere. Hac enim ornant cantum et musicum natura et arte instructum referunt.

¹²Quid est fuga?

Est duarum vel trium vel plurium vocum repetitio quae fit vel per unisonum, 8 5 vel 4.

¹³Quotuplex est fuga?

Triplex, videlicet integra, semifuga et mutillata.

¹⁴Quid est integra fuga?

Est cum omnes voces ex una cantione canunt usque ad finem. Exemplum.



¹⁵[Altus incipit, deinde Tenor duo pausat, discantus 4 pausat Bassus 6 pausat. Epidiapason supra in ?]

¹⁶Canon.

Singulae voces post tempus unisono se invicem sequuntur excepto dicanto qui in epidiapason post duo tempora procedit. Tales fugae exercitatis conveniunt et incipientes faciliora imitari decet.

¹⁷Quid est semifuga?

Est cantio referens initia integrae fugae sed tandem omissa fugae imitatione in clausulam concedens ut "Deus virtutum," "Domus mea domus virtutum," "Mane nobiscum Domine," "Fuerunt mihi lacrymae meae."

¹⁸Quid est mutillata fuga?

Est cantio, quae quamquam statim initio non integram fugam referat tamen talem sonat harmoniam ut intelligi possit ad imitationem fugae compositam, ut initium "Timor et tremor."

¹⁸De inventione fugarum.

Etsi usu haec sunt discenda et potius exemplis quam regulis cognoscenda, tamen cum regulae non multum/mediocriter adjuvent, quo facilius et minori cum

labore constitutiones fugarum percipiantur brevibus
necessaria quaedam monebimus.

¹⁰Quotuplex est ratio cognoscendi [vel constituendi] fugas
aut quotratiōibus constituuntur fugae?

Quadruplex.

¹¹1) Ex speciebus diatessaron vel diapente sumuntur
fundamenta fugarum [ut "Mane nobiscum Domine", "adesto
dolori meo"].

¹²2) Ex repercussionibus Tonorum sumuntur fugarum
fundamenta quae non tantum nudaē sed etiam multis aliis
intervallis intervenientibus constituuntur.

¹³3) Ex clausulis tonis musicis convenientibus fugae
eruantur/utuntur ita ut ex alia clausula ad aliam rendamus.
Ut Domine Jesu Christe, est enim 4 toni LA SOL FA.

¹⁴4) partim ex repercussionibus, partim ex diatessaron
et diapente speciebus ["Videntes stellam" inserted beneath
this line of text] mixtae fugae constituuntur ut exordium in
cantione Crequillonis "Deus virtutum" sumptum est partim ex
specie diatessaron FA UT et partim repercussione FA LA, est
enim sexti toni [vel Maria Magdalena, in isto cantu sunt
mixtae fugae. Nullae fugae possunt aliunde sumi quam ex his
fundamentis jam dictatis].

Caput XII.

De fingendis exordiis.

¹Pulchre [enim?] Horatius inquit "Dimidium facti qui
bene coepit habet." Hoc proverbium ut [ad] alia ita et ad

nostrum institutum quadrare videtur, appellamus autem hoc loco exordium initium cujuslibet cantionis usque ad primam clausulam, *das ist d. exordium so lange die erste Clausel kompt.*

¹²Sumantur autem exordia ex praecipuis fontibus tonorum videlicet ex speciebus diatessaron et diapente vel ex repercussionibus et principalibus clausulis. Non enim pueros exordiis peregrina vel minus usitata immiscere velim, sed adducant tonis convenientia ut sine mora aures de certo aliquo tono iudicium statuunt. Quo facto harmonia gratior sit et aures magis demulceat et sicut videmus [poetam?] exordiis et quidem primis versibus propositionem inserere, ut Virg. 1. Aneidos inchoat opus aneidos: "arma virumque cano," item Lucanus statim initio in lib. 1. "Populumque potentem describam. In sua victricis conversum viscera dextra." Ita nos in Musica cujus cum poesi magna est cognatio tonum in ipso exordio exprimamus.

¹³Est autem exordium cantilenarum duplex, videlicet plenum et nudum. Plenum est, cum omnes voces uno tempore ictu incipiunt ut in "*Bewahr mich hehr.*" Item "*dulci amene wenn alle stimmen zugleich anheben.*" In hujusmodi exordiis quaedam voces nonnumquam ex imperfectis constant consonantiis.

¹⁴Nudum appellamus exordium quando non [simul] omnes voces prorumpunt sed aliae post alias ordine procedunt. Hujusmodi exordia ex fugis plerumque constituuntur,

repetenda igitur sunt hoc loco, quae supra de fugis tradidimus. [Regula.] In nudis exordis imprimis detur opera, ut si non singulae voces tamen aliquando incipientes statim clausulas aliquas constituent. *Wenn man fugis macht so sol man immerdar sie fluchs in initio anfahenn*, ut "Adesto dolori meo" est exordium nudum ut 2 [?] clausulae mirum in modum afficiunt ita in exordiis ad significandum tonum multum habent gratiae. [Ut in muteta Clementis "Adesto dolori meo" vel quinque vocum "*Siehe wie fein und lieblich ist*" statim in ipso exordio intrundit clausulam la.]

Caput XIII.

De medio constituendo.

¹"In medio consistit virtus" preoverbium vetus quod non alieno [?] ab instituto videtur. Nam cum media pars dicatur quiequid intra exordium et finem continetur, quilibet intelligit potiore compositionis partem in fingendo medio consistere: sicut autem exordium [duplex] est et vel ex fugis vel simplici consonantiarum commixtione extruitur, [ita etiam media pars cantionis vel ex fugis vel conjunctione concordantiarum formatur.]

²Qua igitur ratione medium sine fugis constituitur?

Cum supra exposimus clausulas esse partes quibus ceu articulis et membris tota harmonia [invicem connectitur], Sciant Tyrones simplex medium sine fugis tradere originem ex clausulis quae pro ratione toni et verborum convenientur

sunt conjungendae ita ut tanquam partes corpus integrum constituent quo autem eo facilius intelligatur hoc aliquibus regulis rem comprehendam.

¹³Prima Regula.

Primo omnium est elegendus tonus materiae conveniens nam quidam toni sunt laeti, ut primus, quintus et octavus tonus, quidam sunt tristes ut secundus quartus et sextus, quidam morosi [et austeri] ut Tertius et septimus tonus.

¹⁴Secunda Regula.

Verborum ratio est habenda, [ita] ut apte harmonia cohaereant. Nam cantiones verborum causa et non verba propter harmoniam finguntur.

¹⁵Tertia Regula.

Principales Clausulae et minus principales sine periculo inseruntur, sed peregrine ut sunt haud ingratae in tempore adhibitae ita maxime turbant auditum, cum intempestive usurpantur in his igitur ut in alijs usus consoletur.

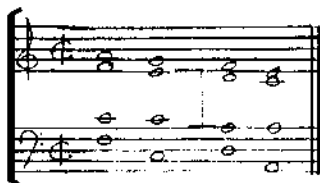
¹⁶Quarta Regula.

Decorum est cum occurrant verba emphasin prae se ferentia [?] tardiori gressu incedere interpositis nonnumquam pausis generalibus ut plerumque fieri solet in missis ut cum occurrit nomen Jesu Christi nec pausa ingratae sunt quae enim [?] syllabicis distionibus subjiciuntur ut in passione, vah [unreadable] Decorum est

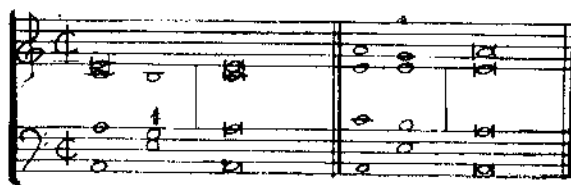
quoque in materia laeta [ascendere] vel iracunda et profundiora loca occupare in tristitia declaranda.

¹⁷Quinta Regula.

Quamquam commixtiones consonantiarum supra fuerunt traditae tamen et hoc loco considerandum quasdam consonantias suaviores, quasdam minus gratias⁵ proferre harmonias ut suavem producit sonum processus vel progressus tertiae in quintam vel ex 10 in 12 quia idem est iudicium de octavis.



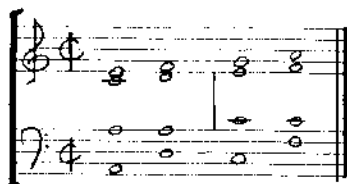
¹⁸Item causus ex tertia vel quinta in octavam vel ex decima in 15 (disdiapason).



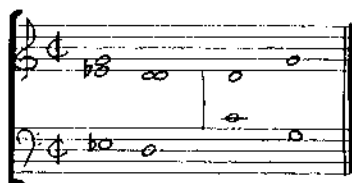
¹⁹Et econtra ascendendo semper quando 5 in 3 ascendit eadem intervalla haud sunt ingrata, scilicet quando quinta in tertiam ascendit. Vel idem sit iudicium de octavis cum

5. Engelke's edition reads "gratas."

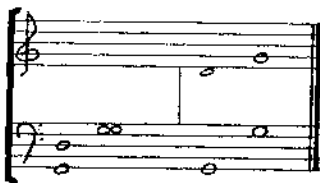
ex duodecima ascendimus in decimam exempli gratia *Wann man umbekeret.*



¹⁰Durius sonat cum ex tertia vel quarta in unisonum descenditur et cum ex decima vel undecima in octavam ascenditur.



¹¹Et cum ex quinta in unisonum ab utraque voce ascenditur



hoc est vitandum.

¹²Excusantur igitur exempla authorum suavia, observentur et vitentur auribus ingratiore.

¹³Qua ratione constituitur medium ex fugis?

Quae supra de fugis tradidimus ea hoc loco ad usum transferantur, regulis insuper de simplici medio constituendo repetitis. Et quamquam his intellectis ex fugis medium fingi potest, tamen quamdam dispositionem Harmonarium ab artificibus videlicet Clemente, Gomberto, Crequillone et alijs ipsorum coetaniis haetanus observatam addere volnj: Nam arbitror haec prodesse tam ad compositionem quam ad iudicium de cantionibus pugandum.⁶

¹⁴[Dispositio.]

Exordio constituto in clausula aliquae voces conveniunt, ut ibi tanquam defatigatae in perfectis consonantijs tanquam in hospitio requiescunt. [Exemplum est "Concussum est mare."] Postea recollectis viribus ad fugam aliquam redeunt qua a singulis vocibus ordine expressa iterum clausula constituitur.

¹⁵Non raro in ipsa clausula aliqua vox jacet fundamentum novae fugae quam postea usque ad clausulam reliquae voces sequuntur. Aliquoties fit ut unius fugae per diversa intervalla instituaturs repetitio, quae, cum singulae voces se ipsas fugando imitari videantur, auribus non mediocrem affert delectationem intervenientibus vocalibus emphasin praeseverantibus [prae se ferentibus] [Exempla "Te Deus virtutum," "Concussum est mare," "In te projectus sum," "Cantate Domino." In illis omnibus [?] fugae per diversa

6. Engelke's edition reads "puagandum."

intervalla.]

¹¹⁶Nonnumquam a fugis simplicem consonantiarum commixtionem [prius tamen constituta clausula] in quibus per tardiores harmonias expressis ad fugam aliquam vox se rursus praeparat quam reliquae voces pro ratione consonantiarum ordine usque ad clausulam sequuntur.

¹¹⁷Ad hunc modum multi artifices suas formant cantiones cursumque talem observant donec ad optatam metam perveniatur [?] de qua recte constituenda in sequenti capitulo dicetur.

Caput XIV.

De constituendo fine.

¹¹⁸In fine omnis laus canitur, item in fine videtur cujus toni, quae vetera proverbia testantur, magna cura fines constituendos esse [?].

¹¹⁹Cum enim omnes clausulae sunt vocum errantium receptacula quid de fine iudicandum, ubi singulae voces non solum inspirare, sed tamquam in exoptate hospicio defatigatae tandem consistere debeant. Danda igitur est opera ut cum iudicio recte fines constituantur. Germanici istius memores, *wenn ende gut ist, so ist alles gut*.

¹²⁰Dupliciter autem harmoniarum fines formantur.

Aut enim regularem quoniamque tenorem habet finem, aut irregularem sequuntur.

¹²¹Regularis terminus sine periculo vel a Tyrone constitui potest.

¹²²Sed irregularis sine probati auctoris exemplo temere

non est inserendus.

¹⁶Estque hoc loco non praetereundem irregulares fines plerumque tribui priori parte cantionis ubi secunda pars expectatur, rarius autem ultimum terminum constitui regulariter.

¹⁷Quo autem haec omnia praecipe intelligentur ordine singulas tonos percurremus.

Primus et secundus tonus exeunt regulariter in D, transpositi in clave G et tunc [?]fiunt bemollares vel molles irregulares fines et Epiphonemata vel appindices quamquam omnino non possunt recenseri tamen exempla aliqua addemus praebentes causum junioribus colligendi plura exempla: [apparent omission]

Caput XV.

De ratione progrediendi in hoc studio.

¹Post praecepta tradita quae ad poeticam musicam discendam requiruntur, brevibus monebimus adolescentes de ratione progrediendi in hoc studio. Et quo eo facilius et rectius discentes rem ipsam agnoscant regulas quasdam subjiciemus:

¹1. primo omnium regulae artis supra traditae discendae sunt, quibus neglectis oleum et operam Tyrones perdere certum est.

¹2. Excutiantur cantiones probatorum authorum ut

Orlandi⁷ et Clementis, resolvantur in decem lineas et per regulas causae examinentur.

¹⁴³. In tali examinatione in primis notentur pulchriores syncopationes, clausulae, fugae et suaviore consonantiarum commixtiones.

¹⁵⁴. Non sufficit ad hunc modum examinasse aliorum laborem nisi accedant propria exercitia, igitur ad praxin perveniendum et cum regulis usus artium magister conjungendus:

¹⁶¹) Praxin sic incipiant pueri, ut divisio artis postulat, prima contrapunctum simplicem in quo sibi faciunt familiares praecipuos regulares de consonantiis invicem conjungendis.

¹⁷²) Conferant se ad contrapunctum fractum et ibi clausulas, nec non etiam suaviora intervalla discant inserere.

¹⁸³) Mediocriter exercitati ad hunc modum tandem contrapunctum coloratum aggrediantur.

¹⁹⁴) Tonorum doctrinam ante omnia commendatam habeant, nam ex hoc fonte tota poetica manet et quo sciant decorum servare, discant natura[m] et proprietates singulorum tonorum, quidam enim sunt laeti ut 1, 5, 7, 8 tonus, quidam tristes et blandi ut 2, 4 et 6, alii vero morosi [et austeri] ut 3 et 7 id quod in doctrina tonorum explicari solet.

7. Engelke's edition reads "Otlandi."

¹⁰⁵) Quandoquidem omnia principia [sua] sint gravia, elegant sibi Tyrones aliquem Symphonistam imitandum quorum, etsi multa sunt genera, tamen quater praecipua recenseri possunt.

¹¹¹) Inter primum genus refertur Josquinus cum suis coetaneis, qui ex fugis extruunt harmonias, sed eorum cantiones quater sunt nuda⁸.

¹²²) Inter secundum genus numeratur Henricus Isaac [Senfel] et alij ejusdem generis qui contrapuncto fracto maxime excellunt.

¹³³) Inter tertium genus refertur Clemens, Gombertus [Crequillus] cum aliis qui ad nostra usque tempora floruerunt. Horum cantiones non ex nudis sed ex plenis fugis constituuntur, et eruditis auribus hactenus fuerunt probatae.

¹⁴⁴) Inter quartum genus refertur Orlandus qui omnes suavitate antecellere videtur. Hic ad fugas ubique se alligare non patitur sed praecipue suavitatis est studiosus et verbis Harmonium apte et convenienter per decorum applicat.

Appendix.

¹Haec si fuerunt observata ab iis qui naturali inclinatione ducuntur ad hanc artem non dubito quin suaves et probatas sint composituri Harmonias. [Adjungam ad haec praecepta adhuc admonitionem et regulam valde utilem et

8. Engelke's edition reads "quatuor."

necessariam.] Cum enim in hoc coetu multi sunt auditores qui ad praxin non accedunt, sed tantum audiunt praecepta propter causas supra enumeratas rationem praescribam quomodo, si forte inter canendum aberratur, in viam redeundum sit.

¹²Multi errantes inter canendum plena voce pergunt quorum modum equidem non probo. nam hoc modo non solum produnt suum errorem verum et reliquas voces turbant. Praestat igitur silere quam strepitu inepto reliquas voces deformare.

¹³Non autem ita canendum est, ut otioso animo reliquas voces audiamus sed verba et fugae, quae a reliquis canentibus proferantur auribus notanda sunt et submissa voce tendamus reditur qui si non ex fugis et verbis colligitur tamen tandem in aliqua clausula a mediocriter praeceptorum perito facile restituitur. Et antea quam de restitutione sumus certi submissa voce clandestino susurro omnia diligenter exploranda sunt, donec ad legitimam viam nos rediisse haud dubio sentiamus. Tunc demum voce aequa cum reliquis canendum.

Laus Deo. 1564. 29 Februarij.

Melete panta dunatai. Telos.

Laus Primo et uni.

BIBLIOGRAPHY

PRIMARY SOURCES--TREATISES

- Aron, Pietro. *Toscanello in Music*, 3 vols., trans. Peter Bergquist, *Colorado College Music Press Translations*, IV. Colorado Springs, Col.: Colorado College Music Press, 1970.
- Adrianus petit Coclico. *Compendium musices*, facs. by Manfred Bukofzer, *Documenta Musicologica* ser. 1, IX. Kassel: Bärenreiter, 1954.
- Adrianus petit Coclico. *Musical Compendium*, trans. Albert Seay, *Colorado College Music Press Translations* V. Colorado Springs, Colorado: Colorado College Music Press, 1973.
- Agricola, Martin. *Rudimenta musices* (Wittenberg, 1539), *Monuments of Music and Music Literature in Facsimile* ser. 2, XXXIV. New York: Broude Bros., 1966.
- Aiguino, Illuminato. *La illuminata de tutti tuoni di canto fermo*. Venice: Antonio Gardano, 1562.
- da Brescia, Bonaventura. *Brevis collectio artis musicae*, ed. Albert Seay, *Colorado College Music Press Critical Texts*, XI. Colorado Springs: Colorado College Music Press, 1980.
- da Brescia, Bonaventura. *Regola musice plane* (Brescia, 1497), *Monuments of Music and Music Literature in Facsimile* ser. 2, LXXVII. New York: Broude Bros., 1975.
- Burmeister, Joachim. *Musica poetica*. Rostock, 1601.
- Burtius, Nicolaus. *Musices opusculum*, trans. Clement Miller, *American Institute of Musicology Manuscript Studies and Documents*, XXXVII. Neuhausen-Stuttgart: Hänssler-Verlag, 1983.
- Butler, Charles. *The Principles of Musik* (London, 1636), *The English Experience*, CCLXXXIV. Amsterdam: Da Capo, 1970.

- Cerreto, Scipione. *Della prattica musica vocale, et strumentale* (Naples, 1601), *Bibliotheca musica Bononiensis* ser. 2, XXX. Bologna: Forni, 1969.
- (Cochlaeus, Johannes.) Riemann, Hugo, ed., *Anonymi introductorium Musicae, Monatshefte für Musikgeschichte* XXIX (1897) 147-164, XXX (1898) 1-19.
- Coperario, Giovanni. *Rules how to Compose*, facs. ed. Manfred Bukofzer. Los Angeles: Ernest E. Gottlieb, 1952.
- (Faber, Heinrich.) Stroux, Christoph. *Die Musica poetica des Magisters Heinrich Faber*. Dissertation, Albert Ludwig Universität, Freiburg im Breisgau, 1967.
- Frosch, Johann. *Rerum musicarum* (Wittenberg, 1535), *Monuments of Music and Music Literature in Facsimile* ser. 2, XXXIX. New York: Broude Bros., 1967.
- Galliculus, Johannes. *Isagoge de compositione cantus*, ed. Arthur Moorefield, *Theorists in Translation*, XIII. Ottawa: Institute for Medieval Music, 1992.
- Herbst, Johannes Andreas. *Musica Poetica*. Nuremberg: n.p., 1643.
- Heyden, Sebald. *De arte canendi*, trans. Clement Miller, *American Institute of Musicology Musicological Studies and Documents*, XXVI. Rome: American Institute of Musicology, 1972.
- (Keinspeck, Michael.) Ammel, Winfried. *Michael Keinspeck und sein Musiktraktat "Lilium musicae planae"* Basel 1496, *Marburger Beiträge zur Musikforschung*, V. Marburg: Görlich & Weiershäuser, 1970.
- del Lago, Giovanni. *Breve introduttione di musica misurata* (Venice, 1540), *Bibliotheca musica bononiensis* ser. 2, XVII. Bologna: Forni, 1969.
- (del Lago, Giovanni, et. al.) Blackburn, Bonnie, Edward Lowinsky, and Clement Miller, *A Correspondence of Renaissance Musicians*. Oxford: Clarendon Press, 1991.
- (Lanfranco, Giovanni.) Lee, Barbara. *Giovanni Maria Lanfranco's Scintille di musica and Its Relation to Sixteenth-Century Music Theory*. Ph.D. dissertation, Cornell University, 1961.

- (Lippius, Johannes.) Rivera, Benito. *German Music Theory in the Early 17th Century: The Treatises of Johannes Lippius*. Ann Arbor, Mich.: University Microfilms International, 1974.
- de Menehou, Michel. *Nouvelle instruction familière (Paris, 1558)*, ed. Henry Expert. Paris: Leduc, 1900.
- (de Montanos, Francisco.) Urquhart, Dan. *Francisco de Montanos's Arte de musica theorica y pratica: A Translation and Commentary*, 2 vols. Ph.D. dissertation, Eastman University, 1969.
- Morley, Thomas. *A Plaine and Easie Introduction to Practicall Musicke*, ed. Alec Herman. London: Dent, 1952.
- Ornithoparchus, Andreas, and John Dowland, *A Compendium of Musical Practice*, ed. Gustave Reese, Steven Ledbetter. New York: Dover, 1973.
- Pontio, Pietro. *Ragionamento di musica (Parma, 1588)*, facs. ed. Susanne le Clercx, *Documenta musicologica* ser. 1, XVI. Kassel: Bärenreiter, 1959.
- Rossetti, Biagio. *Libellus de rudimentis musices (Verona, 1529)*, ed. Albert Seay, *Colorado College Music Press Critical Texts*, XII. Colorado Springs: Colorado College Music Press, 1981.
- (Schanppecher, Melchior.) Niemöller, Klaus, ed., *Die Musica figurativa des Melchior Schanppecher (Opus aureum, Köln 1501, pars III/IV)*, *Rheinische Musikgeschichte*, CL. Köln: Arno Volk-Verlag, 1961.
- Tigrini, Orazio. *Il compendio della musica (Venice, 1588)*, facs., *Monuments of Music and Music Literature in Facsimile*, ser. 2, XXV. New York: Broude Bros., 1966.
- Tinctoris, Johannis. *Concerning the nature and Propriety of Tones*, trans. Albert Seay, *Colorado College Music Press Translations*, II. Colorado Springs: Colorado College Music Press, 1967.
- Tinctoris, Johannis. *Opera Theoretica*, ed. Albert Seay, 3 vols., XXII of *Corpus Scriptorum de Musica*. Rome: American Institute of Musicology, 1975.

- Tinctoris, Johannis. *Terminorum musicae diffinitorium*, facs. and trans. (Ger.) by Heinrich Bellermann, *Documenta musicologica*, ser. 1, XXXVII. Kassel: Bärenreiter, 1983.
- Vanneo, Stephano. *Recanetum de musica aurea (Rome, 1533)*, *Documenta Musicologica*, ser. 1, XXVIII. Kassel: Bärenreiter, 1969.
- Vicentino, Nicola. *L'Antica musica ridotta alla moderna prattica (Rome, 1555)*, facs. ed., *Documenta musicologica*, ser. 1, XVII. Kassel: Bärenreiter, 1959.
- Wollick (Volcyr), Nicolas. *Enchiridion musices*, facs. Geneva: Minkoff Reprints, 1972.
- Zacconi, Lodovico. *Prattica di musica (Venice, 1592)*, 2 vols. Bologna: Forni, 1967.
- Zarlino, Gioseffo. *The Art of Counterpoint*, pt. 3 of *Le istituzioni harmoniche*, trans. Guy Marco and Claude Palisca. New Haven: Yale, 1968.
- (Zarlino, Gioseffo.) Cohen, Vered. *Zarlino on Modes: An Annotated, Indexed Translation, with Introduction and Commentary, of Part IV of Le istituzioni harmoniche*. Ph.D. dissertation, City University of New York, 1977.

PRIMARY SOURCES--SCORES

- Angles, Higinio. *Cristobal de Morales, Opera omnia*, 8 vols., *Monumentos de la música española*, vols. XI, XIII, XV, XVII, XX, XXI, XXIV, XXXIV. Rome: Consejo superior de investigaciones científicas, 1952-1971.
- Bernet Kempers, Karel P. *Clemens non Papa, Opera omnia*, 21 vols., *Corpus mensurabilis musicae*, IV. Rome: American Institute of Musicology, 1951-1976.
- D'Accone, Frank. *Francois de Layolle, Collected Motets, Music of the Florentine Renaissance*, V. Rome: American Institute of Musicology, 1973.
- Ebrecht, Lothar Hoffman. *Thomas Stoltzer ausgewählte Werke*, LXVI of *Das Erbe deutscher Musik*. Kassel: Nagel, 1969.

- Halm, Andreas and Robert Eitner. *Gallus Dressler XVII Motetten zu vier und fünf Stimmen*, XXIV of *Publikationen älterer praktischer und theoretischer Musikwerke*. Leipzig: Breitkopf & Härtel, 1900.
- Hofler, James. *Dominique Phinot, Opera omnia*, 1 vol. to date, *Corpus mensurabilis musicae*, LIX. Rome: American Institute of Musicology, 1972- .
- Hudson, Barton. *Antione Brumel, Opera omnia*, 6 vols., *Corpus mensurabilis musicae*, V. Rome: American Institute of Musicology, 1969-1972.
- Hudson, Barton. *Thomas Crecquillon, Opera omnia*, 5 vols. to date, *Corpus mensurabilis musicae*, LXIII. Rome: American Institute of Musicology, 1974- .
- Löhner, Edwin, and Otto Ursprung. *Ludwig Senfl, Sämtliche Werke*, 11 vols. Wolfenbüttel: Mösseler, 1962-1974.
- Marshall, H. Lowen. *The Four-Voice Motets of Thomas Crecquillon*, 4 vols., *Musicological Studies*, XXI. Brooklyn, N.Y.: Institute of Medieval Music, 1970-1971.
- Meier, Bernhard. *Cipriano de Rore, Opera omnia*, 8 vols., *Corpus mensurabilis musicae*, XIV. Rome: American Institute of Musicology, 1959-1977.
- Nugent, George. *Jacquet of Mantua, Collected Works*, 5 vols. to date, *Corpus mensurabilis musicae*, LIV. Rome: American Institute of Musicology, 1970- .
- Picker, Martin. *The Motet Books of Andrea Antico, Monuments of Renaissance Music VIII*. Chicago: University of Chicago Press, 1987.
- Schmidt-Gorg, Joseph. *Nicolas Gombert, Opera omnia*, 11 vols., *Corpus mensurabilis musicae*, VI. Rome: American Institute of Musicology, 1951-1974.
- Seay, Albert. *Carpentras, Opera omnia*, 5 vols. to date, *Corpus mensurabilis musicae*, LVIII. Rome: American Institute of Musicology, 1972- .
- Slim, H. Colin. *A Gift of Madrigals and Motets*. Chicago: University of Chicago Press, 1964.
- Smijers, Albert, et. al., *Werken van Josquin De Prés*, 53 vols. in 5 series. Amsterdam: G. Alsbach; Leipzig: Kistner & Siegel, 1921-1969.

- Smijers, Albert, and Tillman Merritt. *Trieze livres de motets parus chez Pierre Attaingnant*, 14 vols. Paris, Monaco: Loiseau-Lyre, 1934-1964.
- Walter, George R. *The Five-Voice Motets of Thomas Crecquillon*, 2 pts. in 3 vols. Ph.D. dissertation, West Virginia University, 1975.
- Zenck, Hermann. *Adrian Willaert, Sämtliche Werke, Publikationen älterer Musik IX*. Leipzig: Breitkopf & Härtel, 1968.

SECONDARY SOURCES

- Allaire, Gaston. "Some Overlooked Modulations in the Works of Josquin des Pres?" *Revue Belge de Musicologie XLVI* (1992), 33-52.
- Atcherson, W.T. "Theory Accomodates Practice: Confinalis Theory in Renaissance Music Treatises," *Journal of the American Musicological Society XXIII/2* (Summer 1970), 326-330.
- Bashour, Frederick. *A Model for the Analysis of Structural Levels and Tonal Movement in Compositions of the Fifteenth Century*, 2 vols. Ph.D. dissertation, Yale University, 1975.
- _____. "Towards a More Rigorous Methodology for the Analysis of the Pre-Tonal Repertory," *College Music Symposium XIX/2* (Fall 1979), 140-153.
- Beebe, Ellen. *Mode, Structure, and Text Expression in the Motets of Jacobus Clemens non Papa: A Study of Style in Sacred Music*. Ph.D. dissertation, Yale University, 1976.
- _____. "Text and Mode as Generators of Musical Structure in Clemens non Papa's 'Accesserunt ad Jesum'," *Music and Language, Studies in the History of Music I*. New York: Broude Bros., Ltd., 1983, 79-94.
- Berger, Karol. "Tonality and Atonality in the Prologue to Orlando di Lasso's *Prophetiae Sibyllarum*: Some Methodological Problems in Analysis of Sixteenth-Century Music," *Musical Quarterly LXVI/4* (Oct. 1980), 484-504.
- Bergquist, Peter. "Mode and Polyphony Around 1500," *The Music Forum I* (1967), 99-161.

- Caldwell, John. "Some Aspects of Tonal Language in Music of the Fifteenth and Sixteenth Centuries," *Proceedings of the Royal Music Association CX* (1983-1984), 1-24.
- Crockett, Avaleigh. *Selected Psalm Settings in Gallus Dressler's XC Cantiones quatuor, quinque, et plurium vocum, 1570*. M.M. thesis, University of Alberta, 1977.
- Dahlhaus, Carl. "On the Treatment of Dissonance in the Motets of Josquin des Prez," *Josquin des Prez*. London: Oxford University, 1976, 334-344.
- _____. *Studies in the Origins of Harmonic Tonality*, trans. Robert Gjerdingen. Princeton, N.J.: Princeton University Press, 1990.
- _____. "Tonalität--Struktur oder Prozess," *Neue Zeitschrift für Musikwissenschaft CXLIX* (1988), 12-17.
- _____. "Tonsystem und Kontrapunkt um 1500," *Jahrbuch des Preussischer Staatlichen Instituts für Musikforschung*, 1970, 7-18.
- _____. *Untersuchungen über die Entstehung der harmonischen Tonalität*. Kassel: Bärenreiter, 1968.
- _____. "Zur Harmonik des 16. Jahrhunderts," *Musiktheorie III* (1988), 205-211.
- _____. "Zur Tonartenlehre des 16. Jahrhunderts," *Die Musikforschung XXIX* (1976), 300-303.
- Dehnhardt, Walther. *Die deutsche Psalmotte in der Reformationszeit*. Ph.D. dissertation, Goethe Universität, 1971.
- Dill, Charles. "Non-Cadential Articulation of Structure in Some Motets of Josquin and Mouton," *Current Musicology XXXIII* (1982), 37-55.
- Eitner, Robert. *Biographisch-bibliographische Quellenlexikon der Musiker und Musikgelehrten*, 11 vols. New York: Musurgia, 1947.
- Engelke, Bernhard. "Einige Bemerkungen zu Dresslers 'Praecepta musicae poeticae'," *Geschichtsblätter für Stadt und Land Magdeburg XLIX/L* (1914/1915), 213-250, 396-401.

- Federhofer, Hellmut. "Musica poetica und musikalische Figur in ihrer Bedeutung für die Kirchenmusik des 16. und 17. Jahrhunderts," *Acta musicologica* LXV/2 (Jul.-Dec. 1993), 119-133.
- Frank, Carey. "Composition for Equal Voices in the Sixteenth Century," *Journal of Musicology* IX/3 (Summer 1991), 300-342.
- Gissel, Siegfried. "Zur Modusbestimmung deutscher Autoren in der Zeit von 1550-1650: Eine Quellenstudie," *Die Musikforschung* XXXIV/3 (Jul.-Sept. 1986), 201-217.
- Hermelink, Siegfried. *Dispositiones modorum*. Ph.D. dissertation, Tutzing, 1960.
- Judd, Cristle Collins. "Modal Types and Ut, Re, Mi Tonalties: Tonal Coherence in Sacred Vocal Polyphony from about 1500," *Journal of the American Musicological Society* XLV/3 (Fall 1992), 428-467.
- _____. "Some Problems of Pre-Baroque Analysis: An Examination of Josquin's Ave Maria . . . Virgo Serena," *Music Analysis* IV/3 (Oct. 1985), 201-239.
- "Kadenz," *Handwörterbuch der musikalischen Terminologie*, ed. Hans Eggbrecht, 3 vols. (Wiesbaden: Steiner, 1971-), II.
- Krantz, Steven. *Modal Practice in the Phrygian Motets of Josquin des Prez*. M.A. thesis, University of Minnesota, 1984.
- _____. *Rhetorical and Structural Functions of Mode in Selected Motets of Josquin des Prez*. Ph.D. dissertation, University of Minnesota, 1989.
- Lincoln, Harry B. *The Latin Motet: Indexes to Printed Collections, 1500-1600*. Ottawa: Institute of Mediaeval Music, 1993.
- Lowinsky, Edward. *Tonality and Atonality in Sixteenth-Century Music*. Berkeley, Calif.: University of California Press, 1961.
- Luther, Wilhelm. *Gallus Dressler: ein Beitrag zur Geschichte des Schulkantorats im 16. Jahrhundert*. Kassel: Bärenreiter, 1941.
- _____. "Zur Biographie Gallus Dresslers," *Zeitschrift für Musikwissenschaft* XVII/6-7 (Jun.-Jul. 1935), 305-306.

- Martin, Serge. *Le langage musical, sémiotique des systèmes, Sémiosis V.* Paris: Klincksieck, 1978.
- Meier, Bernhard. "Alte und neue Tonarten. Wesen und Bedeuten," *Renaissance Music 1400-1600 donum natalicium René Bernard Lenaerts, Musicologica lovaniensia I.* Lense: Universitit de Lense, 1969, 157-168.
- _____. "Josquins Motette *Dominus regnavit*: ein Sonderfall des Tonartwechsels," *Tijdschrift von der Vereniging voor Nederlandse XXXII* (1982), 45-50.
- _____. *The Modes of Classical Vocal Polyphony*, rev. by author, trans. Ellen Beebe. New York: Broude Brothers Ltd., 1988.
- _____. *Die Tonarten der klassische Vokalpolyphonie.* Utrecht: Oosthoek, Scheltema & Holkema, 1974.
- _____. "Tonartliche Ordnungen der sogenannten klassischen Vokalpolyphonie," *IMS Report, Berkely 1977.* Kassel: Bärenreiter, 1981, 509-517.
- _____. "Zu den 'in mi' fundierten Werken aus Palestrinas Offertoriums-Motettenzyklus," *Die Musikforschung XXXVII* (1984), 215-220.
- _____. "Zu den Tonarten instrumentaler Musik des späten 16. Jahrhunderts," *Logos musicae. Festschrift für Albert Palm.* Wiesbaden: Steiner, 1982, 162-171.
- _____. "Zur Modalität der ad aequales disponierten Werke klassischer Vokalpolyphonie," *Festschrift Georg von Dadelsen zum 60. Geburtstag.* Stuttgart: Hänssler, 1978, 230-239.
- Murray, Russell. *The Voice of the Composer: Theory and Practice in the Works of Pietro Pontio.* Ph.D. dissertation, University of North Texas, 1989.
- Novack, Saul. "Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac," *The Music Forum II* (1970), 187-263.
- _____. "Tonal Tendencies in Josquin's Use of Harmony," *Josquin des Prez.* London: Oxford University, 1976, 317-333.
- Nutting, Geoffrey. "Cadence in Late Renaissance Music," *Miscellanea Musicologica VIII* (1975), 32-55.

- Otterbach, Friedemann. *Kadenzierung und Tonalität im Kantilenensatz Dufays, Freiburger Schriften zur Musikwissenschaft VII*. Munich: Katzblücher, 1975.
- Perkins, Leeman. "Mode and Structure in the Masses of Josquin," *Journal of the American Musicological Society* XXVI/2 (Summer 1973), 189-239.
- Phipps, Graham H. "The 'Nature of Things' and the Evolution of Nineteenth-Century Musical Style: An Essay on Carl Dahlhaus's *Studies on the Origin of Harmonic Tonality*," *Theoria* VI, 141-163.
- Powers, Harold. "Is Mode Real? Pietro Aron, the Octenary System, and Polyphony," *Basler Jahrbuch für historische Musikpraxis* XVI (1992), 9-52.
- _____. "Modal Representations in Polyphonic Offertories," *Early Music History* II (1982), 43-86.
- _____. "The Modality of *Vestiva i colli*," *Studies in Renaissance and Baroque Music in honor of Arthur Mendel*. Kassel: Bärenreiter, 1974, 31-46.
- _____. "Mode," *New Grove Dictionary of Music and Musicians*, 20 vols. London: MacMillan, 1980, XII, 376-450.
- _____. "Tonal Types and Modal Categories," *Journal of the American Musicological Society* XXXIV/3 (Fall 1981), 428-470.
- Rahn, Jay. "Construct for Modality, ca. 1300-1550," *Canadian Association of University Schools of Music Journal* VIII/2 (Fall 1978), 5-39.
- Randel, Don. "Emerging Triadic Tonality in the Fifteenth Century," *The Musical Quarterly* LVII/1 (Jan. 1971), 73-86.
- Rivera, Benito. "Studies in Analysis and the History of Theory: Sixteenth and Seventeenth Centuries," *Music Theory Spectrum* XI/1 (Spring 1989), 24-28.
- Ross, Ronald. "Toward a Theory of Tonal Coherence: The Motets of Jacob Obrecht," *The Musical Quarterly* LXVII/2 (April 1981), 143-164.
- Salzer, Felix. "Tonality in Early Medieval Polyphony," *The Music Forum* I (1967), 35-98.

- Samuel, Rhian. *Modality, Tonality, and Musica Ficta in the Sixteenth-Century Chanson*. Ph.D. dissertation, Washington University, 1978.
- Schubert, Peter. "Authentic Analysis," *The Journal of Musicology* XII/1 (Winter 1994), 3-18.
- Slavin, Dennis. "Genre, Final, and Range: Unique Sorting Procedures in a Fifteenth-Century Chansonnier," *Musica Disciplina* XLIII (1989), 115-140.
- _____. "Some Distinctive Features of Songs by Binchois: Cadential Voice Leading and the Articulation of Form," *Journal of Musicology* X/3 (Summer 1992), 342-361.
- Stern, David. "Tonal Organization in Modal Polyphony," *Theory and Practice* VI/2 (Dec. 1981), 5-39.
- Treibitz, Charles. *Structural Thought in the Evolution of Modern Musical Concepts*. Ph.D. dissertation, Brandeis University, 1982.
- Treitler, Leo. "Tone System in the Secular Works of Guillaume Dufay," *Journal of the American Musicological Society* XVIII/2 (Summer 1965), 131-169.
- Wienpahl, Robert. "Modality, Monality, and Tonality in the Sixteenth and Seventeenth Centuries, II," *Music and Letters* LIII/1 (Jan. 1972), 59-73.
- Yates, Wilbur C. *A History of the Cadence in Polyphonic Vocal Music through the Fifteenth Century*. Ph.D. dissertation, Indiana University, 1962.
- Zoppelli, Luca. "'Ut prudens et artifex orator': Sulla consistenza di una 'doctrina' retorico-musicale fra Controriforma e Illuminismo," *Rivista italiana di musicologica* XXIII (1988), 132-156.