

Contrapuntal Strategies in William Byrd's

1589 Cantiones Sacrae

James S. MacKay

Faculty of Music
McGill University
Montreal

A thesis submitted to the Faculty of Graduate Studies
in partial fulfilment of the requirements for the degree of
Doctor of Philosophy

April, 2000

Copyright James S. MacKay, 2000



**National Library
of Canada**

**Acquisitions and
Bibliographic Services**

**395 Wellington Street
Ottawa ON K1A 0N4
Canada**

**Bibliothèque nationale
du Canada**

**Acquisitions et
services bibliographiques**

**395, rue Wellington
Ottawa ON K1A 0N4
Canada**

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-64610-6

Canada

Table of Contents

Abstract

Résumé

Acknowledgements

List of Motets from the 1589 *Cantiones Sacrae*

Volume 1: Text

Introduction	1
ONE. Review of Literature	5
Part One: Issues in Renaissance Musical Analysis	5
I. Introduction	5
II. Mode, Key and Pitch-Class Centricity	5
III. Cadences in Renaissance Style	11
1. Introduction	11
2. Zarlino's Description of the Cadence	12
3. Thomas Morley and the Cadence	14
4. Bernhard Meier's Melodic-Cadential Roles	16
IV. Imitative Procedures in Renaissance Style	19
1. Imitative Techniques as per Zarlino and Morley	19
2. Imitation as Seen in Recent Literature	22
V. Reductive Analysis	28
Part Two. Issues and Problems in Byrd Research	31
I. Byrd Biographies and Scores	31
II. Harold K. Andrews	32
III. Walter Gray's Rebuttal of Andrews	36
IV. Joseph Kerman	37
1. The Early Articles	37
2. <i>The Masses and Motets of William Byrd</i>	42
V. Recent Contributions to Byrd Research	46
VI. Summary and Conclusion	48

TWO. Cantus Firmus Technique in Byrd's 1589 <i>Cantiones</i>	51
I. Introduction	51
II. Cantus Firmus Motions and Form	56
III. Cantus Firmus Values and the Double Point	58
IV. Cantus Firmus Values and Pitch Centricity	60
1. The Opening Point of <i>Memento Domine</i>	60
2. <i>Defecit in dolore</i>	65
V. Conclusion	68
THREE. Cantus Firmus and Cadence	70
I. Introduction	70
II. Links between Beginnings and Cadences	71
III. Categories of Melodic-Cadential Motions	73
1. Bernhard Meier's Cadential Roles	73
2. Hierarchical Rank of Cadential Roles	76
3. Evaded and Abandoned Cadential Motions	79
IV. Melodic-Cadential Roles and Cadential Finality	85
V. Foreground Signals of Cadence Points	87
VI. Conclusion	89
FOUR. Cadence and Subject material	91
I. Cadence and Motive	91
II. Examples of Cadences in Opening Material	92
1. Explicitly Cadential Openings	92
2. Implied Cadences in Openings	96
III. Cantus Firmus and Cadence in <i>Memento Domine</i>	96
1. The Opening Imitative Point	97
2. <i>Quam possedisti</i>	105
3. <i>Libera eos</i>	110
4. Summary and Conclusion	112

FIVE. Presentation Types in Byrd's 1589 <i>Cantiones</i>	118
I. Presentation Types in Two Voices	119
1. Imitative Presentation Types	119
2. Non-Imitative Presentation	123
II. Presentation Types in Three Voices	124
1. Imitative Presentation Types	125
2. Non-Imitative Presentation	129
3. Hybrid Presentation Types	133
III. Presentation Types in Four Voices	135
1. Homophonic Presentation types	135
2. Transposed Canon in Four Voices	138
3. Complex Models in Four Voices	139
a. Hybrid Canons in Four Voices	139
b. Other Hybrids in Four Voices	143
IV. Conclusion	150
SIX. Presentation Types and Beginnings	151
I. Formal Beginnings: Data and Commentary	153
II. Beginnings of Internal Openings	162
1. Complex Presentation Types and Loosening	162
2. Internal Openings and Texture	164
3. Canon as Presentation Type	165
4. Hybrid as Presentation Type	169
III. Conclusion	172
SEVEN. Variation Techniques and Motivic Development	173
I. Textural Change	173
II. Transposition	176
1. Transposition and Pitch Centricity	176
2. Transposition and Canonic Procedures	177
3. Canons with Varied Transposition Levels	179

III.	Melodic Inversion	181
IV.	Invertible Counterpoint	183
	1. Definitions and Types	183
	2. Invertible Counterpoint and “Ingenuity”	184
	3. Common Intervals of Inversion	186
	4. Other Intervals of Inversion	188
	5. Invertible Counterpoint and Beginnings	192
	6. Parallel Doubling and ic 10	194
	7. <i>Aspice Domine</i> and ic 11	197
	8. Unusual Inversions and Concluding Canon	199
V.	Conclusion	201
EIGHT. Contrapuntal Strategies in <i>Tristitia et anxietas</i>		203
I.	General Information	204
II.	Detailed Analysis of Each Imitative Point	210
	1. The <i>Prima Pars</i>	211
	2. The <i>Secunda Pars</i>	225
Conclusion		231
Appendix: List of Openings with Cantus Firmus Values		235
Bibliography		240

Volume Two: Musical Examples and Figures

(see detailed list at the beginning of Volume Two)

Abstract

William Byrd's motets with Latin text are a little-known contribution to the sacred vocal repertoire. Most important among these works are three books of *Cantiones Sacrae*, published 1575, 1589 and 1591, respectively. The 1589 *Cantiones Sacrae* was Byrd's first harvest from a backlog of motets that had been accumulating since 1575. This collection lies at a midpoint between Byrd's earliest published works and his full maturity, as seen in the Masses of 1592-95.

This study will describe the contrapuntal strategies that characterize Byrd's 1589 *Cantiones*. I will examine Byrd's deeper-level tonal organization and its derivation from cantus firmus technique. I will show how Byrd uses musical material in cantus firmus values (the breve and semibreve) to shape his subject material and his cadence points, and how this shaping plays out over the course of an imitative point.

I will then examine Byrd's introductory gestures in the 1589 *Cantiones*, identifying 24 *presentation types* that characterize different degrees of beginning. These types contain one or more melodic subjects in a recurring temporal relationship, and form a vertical interval pattern or *harmonic motive*. Next, I will discuss Byrd's variation techniques by which he develops these presentation types: textural change, transposition, melodic inversion and invertible counterpoint. Byrd's presentation and variation of subject material divides an imitative point into distinct phases of tonal and contrapuntal activity, providing insight into its overall form and tonal design.

Finally, I will apply these analytical tools to a complete analysis of *Tristitia et anxietas*, from the 1589 *Cantiones*, thereby showing how Byrd establishes central pitches in the middleground. Through this analysis, I will summarize Byrd's contrapuntal strategies, both long-range and local, that typify his middle-period sacred vocal style, as viewed through the lens of the 1589 *Cantiones Sacrae*.

Résumé

Les motets sur les textes latins de William Byrd apportent une contribution méconnue au répertoire de la musique vocale sacrée. Parmi ces oeuvres, on distingue plus particulièrement les trois livres de *Cantiones Sacrae*, publiés successivement en 1575, 1589 et 1591. La seconde collection de *Cantiones Sacrae* constitue un florilège des meilleurs motets écrits par le compositeur entre 1575 et 1589 environ, et se situe donc à mi-chemin entre les premières oeuvres publiées par Byrd et celles de la maturité (comme les Messes de 1592-95).

Cette recherche décrit les stratégies contrapuntiques qui caractérisent les *Cantiones* de 1589. J'examine l'organisation tonal sous-jacente à ces oeuvres et discute l'influence des techniques de cantus firmus qui s'y manifestent. Je montre comment le matériau du sujet et ses articulations cadentielles adoptent le rythme du cantus firmus (brèves et semi-brèves), et comment ce profil influence le déroulement des points d'imitation.

Ensuite, j'examine les gestes introductifs dans les *Cantiones* de 1589 et identifie 24 types de présentation qui caractérisent différents degrés de commencement. Ces types contiennent un ou plusieurs sujets mélodiques, qui forme avec les autres voix un patron intervallique vertical spécifique appelé *motif harmonique*. Je discute les différentes techniques qui permettent de développer ces types de présentation: par changement de texture, transposition, renversement mélodique, et par contrepoint renversable. La présentation et la variation du matériau du sujet divise un point d'imitation en phases d'activité tonale et contrapuntique, révélatrices quant à l'organisation de la forme générale et du plan tonal.

Finalement, une analyse complète de *Tristitia et anxietas* (des *Cantiones* de 1589) applique les outils analytiques développés dans ce travail, et montre comment Byrd établit des sons polaires dans l'organisation tonale sous-jacente. Cette analyse passe en revue les stratégies contrapuntiques de Byrd qui caractérisent les oeuvres vocales sacrées de la période médiane, à petite et grande échelle, tels qu'observés à travers les lentilles des *Cantiones Sacrae* de 1589.

Acknowledgements

A project of this scope cannot be undertaken without help from others. I would like to mention especially Professor Don McLean, whose enthusiasm and encyclopedic knowledge of music have been a constant inspiration; Professor William Caplin, whose ideas about form in music have helped to shape mine; and Professor Julie Cumming, for her insightful comments and suggestions on an earlier draft of this dissertation. Thanks as well to Stainer & Bell, Ltd. for their gracious permission to reproduce score excerpts from the 1589 *Cantiones Sacrae*.

Finally, there is Professor Peter Schubert, who has been not only a supervisor, but also a mentor and friend, who has looked beyond my occasional levity to find the serious theorist underneath. His role in encouraging my exploration of early music, and in helping me to shape the ideas contained within this dissertation into a more coherent form has been considerable (though of course I take full responsibility for any errors that remain). My debt to Peter can best be summarized in a quote from Thomas Morley, whose dedication to William Byrd in *A Plain and Easy Introduction to Practical Music* reads as follows: "Accept (I pray you) of this book...defend what is in it truly spoken, as that which sometime proceeded from yourself."

Also, I would like to mention family and friends that have supported me along the way. First of all, thanks are due to my parents, Beryl and Clinton MacKay, for their loving support and encouragement. Thanks also to the many friends who have exchanged ideas with me and otherwise brightened my leisure time: Ken McLeod, Glen Ethier, Susanna Guthmann, Christopher Stone, Mike Free, Andy Deruchie, Alan Campbell, Catrina Flint-de Médicis and François de Médicis. Thanks to François as well for preparing the French translation of my abstract. I would also like to convey my appreciation to the Montreal NTN Gang for putting up with me during the difficult final months of my degree, and to Susan Smith, whose free offer of time and computer in the final stages of writing was greatly appreciated.

List of Motets from the 1589 *Cantiones Sacrae*¹

#	Title	#	Title
1	Defecit in dolore	9	Vigilate
2	Domine Praestolamur	10	In resurrectione tua
3	O Domine adjuva me	11	Aspice Domine
4	Tristitia et anxietas	12	Ne irascaris
5	Memento Domine	13	O quam gloriosum
6	Vide Domine	14	Tribulationes civitatum
7	Deus venerunt gentes	15	Domine secundum multitudinem
8	Domine tu jurasti	16	Laetentur coeli

¹As numbered in *The Byrd Edition*, vol. 2: *Cantiones Sacrae 1589*, ed. Alan Brown (London, Stainer & Bell 1988), page vii.

Introduction

William Byrd's motets with Latin text are a little-known contribution to the sacred vocal repertoire. Roughly 70 works in this genre have come down to us, most of them gathered into three books of *Cantiones Sacrae*, published in 1575,¹ 1589 and 1591. The second book, published by Byrd as *Liber primus Sacrarum Cantionum Quinque vocum* on October 25, 1589² (henceforth referred to as the 1589 *Cantiones*) consists of 16 motets written between 1575 and 1589.³ These motets serve as a midpoint between Byrd's earliest published works and his full maturity, as seen in the Masses of 1592-95. The years 1575-89 are a watershed in Byrd's development as a composer, one that warrants close analytical inspection.

Byrd's 1589 *Cantiones* were his first harvest from a backlog of motets that had been accumulating since the Byrd-Tallis 1575 *Cantiones*. These motets are rather homogeneous, sharing a five-voice texture and a penitential character. Given their prominent place in Byrd's development as a composer, this collection is a sampling of Byrd's most noteworthy works from the late 1570s and the 1580s. Thus, I have chosen to explore the musical content of these works as representing a unique midpoint between

¹This collection, to which Byrd and Tallis both contributed 17 motets, was published in celebration of the 17th year of Queen Elizabeth's reign; see John Harley, *William Byrd: Gentleman of the Chapel Royal*, Aldershot: Scolar Press, 1997, 216-17.

²Byrd's original title page appears in *The Byrd Edition*, vol. 2: *Cantiones Sacrae 1589*, ed. Alan Brown (London, Stainer & Bell 1988), xviii.

³This is the chronology suggested in Joseph Kerman, *The Masses and Motets of William Byrd*, Berkeley: University of California Press, 1981. Compare his chronology in the earlier "Byrd's Motets: Chronology and Canon," *Journal of the American Musicological Society* 14 (1961): 359-82.

Byrd's early period (to about 1575) and his full maturity as a composer in the early 1590s.

This study will describe the contrapuntal strategies that characterize this middle period of Byrd's output. Following an examination of previous literature relevant to Byrd's music, I will examine global strategies of Byrd's tonal organization, and their derivation from cantus firmus technique. I will show how Byrd uses material in cantus firmus rhythms (the breve and semibreve) to shape his subject material and his cadence points, and how these subjects, their transposition levels and their cadential articulation provide a distinct musical shape for an imitative point as a whole. I will then show how this interaction of cantus-firmus-like first subjects and cadences shape the overall tonal planning of *Memento Domine* (1589/5).⁴

Next, I will examine the content of Byrd's introductory gestures, identifying *presentation types* (based on Peter N. Schubert's models: the imitative duo, non-imitative module, invertible canon and transposed canon⁵) that characterize different degrees of beginning in Byrd's 1589 *Cantiones*. Byrd's frequent use of complex beginnings in three or more voices necessitates an expansion of Schubert's presentation types to include cases that use a combination of imitative and non-imitative procedures to present subject material. I have therefore identified 20 new presentation types in addition to Schubert's original four.

⁴I identify motets by their year of publication and their numbering in *The Byrd Edition*.

⁵Schubert's presentation types are derived from Pietro Cerone's "commonplaces." See Peter N. Schubert, *Modal Counterpoint, Renaissance Style*, London: Oxford University Press, 1999, especially 264-69.

These types are models for beginning gestures that combine one or more melodic subjects. I will show how Byrd creates different degrees of beginning through the presentation types he employs as an initiating gesture. Byrd uses a limited number of different presentation types at the very beginning of a motet, but he uses a wider assortment to begin subsequent *partes* of a motet, and an even greater variety to begin imitative openings in the middle of a formal unit. Thus, I will propose a mapping of presentation and form in Byrd's *Cantiones*, based on his introductory procedures.

The combination of subjects that creates a presentation type contains a vertical interval pattern that I will term a *harmonic motive*. This harmonic motive can be repeated, either exactly or varied; its recurrence helps to generate form within an imitative point. Thus, the next stage in my study will be to discuss Byrd's methods of variation by which he expands an opening idea into a complete imitative point. Byrd's tendency toward varied repetition creates a constantly shifting musical surface, built around ever-evolving subject variants. I will categorize and discuss each of Byrd's variation procedures separately. These procedures group into four basic categories: textural change, transposition, melodic variation and invertible counterpoint. My examination of these procedures will explore the means of development by which Byrd defines "middles," formally speaking.

Finally, I will pull together all of the analytical tools outlined in this study, and apply them to a complete analysis of *Tristitia et anxietas* (1589/4). I will provide reductive diagrams for each imitative point of this motet. These diagrams graph subject transposition levels and their interaction with cadences. The way in which Byrd presents

and groups subject entries within a point often suggests subdivision into distinct phases of contrapuntal activity. Thus, through these diagrams, I will demonstrate how Byrd generates form within each point by the contrapuntal procedures he uses. This analysis will thus serve as a summary and model of Byrd's contrapuntal strategies, both long-range and local, that characterize his 1589 *Cantiones*.

This focus on the combination of subjects rather than the single line responds to Imogene Horsley's concerns about the limitations of Renaissance musical analysis.

Writing in 1959, Horsley stated:

[W]e have no way of summarizing in a few words the total polyphonic construction. It is in the small details, in the subtle and intricate combinations of the parts, that one finds the essence of the style and perceives the skill of the composer. The flux in the rhythm of the total complex of parts...the timing and spacing of successive entrances throughout the piece...an emphasis resulting from the related rhythmic movements and melodic imitations among the parts...must be taken into consideration.⁶

This study proposes a model for identifying the "subtle and intricate combinations of the parts" that characterizes Byrd's style. By examining melodic subjects in combination, and their subsequent variation within an imitative point, I will provide the means with which to describe precisely the nature of Byrd's "total polyphonic construction."

⁶Wolfgang Boetticher, *Orlando di Lasso und seine Zeit, 1532-1594, Repertoire-Untersuchung zur Musik der Spätrenaissance, Band I: Monographie* (Kassel and Basel: Bärenreiter-Verlag, 1958), reviewed by Imogene Horsley, *Journal of the American Musicological Society* 12 (1959): 77.

Review of Literature

Part One: Issues in Renaissance Musical Analysis

I. Introduction

This chapter will summarize previous analytical work on, or relevant to, William Byrd's music, and thereby establish a context for my analytical approach. I will focus on those articles and books (both primary and secondary sources) that deal with issues of tonal organization, cadence, and especially imitation and other contrapuntal techniques. For each of these topics listed above, I will summarize the views of previous scholars, as well as my own particular place with reference to this previous work. I will give particular attention to two authors who have published extensively on Byrd's vocal music: Harold K. Andrews and Joseph Kerman.

II. Mode, Key and Pitch-Class Centricity

1. Traditional Accounts of Mode

The issue of mode and how it plays out in Renaissance music is a thorny one, especially as it applies to the music of Byrd. The concept of mode dates back to the ancient Greeks, and then reappears in Europe with the advent of Gregorian Chant around A.D. 600. This was a system that by Byrd's time had been extant as an organizing force in Western music for a millennium, but one that was in the process of breaking down.

This is reflected in the complexity and variety of methods by which the modal system was explained, both in the Renaissance and recently. I will summarize these models for modal pitch organization, and consider to what extent they are reflected in Byrd's style.

Mode as it was used in the Renaissance is defined in two main ways: historically, according to the eight Medieval psalm-tones, or abstractly, according to species or octave, fifth and fourth. Bernhard Meier refers to these concepts of mode as "Western ecclesiastical" and "Pseudo-Classical," respectively, in his summary of Renaissance modal practice, *The Modes of Classical Vocal Polyphony*.¹ In both of these models, the main features that differentiated the modes were their ambitus (range), final and the reciting tone. The odd-numbered authentic modes had the final at the extremes of the range, whereas the even-numbered plagal modes had the final in the middle of the range. In the pseudo-Classical model, the final and its upper fifth were also central to the mode, as they were the pitches that demarcated the modal boundaries. Finally, though both of these modal constructs recognized only eight modes (an authentic-plagal pair on each of four possible finals: D, E, F and G), Glarean and later, Zarlino proposed a 12-mode system, adding a pair of modes on A and C.² In recent years, Harold Powers has proposed a means of defining mode based on a combination of modal system (mollis or

¹Bernhard Meier, *The Modes of Classical Vocal Polyphony*, Translated by Ellen S. Beebe, New York: Broude Brothers, Ltd, 1988, 34-46.

²See Henricus Glareanus, *Dodecachordon*, translation, transcription and commentary by Clement A. Miller, American Institute of Musicology, 1965; and Gioseffo Zarlino, *Le Istitutioni Harmoniche*, Vol. 4, Venice: n.p., 1558, translated by Vered Cohen as *On the Modes*, New York and London: Yale University Press, 1983.

durus), cleffing and final. This combination of features he terms a “tonal type.”³ This system, based in part on Siegfried Hermelink’s research into clef combinations in Palestrina’s music,⁴ acknowledges the importance of vocal range as a distinguishing feature of modal character and design.

However, it is unclear to what extent the tenets of Continental European modal theory discussed above can be applied to Byrd. His 1589 *Cantiones* is not modally-ordered: there is a progression from works with A as final to works with F as final, but no clear and consistent pattern, and thus no external evidence as to mode. Powers’s tonal types are of little importance to Byrd’s practice as well, since Byrd’s clef combinations vary with virtually every motet in the collection. Though a 16-motet sample is perhaps not large enough for a pattern to emerge, Joseph Kerman has noted a similar diversity in the 1575 *Cantiones*. Byrd’s clef combinations in this earlier collection are less systematic than Palestrina’s,⁵ and thus little help in determining the mode of a work according to Powers’s system. Finally, there is a uniformity of range in these works that makes the authentic-plagal distinction in traditional accounts of mode irrelevant. Thus, following the lead of Owens (see footnote 6, below), Kerman and others, I abandon the standard modal models when discussing pitch organization in Byrd’s 1589 *Cantiones*.

³ See Harold Powers, “Tonal Types and Modal Categories in Renaissance Polyphony,” *Journal of the American Musicological Society* 34 (1981): 55-107.

⁴ Summarized in Siegfried Hermelink, *Dispositiones Modorum. Die Tonarten in der Musik Palestrinas und seiner Zeitgenossen*, Munich: Tutzing, 1960.

⁵ Kerman, *The Masses*, 71.

The difficulty of applying Continental European modal theory to Byrd's music is more easily understood when one examines the English treatise evidence of his time. If Thomas Morley is any indication, it is apparent that mode was of little importance in English music theory. Morley discusses the eight modes almost as an afterthought, midway through the third and final part of his treatise.⁶ He later added a lengthy annotation as an appendix in which he discussed the species of octave and fifth and their role in modal definition. Morley concluded by guiding the reader to Glarean's *Dodecachordon* or Zarlino's *Istitutioni* for further information.⁷

Morley's consideration of mode gives the impression of his not having understood a system of categorization that was largely irrelevant and uncongenial to him. Jessie Ann Owens has recently noted both Morley's confusion regarding the concept of mode, and the small role it plays in his treatise.⁸ Given Morley's confusion or lack of interest in mode, one can scarcely imagine that Byrd, whose influence on the concepts contained in Morley's treatise was acknowledged by the author himself, was any different, since their views on music arose from the same English tradition. Thus, the question needs to be asked: if traditional definitions of mode are generally not applicable to Byrd's music, then what *can* we say about its pitch organization?

⁶Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke*, London, 1597. Facsimile, Amsterdam and New York: Da Capo Press, 1969, 147-48. Jessie Ann Owens has noted that what Morley is referring to are the psalm tones; see "Concepts of Pitch in English Music Theory, c. 1560-1640," in *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 183-246, New York and London: Garland Publishing, 1998, 219-20.

⁷Morley, *Plaine and Easie*, The Annotations Upon the Third Part, penultimate sentence.

⁸Owens, "Concepts of Pitch," 218-19 and footnote 98.

First of all, Byrd's music is unquestionably centric. There is always a central pitch, or final, around which the other notes of the diatonic system organize themselves. Previous authors have used what Owens describes as a "neo-modal" system to describe this centricity: it is a five-mode system (Dorian, Phrygian, Mixolydian, Aeolian and Ionian) in which each mode can appear in three possible transpositions (no flats, one flat or two flats).⁹ This is a useful working model which, as Owens notes, has been employed by "nearly all of the most respected critics of Byrd's music,"¹⁰ though it is one to which she herself does not adhere. Owens instead proposes a system of tonal organization based on a piece's final and pitch collection, minus any ascription of modal terminology.¹¹ This system frees the analyst from using possibly misleading modal labels, or invoking common-practice tonal terminology. Instead, we have a midpoint between modal and tonal practices, in my opinion a suitable solution for Byrd's music, "which seems well on the way towards tonal organization" as Kerman suggests,¹² without being fully there yet.

The simplification of the eight-mode or twelve-mode systems into a more limited array of possibilities, however one wishes to define them, is borne out in Byrd's use of them throughout his career, for which Andrews provides a table in *The Technique of Byrd's Vocal Polyphony*.¹³ Andrews classifies Byrd's modes according to key signature

⁹Owens, "Concepts of Pitch," 186.

¹⁰Owens, "Concepts of Pitch," 187.

¹¹Owens, "Concepts of Pitch," 229-30.

¹²Kerman, *The Masses*, 70.

¹³Harold K. Andrews, *The Technique of Byrd's Vocal Polyphony*, London: Oxford University Press, 1966, 19.

and final. In Byrd's output, Dorian and Phrygian modes are quite rare (less than 10% of his output apiece). Lydian is virtually non-existent (2 examples in 411 works examined), and can be effectively dropped from the neo-modal system due to its rarity. Most of Byrd's vocal works Andrews lists as Mixolydian, Ionian or Aeolian. His modal designations for the 29 *partes* of the 1589 *Cantiones Sacrae* are 1 Dorian, 3 Phrygian,¹⁴ 17 Aeolian and 8 Ionian. Other than the absence of Mixolydian in the collection, this proportion is quite similar to that of his overall output. One can see in Andrews's statistics that Byrd was moving toward a two-mode system in multiple transpositions (analogous to later tonal practice), especially in the 1589 *Cantiones*.

Morley explains this concern for centricity in his discussion of key. In a famous passage, Morley describes "Go[ing] out of your key" as being "one of the grosest faults which may be committed."¹⁵ Morley declines to provide detailed rules as to how this fault can be avoided, leaving it to "the judgement of the composer."¹⁶ However, a later comment sheds some light on Morley's thought processes: he advises his student to imitate at the fourth, fifth and octave only, as "the best manner of maintaining pointes."¹⁷ This arrangement of entries suggests emphasis of a central pitch by combining it with a complementary pitch either a fifth above or below it. Thus, for Morley, the pairing of

¹⁴The three works that Andrews calls Phrygian (*Memento Domine, In resurrectione tua* and the *Prima Pars* of *Deus venerunt gentes*) seem to me to be works with A final that end on their upper fifth. I will explore this in depth concerning *Memento Domine* in Chapter 4.

¹⁵Morley, *Plaine and Easie*, 146 (I have retained Morley's original spelling in this and all subsequent quotes).

¹⁶Morley, *Plaine and Easie*, 147.

¹⁷Morley, *Plaine and Easie*, 155.

important pitches a fifth apart is a major factor in the establishment of a key: a brief examination of Byrd's opening imitations confirms this musical priority. It would be dangerous to call this fifth relationship a dominant-tonic polarity, but the musical effect is similar. One focus of my dissertation will be to demonstrate how Byrd uses this fifth relationship within opening gestures to generate areas of stability within an imitative point¹⁸ as a central region from which to depart.

III. Cadences in Renaissance Style

1. Introduction

A definition of cadence is important to the current study for three reasons. First of all, cadences, being musical points of rest in the contrapuntal flow, are important determinants of a passage's pitch architecture. Secondly, cadences generally include at least one voice in longer rhythmic values (i.e. breves or semibreves), and therefore have some link with cantus firmus technique. Because of the presence of these longer values, cadences can help to outline the deeper-level structure of a passage. Finally, the subject material that Byrd introduces in a beginning gesture often includes latent or explicit cadential motions. This link between beginning and closing material is a means by which Byrd manipulates form.

¹⁸I use the term "imitative point" to mean an opening presentation of subject material and its subsequent musical working out, normally set to the same text.

2. Zarlino's Description of Cadence

A cadence is a certain simultaneous progression of all the voices in a composition accompanying a repose in the harmony or the completion of a meaningful segment of the text upon which the composition is based.¹⁹

Thus Zarlino defines the cadence as it was understood in the mid-Renaissance. Zarlino goes on to describe how harmonic and textual closure should be linked through the use of a cadential gesture. He also raises the possibility of cadencing on different goal tones (usually the final, its upper fifth or its upper third), as determined by a composition's mode; this variety is "in the interest of grateful, pleasing harmony."²⁰

Zarlino describes two basic categories of cadence in two voices: the **simple cadence**, in which both voices proceed in semibreves to an octave or unison, and the **diminished cadence**, in which florid rhythm occurs, always including a suspension.²¹ Though the diminished cadence is far more frequent in practice, Zarlino seems to view these two possibilities as equivalent in effect. This apparent equality could be a matter of pedagogy: Zarlino presents the unornamented cadential framework first, and then shows how it may be varied, and its cadential function clarified, by melodic diminution.²²

¹⁹Gioseffo Zarlino, *Le Istitutioni Harmoniche*, Vol. 3, Venice: n.p., 1558, translated by Guy A. Marco and Claude V. Palisca as *The Art of Counterpoint* (New Haven and London: Yale University Press, 1968), 141.

²⁰Zarlino, *The Art of Counterpoint*, 142.

²¹Zarlino, *The Art of Counterpoint*, 142-43.

²²Zarlino later demonstrates appropriate goal tones for cadences in each of the twelve modes; see Gioseffo Zarlino, *Le Istitutioni Harmoniche*, Vol. 4, Venice, n.p., 1558, translated by Vered Cohen as *On the Modes*, New York and London: Yale University Press, 1983, chapters 18-29.

The two-voice cadences demonstrated by Zarlino include the most common type: stepwise contrary motion to the melodic goal tone with one voice moving by semitone, using *musica ficta* if necessary (see Example 1.1). He also discusses “cadences used occasionally,” in which the ascending semitone motion to the goal tone in the upper voice is accompanied in the lower voice by a descending fifth leading to the same tone, as shown in Example 1.2. The cadence with a leap in the bass, Zarlino cautions, is better in more than two voices: presumably a third voice would provide the descending stepwise motion to the goal tone which is absent from the two-voice model.²³ Zarlino’s discussion of cadences in two voices therefore provides the melodic framework for a later examination of cadences in three and four parts.²⁴

Finally, Zarlino gives examples of cadences to the third, fifth and sixth, or “improper cadences.” These include a cadence in which the voices expand by step from a third to a fifth. His other improper cadences deflect one of the cadential voices from its expected goal, either by step or by skip (see Example 1.3). “Extravagant cadences” behave similarly;²⁵ what Zarlino is describing is an evaded cadence,²⁶ in which “the voices give the impression of leading to a perfect cadence, and turn instead in a different direction.” (Example 1.4)²⁷

²³Zarlino, *The Art of Counterpoint*, 147-48.

²⁴Zarlino, *The Art of Counterpoint*, 200-04.

²⁵Zarlino, *The Art of Counterpoint*, 149.

²⁶William Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart and Beethoven*, New York and Oxford: Oxford University Press, 1998, 101-03; see also 28-29 for a discussion of the related concept of the “deceptive cadence.” Caplin has also provided a glossary of his terminology, 253-58.

²⁷Zarlino, *The Art of Counterpoint*, 151.

3. Thomas Morley and the Cadence

Morley also discusses the cadence at length, beginning, as did Zarlino, with cadences in two voices. He considers the suspension to be an integral part of the gesture: “A Cadence wee call that when, comming to a close, two notes are bound together and the following note descendeth [by step].”²⁸ Thus, Morley isolates the cadential suspension as the main feature of closure. This definition, however, does not specify how the melodic lines must move following the suspension, leaving open the possibility of evading the expected cadential goal melodically.

Morley’s cadences that follow this definition are varied. His first three examples (see Example 1.5) include a standard cadence to the octave (“2-1” in one part and “8-7-8” in the other),²⁹ and the cadence to the fifth.³⁰ His third example uses a 4-3 suspension above the “2-step,” and then descends in parallel motion with the cantus firmus to the third of the mode.³¹ Morley’s “best way of closing” ensues, in which the “8-7-8” line is paired with a scale degree “5-1” bass motion (see Example 1.6).³²

Morley eventually concedes the possibility of cadencing without a syncopation (i.e. Zarlino’s “simple cadence”). His four examples proceed intervallically 5-6-8, 5-3-5,

²⁸Morley, *Plaine and Easie*, 73. I have added the phrase “by step” to correspond with the accompanying musical example.

²⁹This scale-degree conception of cadential motions, in which scale degree “1” is always the expected goal of the cadential motion, follows Peter N. Schubert’s labelling system in *Modal Counterpoint, Renaissance Style*, London: Oxford University Press, 1999, 131-37.

³⁰Morley does see this latter cadence as inferior: he calls it “unpleasant yet...true” (*Plaine and Easie*, 74).

³¹Morley, *A Plain & Easy Introduction to Practical Music*, ed. Alec Harman, New York: Norton, 1952, 146.

³²Morley, *Plain & Easy Introduction*, 146.

10-8-10 and 6-5-8, respectively, over the standard scale degree “2-2-1” tenor voice (see Example 1.7).³³ These cadential gestures range from standard to archaic, from final sounding to open-ended in effect. The final cadence of the group, which interpolates the so-called “Landini sixth” between the subsemitonium and its resolution, is a technique whose moment had passed many generations before. Byrd uses it to avoid a motion from diminished fifth to perfect fifth in *Tristitia et anxietas*, measure 72 (see Example 1.8), but this cadence type is nonetheless rare by 1589.

Morley then divides his cadence types into final and passing closes, creating a formal hierarchy among closing gestures.³⁴ Final closes approach their goal tone from either the upper or lower fifth. Passing closes evade their goal tone in a number of ways. For example, Morley adjusts the bass from its usual “5-1” to “5-3” or “5-6,” creating a substitute harmony at the cadence point. Morley also classes the “V-I” simple cadence (without suspension) and “vii⁶-I” cadences as passing closes. The first case implies that, for Morley, the absence of a suspension weakens, but does not eliminate the sense of closure. The second case shows that the traditional sixth-to-octave pairing of the pre-Renaissance cadence is no longer sufficient to effect full closure, but requires in addition the “5-1” bass skip added to this framework. This ranking of cadential finality according to its melodic-cadential members is important to Bernhard Meier, as will be seen below.

³³Reproduced from Morley, *Plain & Easy Introduction*, 147.

³⁴These appear in Morley, *Plaine and Easie*, 132-42; the origin of these cadences is explored by Alec Harman in Morley, *Plain & Easy Introduction*, 244, footnote 2.

4. Bernhard Meier and Melodic-Cadential Roles

Probably the most comprehensive discussion of Renaissance cadences in recent literature comes from Bernhard Meier; in *The Modes of Classical Vocal Polyphony*, he devotes an entire chapter to the classification of Renaissance cadences and their component voices that play specific roles within the cadential gesture. Since melodic motions typical of a cadence occur in all formal locations of Byrd's motets, a summary of Meier's melodic-cadential roles is necessary as a window into Byrd's style.

Meier begins his discussion by identifying the two primary structural voices within the cadential gesture. These are the ascending and descending steps that lead to the cadential goal tone, which he calls *cantizans* and *tenorizans*, respectively.³⁵ These voices can either be unornamented, in note-against-note counterpoint (this category Meier calls the *clausula simplex*, i.e. Zarlino's simple cadence), or the cantizans may be embellished (*clausulae formales*):³⁶ typically, the ascending step is ornamented by a suspension, as Morley has noted.³⁷

³⁵Meier, *The Modes of Classical Vocal Polyphony*, 91. These roles "bear names that correspond to the voices in which they usually occur." The same applies to altizans and basizans, when these terms appear on pages 92-93.

³⁶Meier, *The Modes*, 92.

³⁷Meier later discusses the problem of *musica ficta* (*The Modes*, 94-96), though this feature of the cadential gesture is not a primary focus of his study. For a more detailed emphasis on *ficta* and its influence on cadences, see Karol Berger, *Musica Ficta: Theories of Accidental Inflection in Vocal Polyphony from Marchetto da Padua to Gioseffo Zarlino* (Cambridge: Cambridge University Press, 1987), Chapter 6. The differences between Berger and Meier's approaches to cadence are detailed in Michele Fromson, "Cadential structure in the Mid-Sixteenth Century: The Analytic Approaches of Bernhard Meier and Karol Berger compared." *Theory and Practice* 16 (1991): 179-214.

In cadences of three or more voices, two new cadential roles arise: the *altizans* and *basizans*. The former is a supporting voice in the middle register.³⁸ As seen from Meier's first example of the *altizans* (reproduced here as Example 1.9), the *altizans* duplicates melodically the motion of the *cantizans*. Hence, this motion can only be identified by its registral location within the cadence, and not by its melodic motion. Meier then presents a new *altizans* motion in its "second basic form," as he describes it (see Example 1.10).³⁹ Due to the melodic variability of the *altizans* role and its clearly supporting role within the cadence, I will not use it as a structural voice in my own analyses of Byrd's cadences.

The *basizans* motion has a far more prominent role than the *altizans* in the Renaissance cadence: it is the skip downward of a fifth in the lowest voice, which Meier derives from the cadence c. 1400, with octave skip.⁴⁰ Meier saves his discussion of the problematic (and melodically variable) Phrygian *basizans* for later, as will be seen below.

These categories having been set, Meier scans the treatises for evidence as to which disposition of cadential voices was considered the most conclusive. Meier asserts that by 1500, the cadence with *basizans* was considered more final, or perfect, than the cadence with *tenorizans* in the lowest position, which was "only semiperfect, usable only within works or at the end of a mere *prima pars*."⁴¹ This observation seems to be borne

³⁸Meier, *The Modes*, 92.

³⁹Meier, *The Modes*, 93.

⁴⁰Meier, *The Modes*, 93.

⁴¹Meier, *The Modes*, 93. Here, he cites Gallus Dressler.

out in practice; it is rare that Byrd ends a motet with anything other than a cadence with basizans included.

Meier then examines some irregular cadential cases, the most important being the “clausula in mi,” or Phrygian cadence.⁴² Meier gives three solutions for the basizans motion (see Example 1.11), all of which come to rest on a note other than the cadential goal. This peculiarity of the Phrygian basizans creates a new set of cadential choices: namely, the potential of evading melodically the expected cadential goal in any of its melodic-structural roles.

Meier discusses three ways to evade the cadence. First of all, a melodic goal may be delayed by a rest, which I will term an **abandoned cadential motion**; the note following the rest often begins a new imitation, as Meier points out.⁴³ Secondly, even if there is no rest, the beginning of a new imitative point can be superimposed on a cadential goal.⁴⁴ This dovetailing is a type of elision. By transforming an ending into a beginning, Byrd creates a need for continuation rather than a sense of closure. Finally, the melodic motion of the cadential voice may be adjusted to lead somewhere other than its expected goal;⁴⁵ I will term this an **evaded cadential motion**. Meier gives many examples of this last type, which he labels according to the voices that evade their goal (see Example 1.12). I will identify each of these evaded motions using Schubert’s scale-degree labels (for example, a tenorizans motion evaded upward by step is “2-3”), and

⁴²Meier, *The Modes*, 96-98.

⁴³Meier, *The Modes*, 99.

⁴⁴Meier, *The Modes*, 100.

⁴⁵Meier, *The Modes*, 101.

rank them according to their effect on cadential finality. The three techniques of melodic evasion at cadence points that Meier describes are common in Byrd's 1589 *Cantiones*: a detailed discussion of typical cases, accompanied by musical examples, will appear in Chapter 3.

IV. Imitative Procedures in Renaissance Style

1. Imitative Techniques as per Zarlino and Morley

Imitative polyphony, which displays a concern for motivic integration and control throughout the polyphonic fabric, is basic to Renaissance music. Consequently, a discussion of imitation is fundamental to many of the treatises of the sixteenth century. Imitation is often found in Byrd's opening gestures, or later on in an imitative point as a means of variation. Thus, a close examination of the technique, as seen by Renaissance and recent authors, is in order.

Midway through *The Art of Counterpoint*, Zarlino first broaches the subject of imitation in a section called "Fugues or Consequences." For Zarlino, imitation is of two basic types, free or strict (*sciolta* or *legata*).⁴⁶ By strict imitation, Zarlino means canon, in which all of the melodic motions of the following voice are a direct consequence of mimicking the leading voice that guides the way (hence Zarlino's terms, "consequenza" and "guida").⁴⁷ It may seem strange that Zarlino discusses canon and free imitation in the same breath. However, this is done to point out the underlying similarities of the two

⁴⁶Zarlino, *The Art of Counterpoint*, 127.

⁴⁷Zarlino, *The Art of Counterpoint*, 129-30, and example 88.

techniques: free imitation is simply a localized example of canonic technique. His different “manners of strict fugue”⁴⁸ illustrate the two main types of canonic writing, and imitative writing generally: exact imitation at a particular melodic and time-interval, and canon by melodic inversion.

Later in the treatise, Zarlino describes double counterpoint (i.e. invertible counterpoint), in which “a composition is so ingeniously designed that it may be sung with the parts interchanged [reversed in registral position].”⁴⁹ This “artful kind of counterpoint,”⁵⁰ as Zarlino terms it, is a hallmark of imitative style. When a melodic subject appears in stretto (overlapping itself in imitation), subsequent restatements of this material often vary it by reversing the registral position of the individual voices. This reversal permits variety, since it changes the interval structure of the original combination while retaining its melodic content. Zarlino describes and gives musical examples of inversion at the twelfth and tenth (but curiously, not the octave), as well as invertible counterpoint combined with melodic inversion of both parts. In the latter case, the interval structure of the original combination is retained, but the melodic content changes. Double counterpoint can also generate a framework to which an additional voice may be added in parallel tenths.⁵¹ This textural thickening is a further useful means of variation available to a Renaissance composer. Zarlino later illustrates the use of all these double

⁴⁸Zarlino, *The Art of Counterpoint*, 129, 132-33.

⁴⁹Zarlino, *The Art of Counterpoint*, 159. Material in square brackets has been added by the current author.

⁵⁰Zarlino, *The Art of Counterpoint*, 159.

⁵¹Zarlino, *The Art of Counterpoint*, 169-70. This is a common rationale for invertible counterpoint at the tenth.

counterpoint types in three voices, adding a free voice to an invertible pair.⁵² He concludes by discussing strict canon, which, given the absence of this procedure in the 1589 *Cantiones*, need not be considered here (Byrd's essays of this type in the Latin motet genre are all found in the 1575 *Cantiones*).

Morley's discussion of imitation is likewise scattered among various portions of his treatise. It appears in his discussion of note-against note counterpoint in two parts, in which he distinguishes between *fuga*, where one can adjust melodically the subject, and canon, where one cannot.⁵³ Later, in a section on three-voice counterpoint, Morley discusses the possibility of composing two canonic voices against a pre-existing plainsong. Here, the canonic lines relate both to the cantus firmus line and each other "in fuge" (i.e. imitation).⁵⁴ Morley illustrates this difficult procedure with an example (transcribed in score format) from Osbert Parsley.⁵⁵

One of Morley's innovations is immediately apparent when he illustrates canon himself; he suggests writing a semibreve framework first ("thus plaine"). Once consonant sonorities have been planned out on downbeats, Morley then adds figuration, creating a canon in florid rhythm ("thus divided").⁵⁶ Thus, Morley, like Zarlino, recognized the semibreve level as a type of musical scaffolding on which the composer can build various types of melodic figuration. This concept will be a focus of the ensuing

⁵²Zarlino, *The Art of Counterpoint*, 205-20.

⁵³Morley, *Plaine and Easie*, 77.

⁵⁴Morley, *Plaine and Easie*, 94-96.

⁵⁵Morley, *Plaine and Easie*, 97.

⁵⁶Morley, *Plaine and Easie*, 98ff. This passage is reproduced in Schubert, *Modal Counterpoint*, 194-96.

chapters, in which I will posit that the semibreve level of a composition is a type of shallow middleground structure that guides and directs faster-moving subject material.

Morley next discusses invertible counterpoint of various types: “a manner of composition used among the *Italians*, which they call *contrapunto doppio*, or double descant.”⁵⁷ As in Zarlino, Morley is discussing a contrapuntal device that is a common method of varying an imitative pair of voices. Morley’s discussion of double counterpoint closely mirrors Zarlino. He considers inversion at the twelfth and tenth, followed by “the second kinde of double descant” wherein the parts “go by contrarie motion” in the inversion.⁵⁸ One could well suspect that Morley modelled this discussion closely on the corresponding passages from Zarlino’s *Istitutioni*, though he substitutes his own musical examples.

2. Imitation as Seen in Recent Literature

The importance of imitation in primary sources is mirrored in the secondary literature; most essays that discuss technical aspects of Renaissance music examine this technique. Andrews provides an encyclopaedic approach to the topic: in *The Technique of Byrd’s Vocal Polyphony*, he lists all of Byrd’s various imitative procedures (free imitation, invertible counterpoint, imitation by melodic inversion, canon, etc.) and their frequency of use in his vocal music.⁵⁹ Others have sought to place imitative procedures

⁵⁷Morley, *Plaine and Easie*, 105. Italics are in the original.

⁵⁸Morley, *Plaine and Easie*, 105.

⁵⁹Andrews, *Byrd’s Vocal Polyphony*, 239-55.

in a larger context. Both Imogene Horsley and Putnam Aldrich discuss the role of imitation in clarifying the mode.⁶⁰ Kerman brings up issues of style in “Byrd, Tallis and the Art of Imitation,” which contrasts Byrd’s approach to imitation with Tallis and the older generation of English Renaissance composers.⁶¹ Kerman’s articles on “cell technique” show how imitation is linked with issues of compositional planning and rhetorical emphasis.⁶² He describes this technique as a procedure in which brief imitative segments are identified, and their role in building musical climaxes asserted.

One further example of how composers proceed from the level of detail to issues of formal design is Peter N. Schubert’s article “A Lesson from Lassus: Form in the Duos of 1577.” In this article, Schubert asserts a link between form and imitative procedures.⁶³ His claim that there is a systematic difference in time-interval and melodic interval of imitation depending on a passage’s location in a composition suggests that Renaissance composers had a clear concept of what were modally appropriate beginning gestures, and

⁶⁰See Imogene Horsley, “Fugue and Mode in 16th-Century Vocal Music,” in *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan Larue (New York: Norton, 1966), 406-22; and Putnam Aldrich, “An Approach to the Analysis of Renaissance Music,” *Music Review* 30 (1969): 1-21.

⁶¹Joseph Kerman, “Byrd, Tallis and the Art of Imitation,” in *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan Larue (New York: Norton, 1966), 519-37.

⁶²The term first appears in Joseph Kerman, “Old and New in Byrd’s *Cantiones Sacrae*,” in *Essays on Opera and English Music in Honour of Jack Westrup*, ed. F. W. Sternfeld, (Oxford, Blackwell, 1975), 25-43. See also Kerman: “*Write all these Down: Notes on a Byrd Song*,” in *Byrd Studies*, ed. Alan Brown and Richard Turbet (Cambridge: Cambridge University Press, 1992), 112-28.

⁶³Schubert, “A Lesson from Lassus: Form in the Duos of 1577,” *Music Theory Spectrum* 17 (1995), especially 3-5 and 10-12; see also Table 1 on page 8, in which the time interval of imitation is listed for all imitative points in these duos.

set aside particular devices to that purpose. As a corollary, composers deliberately reserved certain other imitative procedures for middle sections as a way of creating formal distinctions among beginnings, middles and endings in their music. The notion that one can create a one-on-one mapping between a particular type of musical material and its location in a composition has been asserted in Classical style by William Caplin;⁶⁴ Schubert's article suggests a Renaissance analogue for this procedure.

Schubert's subsequent expansion of ideas from this article is as yet unpublished, though certain elements of his theory appear in his textbook, *Modal Counterpoint, Renaissance Style*. The concept that introductory contrapuntal gestures are form-building elements is a vital part of his subsequent work. Schubert's identification of beginning gestures is based on Pietro Cerone's "commonplaces."⁶⁵ These opening cells (usually two to four measures long) belong to three basic types: the imitative duo, the non-imitative module⁶⁶ and the canon, which is of two varieties: transposed and invertible.

The duo and canon are two different ways of handling imitative subject entries. With the imitative duo, there is always intervening material between its first appearance and its subsequent restatement; thus the imitation is "semi-periodic." If three or more entries of the same subject occur at equal time-intervals, then the imitation is fully periodic and we have a canon. Seeing as Schubert defines canon according to its

⁶⁴Implicit in Caplin, *Classical Form*.

⁶⁵Schubert, *Modal Counterpoint, Renaissance Style*, 216-19 and 276-77.

⁶⁶The term "module" is from Jessie Ann Owens, "The Milan Partbooks: Evidence of Cipriano da Rore's Compositional Process," *Journal of the American Musicological Society* 37 (1984): 270-98.

periodicity, it doesn't matter how brief the canon is. Thus, Schubert uses the term differently from Zarlino, for whom canon is strict imitation throughout a composition.

Schubert's canon is of two basic types. If the melodic interval between the first two entries is retained between all subsequent pairs of entries in the canon, we have a *transposed canon*. If the melodic interval between the first two entries is altered by invertible counterpoint with the addition of subsequent entries (i.e. the registral relationship between adjacent entries is reversed), we have an *invertible canon*. Thus, Schubert recognizes four presentation types, which I present as Figures 1.1 through 1.4 (the arrow in Figures 1.2, 1.3 and 1.4 indicates a variable melodic continuation):

Figure 1.1: Non-imitative Module (in two voices):

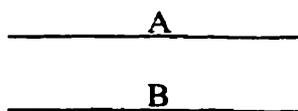


Figure 1.2: Imitative Duo

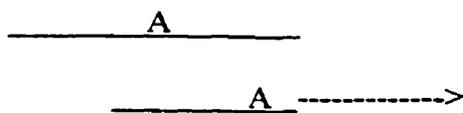


Figure 1.3: Transposed Canon

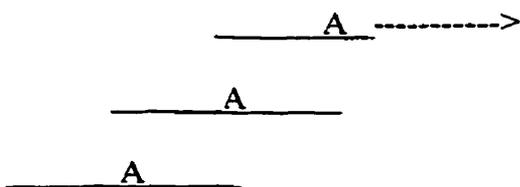
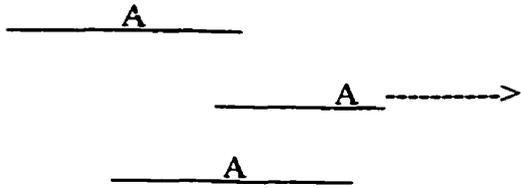
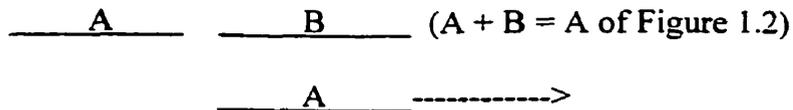


Figure 1.4: Invertible canon

I have labelled each of these models according to their *melodic* content. In the imitative duo (and, by extension, the two canonic types, which are essentially imitative duos with an extra entry or entries), Schubert focuses on the *harmonic* combination formed by overlapping subject entries as being distinct from the opening presentation of subject material. Thus, he defines the imitative duo as shown below (see Figure 1.5), where the subject ending serves as accompaniment to the new entry (one could proceed likewise with the two canonic models of Figures 1.3 and 1.4, labelling each successive overlap as a new subject).

Figure 1.5: Imitative Duo, Another Way of Analysis

Each of these openings creates a harmonic obligation if the material repeats. That is, the interval pattern formed by the combination of subjects must be retained in some form, exact or varied by a global operation. I will term this interval pattern a **harmonic motive**. In Figure 1.5, the harmonic motive would be the interval pattern created by

combining subjects A and B. This retention (and possible variation) of melodic-harmonic content and its later “clustering” during later development can be used to generate larger formal groupings purely through contrapuntal manipulation.

This intersection of form and contrapuntal procedure is vital to my analytic approach. By inspecting the techniques Byrd uses in his 1589 *Cantiones*, and where in a section he uses them, I will show how an imitative point passes through three stages: presentation, continuation (development) and cadence.⁶⁷ I will retain Schubert’s terminology for openings (non-imitative module, imitative duo, transposed canon and invertible canon) in my own analytical approach. These terms are a good starting-point for Byrd’s musical strategies in Stage 1 (the presentation of subject material). The last stage, cadence, has been discussed at length in both the primary and secondary literature (pages 7-15, above). The intermediate stage (continuation) is the most complex and dynamic of the three. The exact nature of Byrd’s development procedures, and the order in which he uses them, can permit the analyst to describe with greater precision the musical content and succession of material within this intermediate stage.

⁶⁷These are the formal functions of the Classical sentence, as defined by Caplin in *Classical Form*, 9-10 and his Example 1.1. I use these terms as metaphors for beginning, middle and ending procedures.

V. Reductive Analysis

As seen on pages 12 and 21, Zarlino and Morley hint that semibreves act as a structural underpinning in Renaissance style. This is a rudimentary form of reductive analysis, in which surface features (embellishing tones in florid rhythm) are removed from the music so that its underlying structure is made evident. This analytic method derives from Heinrich Schenker's concepts (prolongation, background structure, etc.) to varying degrees. The application of Schenker's method to Renaissance music began with Felix Salzer's *Structural Hearing* (Schenker himself didn't apply the method to pre-tonal music), and has played out in more recent years in the writings of Saul Novack, David Stern and Cristle Collins Judd, among others.⁶⁸

Stern's "William Byrd: Mass for Five Voices"⁶⁹ is the most relevant article for my own study, as he is the only author to apply Schenkerian techniques specifically to the music of Byrd. His reductive analyses of selected passages from this Mass seek to define the nature of what he calls its "magical, hovering quality,"⁷⁰ tonally speaking. However, both he and others in this area have moved toward reductive analyses that invoke Schenkerian concepts such as prolongation and structural levels without applying his

⁶⁸The problems inherent in applying Schenkerian techniques to pre-tonal music are somewhat outside the focus of this study. Articles and books that explore these issues include Felix Salzer, *Structural Hearing*, New York: Boni, 1952; Saul Novack, "Fusion of Design and Tonal Order in Mass and Motet," *Music Forum* 2 (1970): 187-263; David Stern, "Tonal Organization in Modal Polyphony," *Theory and Practice* 6 (1981): 5-39; and Cristle Collins Judd, "Some Problems of Pre-Baroque Analysis: An Examination of Josquin's *Ave Maria...Virgo Serena*," *Music Analysis* 4 (1985): 201-39.

⁶⁹David Stern, "William Byrd: Mass for Five Voices," in *Music Before 1600: Models of Musical Analysis*, ed. Mark Everist (London: Blackwell, 1992): 208-24.

⁷⁰Stern, "Mass for Five Voices," 218.

theory in full. Since Schenker designed his theory with the Bach-to-Brahms canon in mind, it fits Renaissance music with difficulty. Schenker's *Ursatz* model (a stepwise structural melodic descent supported by I-V-I background harmony) is often not present in pre-1600 music.⁷¹

My own preference is to restrict reductive analysis in Byrd's music to the semibreve and breve level only.⁷² This level of reduction is historically provable: as noted above, Zarlino has commented on how the semibreve unit, defined by the cantus firmus against which beginning composers learned to write, "give[s] practice in recognizing the location and distances of the consonances."⁷³ This line of thought is apparent as well in Morley's advice in writing a canon: create a semibreve framework for each voice, and then embellish.⁷⁴ The influence of this level of structure both on subject design and on the formation of cadences is the focus of Chapters 2-4.

Moreover, "reduction" need not be Schenkerian. Any analysis that removes surface details from a composition to reveal the structure underneath is in some way reductive, as for example, Kerman's charts of subject entries and their starting pitches.⁷⁵ In a similar vein, Benito Rivera has proposed a reductive model based on the

⁷¹A detailed examination of Schenker's thought is beyond the scope of this study; David Stern provides a valuable summary in "Mass for Five Voices," 216-18.

⁷²Sarah Fuller has demonstrated exactly such a reductive procedure in "Line, *Contrapunctus* and Structure in a Machaut Song," *Music Analysis* 6 (1987): 37-58.

⁷³Zarlino, *The Art of Counterpoint*, 92.

⁷⁴Morley, *Plaine and Easie*, 98.

⁷⁵Kerman, "Byrd, Tallis and the Art of Imitation," 521ff.

identification and tracing of a “migrating *soggetto*” that controls and shapes the musical discourse of a section.⁷⁶ As Rivera explains:

[These subjects] are generally not recognizable as familiar melodies; they do not stand out in distinctively long notes, and they are not presented in conspicuous canonic imitation. They are newly composed, divided into separate phrases, dispersed, and, we might say, buried to blend into the dense polyphonic complex. They can, however, be brought to the surface through careful analysis.⁷⁷

This “migrating *soggetto*” is not a Schenkerian *Urfinie*, but is analogous to it in some ways. It is the musical thread that determines the melodic and tonal coherence of a composition, and to which the other voices relate.

⁷⁶Benito V. Rivera, “Finding the *Soggetto* in Willaert’s Free Imitative Counterpoint: A Step in Modal Analysis,” in *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993), 73-102.

⁷⁷Rivera, “Finding the *Soggetto*,” p. 74.

Part Two. Issues and Problems in Byrd Research

I. Byrd Biographies and Scores

William Byrd has received considerable critical attention, beginning with Charles Burney's "Memoir of William Birde" in his *History of Music* of 1776.⁷⁸ Articles that followed in the 1800s were general or biographical in nature (for example, the question of Byrd's Catholicism and its influence on his music appear early on).⁷⁹ The articles on Byrd from the 1800s were directed toward the music-loving amateur as opposed to the professional musician. This critical attention was accompanied by the publication of some of Byrd's music in the mid-1800s; the 1589 *Cantiones* were among the first works to appear in a modern edition (published by the Musical Antiquarian Society in 1842).⁸⁰

Byrd research in the twentieth century expanded greatly around 1923, the tercentenary of his death. At this time, Edmund Fellowes emerges as Byrd's main biographer, and later the editor of the first complete Byrd edition, which would begin to appear in 1937 (In 1977, *The Byrd Edition* began to appear in a revised, newly-edited version, which, when complete, will supplant the Fellowes edition⁸¹). In 1923, Fellowes

⁷⁸Richard Turbet, *William Byrd: A Guide to Research* (New York: Garland Publishing, 1987), 146.

⁷⁹This topic has been explored recently by Craig Monson, Joseph Kerman and Richard Turbet. See Craig Monson, "Byrd, the Catholics and the Motet: The Hearing Reopened," in *Hearing the Motet: Essays on the Motet of the Middle Ages and Renaissance*, ed. Dolores Pesce, 348-74 (Oxford and New York: Oxford University Press, 1987); Joseph Kerman, "William Byrd and the Catholics," *New York Review of Books* 26 (1979): 32-36; and Richard Turbet, "Byrd's Recusancy Reconsidered," *Music and Letters* 66 (1985): 51-52.

⁸⁰Turbet, *William Byrd: A Guide to Research*, 136.

⁸¹This is asserted by Philip Brett in *The Byrd Edition*, General Preface, iv.

published a Byrd biography: *William Byrd: A Short Account of his Life and Work*, which later became *William Byrd* (1936, revised 1948), the standard reference for the composer until John Harley's *William Byrd: Gentleman of the Chapel Royal* (1997).⁸²

Secondary literature since 1950 has begun to focus on the technical aspects of Byrd's art. Accompanying this focus was an effort to reconstruct Byrd's compositional process through the lens of Renaissance terms and thought, as expressed in the treatises of his time. This new scholarly rigour in Byrd research arises in the work of Harold K. Andrews and Joseph Kerman. Their contributions to the field are well known; I will summarize their writings that are most relevant to my own work.

II. Harold K. Andrews

Andrews's main contribution to Byrd research was his comprehensive study of Byrd's vocal style in relation to that of his Renaissance contemporaries and predecessors. This study, *The Technique of Byrd's Vocal Polyphony* was written in friendly emulation of Knud Jeppesen's *The Style of Palestrina and the Dissonance*. Andrews sought to do for Byrd's music what Jeppesen had done with Palestrina's: namely, to provide a detailed overview of its harmonic, melodic, contrapuntal, rhythmic and formal content.

Given the vast nature of Andrews's project, each individual aspect of Byrd's music is treated with concision. Andrews covers a wide range of topics, beginning with Byrd's social environment and its influence on his style, followed by his use of mode, his

⁸²Harley revises Byrd's birth date from the previously accepted c. 1542-43 to somewhere between October 1539 and September 1540; see *William Byrd: Gentleman*, 4.

rhythmic technique and his melodic style. Andrews's consideration of Byrd's melodic style leads into a discussion of how Byrd combines melodic lines, and the nature of the resulting counterpoint. He first examines the interval structure of pairs of lines within a thicker texture, and then discusses and categorizes Byrd's use of dissonance at length (here Andrews's emulation of Jeppesen is most apparent). The final chapters discuss aspects of Byrd's art that Andrews sees as secondary: contrapuntal techniques, texture and form, and word setting. Byrd's use of contrapuntal devices is vital to this study, so I shall dissect his observations in some detail.

Andrews's discussion of contrapuntal techniques summarizes Byrd's use of fugue, canon, and imitation in general. Andrews has three categories of imitation: single subject imitation, double subject imitation and rhythmic imitation. The first category involves building an imitative passage around a single melodic idea. With double subject imitation, an imitative passage is built around two distinct, separable subjects, a procedure that Andrews was the first to note in Byrd's music.⁸³

Rhythmic imitation is a somewhat looser type of repetition. Andrews uses the term to describe the nebulous combinations of motives that develop in the middle of Byrd's imitative points. As Andrews notes, Byrd seldom retains the shape of his subject material exactly as an imitative passage ensues. Instead, he alters its melodic shape, while retaining its original rhythmic profile: in short, "the extent of melodic alteration

⁸³ Andrews, *Byrd's Vocal Polyphony*, 245-48.

becomes so great that the attention becomes fixed on the rhythmic rather than the melodic element of the subject.”⁸⁴

This is one area where I differ from Andrews. Many of the passages that he claims only contain rhythmic imitation have a clearer connection to the initial subject material than he acknowledges. This connection can be determined by refining the focus somewhat: what features of Byrd’s subject material are preserved throughout their subsequent development in an imitative passage? For Andrews, the answer seems to be “the melodic shape of the subject itself,” otherwise we merely have rhythmic imitation. Following Schubert, I focus instead on the vertical interval combinations that the subject forms when it is placed against itself or against other subject material recurrently.

Isolating the interval combination as the point of departure rather than the melodic motive gives the tracking of repetition a different rationale. The analyst can recognize an underlying similarity in those cases in Byrd’s music where there are changes to his subject’s melodic contour, since the subject may change shape while still being able to combine in the same way as before with a second voice. The combination may “fray at the edges,” but a central interval structure will be retained. The exact length of the retained portion will vary depending on how many changes Byrd has made to the melodic lines when one compares the later variants to the initial presentation. However, one can detect plenty of recurring material derived from the original subject if one uses a small enough chisel. The material retained may be no more than half of a measure, containing

⁸⁴ Andrews, *Byrd’s Vocal Polyphony*, 248.

two recurring vertical intervals. When this melodic-harmonic package returns, its relation to the original combination can be made explicit.

These brief repeating elements are not necessarily subjects at all, but rather the fundamental building blocks of the style. However, these small, malleable interval combinations often coalesce into longer melodic-harmonic gestures. Thus, examining these small units and how they combine to form longer subjects is a precise way of defining repetition. Furthermore, identifying repeating elements in Byrd's music can give insights into his compositional process, and thus can shed some light on the structural underpinnings of his style.

Andrews also mentions Byrd's employment of contrapuntal variation techniques such as invertible counterpoint, melodic inversion, augmentation, diminution, and other technical devices. Andrews's perspective on these devices is that they should not be used merely for display, but rather, "find their artistic fulfilment in the enrichment of imitation."⁸⁵ Since these techniques arise from a larger musical concern (varied repetition), rather than being techniques unto themselves, Andrews's discussion of each is brief. He discusses invertible counterpoint in three paragraphs, summarizing the views of Vicentino, Zarlino and Morley.⁸⁶ Augmentation and diminution, both rare in Byrd, except in "the more problematic kinds of canon for its own sake...more appropriate to technical problems than to expressive music,"⁸⁷ get an equally brief mention. Andrews

⁸⁵ Andrews, *Byrd's Vocal Polyphony*, 239.

⁸⁶ Andrews, *Byrd's Vocal Polyphony*, 240-41.

⁸⁷ Andrews, *Byrd's Vocal Polyphony*, 254.

gives melodic inversion more attention, perhaps because Byrd sometimes uses this procedure in opening sections to vary subject material. Each of these techniques has an important role to play in Byrd's music as a means of variation, as will be explored in Chapter 7. Of these techniques, I will examine invertible counterpoint in the greatest detail; it is a technique through which Byrd shows his ingenuity in the largest measure.

III. Walter Gray's Rebuttal of Andrews

Shortly after the publication of *The Technique of Byrd's Vocal Polyphony*, Walter Gray gently took exception to Andrews's focus on the single melodic line in categorizing Byrd's motives. His article "Motivic Structure in the Polyphony of William Byrd" seems to have been written in direct response to Andrews. Gray's stated approach seems to downplay the single-line motive, and instead highlight the use of motives in combination; he describes Byrd's music as "a blend of independent melodic lines, which are combined in a complex web of free imitation."⁸⁸ Gray's general point is telling: it is not merely the melodic line itself, but its combination with other similar lines, which creates the structural unit. Later, Gray spells out this new emphasis explicitly:

⁸⁸Walter Gray, "Motivic Structure in the Polyphony of William Byrd," *Music Review* 29, 223.

A more searching analysis, however, reveals that often embedded in the melodies are motives--rhythmic and melodic--from which Byrd draws the entire polyphonic fabric... [therefore], a motive is a melodic, rhythmic, or melodic-rhythmic grouping which has enough constructive or thematic importance to be recognised through analysis.⁸⁹

Judging from Gray's musical examples, he does not follow through on his stated analytical aim. He does indeed provide detailed motivic analyses of selected passages (primarily drawn from *The Great Service* and the Masses), but does not clearly show how these motives (often extremely brief) coalesce into larger multi-voiced structural units. This final step would be taken later by Joseph Kerman: Gray's stated aim has its fulfilment echoes in Kerman's "cell technique," an important procedure to be discussed below.⁹⁰

IV. Joseph Kerman

1. The Early Articles

Probably the primary source in the study of Byrd's music over the past half-century is Joseph Kerman. His interest in Byrd's music began in the late 1940s with *The Elizabethan Madrigal*, completed in 1950,⁹¹ and has continued to the current day. As Kerman himself pointed out in a later article,⁹² the chapter on Byrd in *The Elizabethan Madrigal*, in which he sought to define and categorize genres in his vocal music, presented him with many deviant pieces that defied such neat categorization. This

⁸⁹Gray, "Motivic Structure," 223.

⁹⁰As far as I can tell, Kerman never cites Gray on this matter; he apparently arrived at this concept independently.

⁹¹Joseph Kerman: *The Elizabethan Madrigal*, London: Oxford University Press, 1962.

⁹²Kerman: "Notes on a Byrd Song."

stimulated his interest in Byrd's music to the point that he has since been the most prolific publisher of printed matter on a wide variety of Byrd-related topics, from source studies to analytical and technical aspects, to issues of biography. This section will seek to summarize Kerman's vast contributions to Byrd literature that are most relevant to the current study. Kerman often drops tantalizing suggestions for extension of his research which almost demand further exploration; I will highlight some of these areas that I have sought to pursue further in my own work.

Kerman's first task was to examine the available manuscript sources, and deal with questions of authenticity and chronology in Byrd's Latin motets. This concern led to the publication of "Byrd's Motets: Chronology and Canon" in 1961. Chronological placement is a problem with Byrd's middle-period motets; Byrd published no sacred vocal works between 1575 (the *Cantiones Sacrae* jointly written by Byrd and Thomas Tallis) and the two books of *Cantiones Sacrae* published in 1589 and 1591. Kerman believed that Byrd composed in this genre intermittently from 1575-91 and that the two volumes of *Cantiones Sacrae* are compilations of previously-composed material, some of it quite old.⁹³ Kerman noted that a number of motets that Byrd published in 1589 and 1591 had circulated in manuscript earlier in the 1580s; thus, he was able to push back the tentative dates of composition for some of Byrd's 1589 *Cantiones*, often by many years (see Table 1, below):

⁹³Kerman, "Byrd's Motets: Chronology and Canon," 359.

Table 1: Kerman's Chronology for the 1589 *Cantiones*:⁹⁴

Earliest Group (1575 to c.1580)	Middle Period (c.1580-87)	Latest (c.1589)
Aspice Domine	Tristitia	Defecit
Ne irascaris	Memento Domine	Vigilate
Tribulationes	Vide Domine	
Domine praestolamur	Deus venerunt gentes	
O Domine adjuva me	O quam gloriosum	
In resurrectione tua	Domine secundum	
Laetentur coeli		

Kerman's dating is based primarily on external evidence. However, these dates are generally supported by similarity of style in works that Kerman believes were composed at roughly the same time. For example, the homophonic double statement of subject material that opens *Tristitia et anxietas* is neatly duplicated in *Vide Domine*. Two other attempts at a chronology for the 1589 *Cantiones* (Brown and Harley⁹⁵) arrive at similar dates; thus, it can be inferred that Kerman's chronology is largely accepted as accurate.

⁹⁴Summarized from Kerman, "Chronology and Canon," 359-82; he fundamentally retains this chronology in *The Masses*.

⁹⁵*Cantiones Sacrae 1589* (Ed. Brown), preface, page x; and Harley, *William Byrd, Gentleman*, 222.

Kerman then wrote a pair of articles on technical aspects of Byrd's art: "On William Byrd's *Emendemus in melius*,"⁹⁶ and "Byrd, Tallis and the Art of Imitation." The former article provides a varied, multi-faceted approach to the analysis of the motet cited in the title. He discusses the work's texture, melody, harmony, tonality, rhythm, dissonance and history in turn. The latter article takes up Andrews's concept of the double point of imitation. Kerman claims that this technique arose from an Italianate influence on Byrd's style (Alfonso Ferrabosco the Elder).⁹⁷ Byrd's use of double points, Kerman asserts, combined with his use of irregular time-intervals of entry in his imitative points, makes his music distinct from that of his predecessors, Thomas Tallis and William Mundy.⁹⁸

Kerman's next important contribution to the field of Byrd research was his coinage of the term "cell technique," first appearing in his article, "Old and New in Byrd's *Cantiones Sacrae*." "Old and New" compares a motet trilogy from the 1575 *Cantiones* (*Tribue Domine* and the two motets following it) to a later work from the 1591 *Cantiones*, *Infelix ego*. Kerman introduces the concept of "cell construction" to describe Byrd's use of motives in short multi-voiced combinations, as follows:

⁹⁶Joseph Kerman, "On William Byrd's *Emendemus in melius*," *Musical Quarterly* 49 (1963): 17-37.

⁹⁷Joseph Kerman, "Byrd, Tallis and the Art of Imitation," in *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan Larue (New York: Norton, 1966), 528.

⁹⁸Kerman, "Byrd, Tallis and the Art of Imitation," 536-37.

The composer starts with a clearly-defined, rather light phrase or cell for semichoir...the cell is usually short and usually ends with a crisp little cadence; a typical texture involves three voices in stretto imitation. Overlapping this cadence, another semichoir sings a free repetition of the first cell...⁹⁹

Kerman emphasizes the brevity of a cell compared to the relatively greater length of a complete subject, though the overlap necessary for stretto imitation means that a cell will span a slightly longer period than its component single-line motivic fragments. As such, the cell stands conveniently at an intermediate point in structural weight between motive and subject.

Kerman is less specific as to what happens next in a passage that is structured around one or more such cells. Clearly, some repetition or varied reworking of material is involved, though this repetition can be somewhat flexible. Kerman suggests contrapuntal inversion, transposition or other modifications as possible means of variation,¹⁰⁰ to which I would add, given its prevalence in Byrd, changes in melodic contour. The passage structured around such cells usually culminates in a dense stretto, in which the melodic components coalesce into “a natural climax in terms of texture, phrase length and contrapuntal intensity.”¹⁰¹

Kerman’s conception is loosely defined so as to capture the potential flexibility of Byrd’s compositional procedure. This very flexibility evokes with great effect the dynamic conception of how Byrd controls forward momentum in an imitative passage.

⁹⁹Joseph Kerman, “Old and New in Byrd’s *Cantiones Sacrae*,” in *Essays on Opera and Early Music in Honour of Jack Westrup*, ed. F. W. Sternfeld (Oxford: Blackwell, 1975), 36.

¹⁰⁰Kerman, “Old and New,” 36.

¹⁰¹Kerman, “Old and New,” 36.

Kerman's discussion of how cells coalesce in such a passage shows how Byrd combines and recombines his motivic material to shape his material toward a cadential goal.

Kerman states that over two dozen phrases in the 1589 and 1591 *Cantiones* use this device, including the doxology from *O Quam Gloriosum* (1589/13).¹⁰² As two dozen phrases out of the 37 motets in the 1589 and 1591 collections amount to more than 10% of the total imitative points contained within them, this technique is vital to any discussion of Byrd's middle period style. Thus, I have taken Kerman's process of "cell construction" and formalized it into 24 distinct *presentation types*. These types show the ways in which Byrd combines subject material in two, three or four voices. They are the focus of Chapters 5 and 6.

2. *The Masses and Motets of William Byrd*

Many of the concepts that Kerman developed in his early articles found their way into *The Masses and Motets of William Byrd*. Kerman's text is a chronological overview and discussion of Byrd's entire output of Latin-texted vocal music. This vast undertaking includes capsule analyses of Byrd's motets (including the 54 works published in the three sets of *Cantiones Sacrae* of 1575, 1589 and 1591, plus many others in manuscript sources), plus his Masses and the two books of *Gradualia* (1605 and 1607). Kerman's analytical approach brings together many different threads; the book examines issues of biography, source studies, text-music relations, and incorporates detailed analyses of specific works.

¹⁰²Kerman, "Old and New," 38-39.

Since the musical content of Byrd's 1589 *Cantiones* is the focus of this study, I shall concentrate here mainly on what Kerman has to say about these motets. Kerman first deals with chronology, revisiting to a great extent his observations in "Byrd's Motets, Chronology and Canon." He confirms his earlier findings: Byrd's 1589 *Cantiones* likely date from 1575-1589, the exact middle of the period in which the Latin motet genre was Byrd's primary focus.¹⁰³

Kerman combines his chronology with categorizations of individual motets according to sub-genre types. First, he divides the motets into an early group (up to the late 1570s) and a later period (late 1570s to 1591). Kerman splits the early group into motets that make use of cantus firmus technique or canon, and motets of praise and penitence.¹⁰⁴ The canons display a certain rigidity of style: as Andrews would say, Byrd uses canon as more of a technical *tour de force* than as an expressive device.¹⁰⁵ The cantus firmus motet is a sub-genre that was vital to Byrd's development as a composer. As I will demonstrate below (Chapters 2-4), placing florid material against a line in semibreves is an important starting-point for subject and cadence design in Byrd's freely-composed motets, even after he had abandoned the sub-genre in the late 1570s.¹⁰⁶ The motets of praise and penitence combine homophony with a freely imitative style.

¹⁰³Byrd's Latin motets may date exclusively from the period 1572-91. See Kerman's Table 5 from *The Masses*, 126-27.

¹⁰⁴These are Kerman's chapter headings on pages 57 and 82 of *The Masses*.

¹⁰⁵Andrews, *Byrd's Vocal Polyphony*, 250ff. Kerman is more sympathetic, judging from his discussion of canonic procedures in *Similes illis fiant*, *Petrus beatus* and *Miserere mihi Domine* (Kerman, *The Masses*, 59, 77-78).

¹⁰⁶The importance of cantus-firmus-like gestures in Byrd's middle period is hinted at by Kerman regarding the opening gesture of *Vigilate* (*The Masses*, 152-53).

Kerman shows how these works contain the first essays in cell technique¹⁰⁷ and in designing double points of imitation.¹⁰⁸

The later motets (late 1570s to 1591) are similarly divided into two genres, but here, the categories are more general. Cantus firmus motets cease entirely after 1580 (the three that appear in the 1589 and 1591 *Cantiones* date from the mid-to-late 1570s, according to Kerman¹⁰⁹), and canon is no longer used as an overall organizing feature; its use is relegated to brief stretto passages within longer freely-imitative works.

Kerman divides these later motets into works “in the central imitative tradition,” and “motets in other styles.”¹¹⁰ The first category illustrates to what extent Byrd was influenced by new developments regarding imitation, which crossed the English Channel courtesy of his friend, Alfonso Ferrabosco the Elder¹¹¹ (this category of motets comprises the majority of Byrd’s total output after the late 1570s). The second group is a default category including all of Byrd’s motets that are not pervasively imitative. Kerman includes four works from the 1589 *Cantiones* in this group: *Tribulationes Civitatum*, *Ne Irascaris*, *Vide Domine*, and *O Domine, adjuva me* (1589/14, 12, 6 and 3). Each of these motets moves toward one or two culminating imitations at the end. This is perhaps a

¹⁰⁷Kerman, “Old and New,” 38.

¹⁰⁸Kerman, *The Masses*, 104ff.

¹⁰⁹See Kerman, *The Masses*, 80. Some technical features outlined by Kerman (73-77) support this dating. *Aspice Domine* (1589/11) has an archaic partial key signature, whereas *Descendit de Coelis* and *Afflicti pro peccatis nostris* (from the 1591 *Cantiones*) are in the six-voice texture that Byrd abandoned during his middle period.

¹¹⁰These are Kerman’s chapter headings on pages 133 and 161 of *The Masses*.

¹¹¹Kerman, “Byrd, Tallis and the Art of Imitation,” 528-29, and *The Masses*, 102-07.

refinement of Byrd's procedure in the earlier *Emendemus in melius* of 1575, one of his earliest essays in declamatory homophony.

These two categories are not mutually exclusive, nor does Kerman claim that they are. For example, *Ne Irascaris*, following its homophonic beginning, is primarily imitative: the "Jerusalem" imitative point in the *secunda pars* (measure 115ff.) is one of the densest canonic passages in the entire collection. However, *Tristitia et Anxietas* (1589/4), which Kerman classes as a "motet in the central imitative tradition," begins with homorhythmic declamation and becomes imitative only after this initial presentation of the opening text. Therefore, Kerman's categories for Byrd's middle period motets are indicators of the most prevalent (but not necessarily exclusive) textural and contrapuntal procedures within the work.

Kerman's detailed analyses of selected Latin motets are quite varied, both in their intent, and the analytic points that they seek to make. Kerman gives a brief sketch of the 16 motets from the 1589 *Cantiones*, showing stylistic links between these works and others written around the same time and published in the 1591 *Cantiones*. This is an outgrowth of his efforts to establish a chronology for these motets. According to Kerman, three works from the 1589 *Cantiones* come from Byrd's early period: the cantus firmus motet *Aspice Domine* (1589/11), and the stylistically-similar *In resurrectione tua* (1589/10) and *Laetentur Coeli* (1589/16). The other 13 motets date from the late 1570s to 1589. Four of these motets (1589/3, 6, 12 and 14, as noted above) are primarily homophonic; the remaining nine are imitative. Kerman's discussion of individual motets touches on a variety of points, including text setting, cadential structure, cell construction

and the double point of imitation. The overarching theme is Byrd's overall development as a composer, defined by the refinement of his technical and rhetorical skills.

The Masses and Motets of William Byrd contains the most detailed discussion of the motets from Byrd's 1589 *Cantiones* to date. Kerman brings to bear all of the analytical procedures and terminology of his previous work on Byrd. What is left is to formalize and expand upon some of these concepts. Kerman speaks of single, double and triple points, for example, but how exactly does Byrd present his subject material in such points? One part of the solution is the formalization of Byrd's procedures into presentation types, as mentioned above on page 25-26. These types, a more precise formulation of Kerman's "cell technique" and an extension of Schubert's models (the non-imitative module, imitative duo and canon) summarize the ways that single or multiple subjects can be combined in an opening gesture. Furthermore, how do Kerman's "cells" relate to the subject material at the beginning of an imitative point from which they derive? By categorizing Byrd's variation procedures, I will be able to demonstrate this musical relation, as well as some of the finely worked variations and recombinations of motives within a cell itself.

V. Recent Contributions to Byrd Research

Following the publication of Kerman's *The Masses and Motets of William Byrd* in 1981 there has been a reduction in scholarly activity about Byrd's music. However, there have been some recent contributions of note. John Harley's *William Byrd: Gentleman of the Chapel Royal* (mentioned on page 32), updates the bibliographic information on Byrd

and his family, and includes brief analyses of specific compositions (including *Tristitia et anxietas*, from the 1589 *Cantiones*). David Stern's exploration of Schenkerian techniques and their applicability to Byrd's *Mass for Five Voices*, has likewise been discussed above (page 28). Also of interest is a collection of essays, entitled *Byrd Studies* (published in 1992). This book includes contributions by Peter le Huray, Owen Rees and John Morehen on Byrd's motets, and a new article by Joseph Kerman, in which he revisits the concept of "cell technique."¹¹² Le Huray's article on cantus firmus composition and its influence on Byrd¹¹³ are relevant for this study, so I will discuss it briefly.

Le Huray traces the pedagogical development of a Renaissance composer from improvising on plainchant to composing on one, using Morley's treatise as guide. Le Huray's discussion of the cantus firmus motet *Libera me, Domine de morte aeterna* invokes Kerman's double point as a way of describing Byrd's pairing of distinct subjects against the cantus firmus line: le Huray calls this pairing the "head and tail" procedure.¹¹⁴ He then makes a link between this procedure's origin in cantus firmus motets with its later use in freely-composed motets such as *Libera me, Domine, et pone me* from the 1575 *Cantiones Sacrae*. The use of cantus-firmus-like units is more prevalent in Byrd than is usually noted. I will document this link in the 1589 *Cantiones*, especially *Memento Domine*, in Chapters 2-4, below.

¹¹²Joseph Kerman: "Write all these down: Notes on a Byrd Song," in *Byrd Studies*, ed. Alan Brown and Richard Turbet, (Cambridge: Cambridge University Press, 1992), 112-28.

¹¹³Peter le Huray, "Some Thoughts about Cantus Firmus Composition; and a Plea for Byrd's *Christus Resurgens*," in *Byrd Studies*, ed. Alan Brown and Richard Turbet, (Cambridge: Cambridge University Press, 1992), 1-23.

¹¹⁴le Huray, "Some Thoughts," 11-12.

VI. Summary and Conclusion

The ways in which I will use and build upon the considerable and greatly varied work cited above fall into three main stages. First, I will explore deeper-level structure in Byrd's 1589 *Cantiones*, using the cantus firmus as a metaphor for middleground tonal organization. Subject material in cantus firmus rhythmic values (breves and semibreves), I will posit, is a controlling and limiting influence on the musical shape of an imitative point. By tracing the transposition levels and cadential articulation of such subjects, I will provide a detailed picture of an imitative point's overall musical shape, and distinguish between techniques and organizational procedures typical of beginnings, middles and endings. This method brings together le Huray's views on cantus firmus technique, Kerman's commentary on the double point, Meier's cadential roles, and Rivera's concept of a "migrating soggetto" as a structural underpinning.

I will then explore the exact nature of Byrd's opening gestures, as to their formal weight within a motet, their texture, their use of imitation and their manipulation of single or multiple melodic subjects. I will identify 24 presentation types for openings, thus formalizing Kerman's "cell technique" and extending Schubert's models (the non-imitative module, imitative duo and canon) to musical situations in which Byrd uses complex combinations of imitative and non-imitative procedures. Some of these presentational models occur at the beginning of a formal division within a work (i.e. at the beginning of a motet, or of a *secunda pars*). Others only occur at an opening gesture in the middle of a formal unit (for which I will use the term "internal opening"). Still others arise later in an imitative point to vary or expand simpler opening gestures.

Finally, a few presentation types are hypothetical extensions of types that I have found in Byrd's 1589 *Cantiones*. I submit that the presence of certain types can be used to determine degrees of beginning, since Byrd's presentational procedures at the opening of a motet differ from his procedures at subsequent opening gestures within a formal unit.

Moreover, complex beginning gestures (ones that include three or more voices, and possibly a mix of imitative and non-imitative procedures) may include a smaller two-voice cell that is immediately subjected to variation within the presentation type itself. For example, a canon, as defined by Schubert, can be seen as an imitative pair extended to three or more voices by transposition or invertible counterpoint. Thus, these complex beginnings give insight into Byrd's developmental procedures in middles of imitative points. I will categorize and summarize these variation procedures as an avenue into Byrd's highly creative and complex means of developing his opening material. This combination and recombination of previously stated subject material will often coalesce into larger patterns that display a logical internal form within an imitative point. This detailed consideration of variation techniques confirms Schubert's view that form intersects with technique in quantifiable ways.¹¹⁵

¹¹⁵Schubert, "A Lesson from Lassus," 4.

As a summary and conclusion to this dissertation, I will then apply all of the analytic tools outlined in the ensuing chapters to *Tristitia et anxietas* (1589/4). This analysis will discuss the tonal design of the motet, as suggested by Byrd's manipulation of subjects and his cadential shaping of them. I will also describe Byrd's presentation and development procedures within each section of the motet. Finally, I will show how Byrd uses all of these techniques with a larger plan in mind: the introduction and emphasis of central pitches in the middleground.

Cantus Firmus Technique in Byrd's 1589 *Cantiones*

I. Introduction

In this chapter, I will explore the role of the cantus firmus in Byrd's 1589 *Cantiones*. I will examine the two ways that the cantus firmus influenced Byrd's later motets: first through his musical training, in which it was a vital pedagogical tool, and then through his early experiments (c. 1572-1580) with the cantus firmus motet sub-genre.¹ I will then assert that these influences play out in Byrd's later, freely composed motets from the 1589 *Cantiones* in his preference for subject material in breves and semibreves. Such subject material, due to its melodic and rhythmic stateliness, suggests a brief cantus firmus segment. These segments are not pre-existing lines as the term "cantus firmus" implies, but rather, due to the length of their rhythmic units, a shallow middleground structure with which faster-moving lines can be combined.

The pedagogical impact of the cantus firmus in Renaissance compositional practice is implicit in Byrd's case, as it would be for any aspiring Renaissance composer. It can be established that adding lines in free rhythm to a cantus firmus (first through

¹These are the dates proposed by Harley (*William Byrd, Gentleman*, 214). Compare Kerman, "Chronology and Canon," 317.

vocal or keyboard improvisation, and finally through composition) was the way in which Renaissance composers learned their craft.² This aspect of composer training is discussed at length in Peter le Huray's "Some thoughts on cantus firmus composition" (cited above on page 47),³ but is also implicit in most Renaissance treatises. (For the sake of the current discussion, I shall take Zarlino's *The Art of Counterpoint*, and Morley's *A Plaine and Easie Introduction to Practicall Musicke* as representative treatise examples.) I shall now briefly summarize how Zarlino and Morley teach Renaissance composition, and the role that the cantus firmus plays in this endeavour.

Following a discussion of rudiments, Zarlino and Morley both introduce two-voice simple counterpoint, where one voice is added to a cantus firmus in note-against-note rhythm. The aspiring improviser or composer then learns how to use dissonances by placing melodies in florid rhythm against a pre-existing line (diminished counterpoint). Once this skill is obtained, the basic principles of two-part writing are extended to counterpoint in three or more parts (two or more florid lines added to a cantus firmus). Zarlino and Morley then move on to free rhythm in all parts, and explore a variety of imitative procedures, ending with double canon. This progression of material involves a gradual increase in complexity and rigour. The authors carefully move from counterpoint that could be improvised to that which would have to be planned out in advance and written down.

²Peter N. Schubert explores the important role of improvisation in the Renaissance in *Modal Counterpoint, Renaissance Style*, 309-11.

³le Huray, "Some Thoughts," especially pages 2-3.

What is described above is a model for controlling interval patterns rather than a deliberate effort by the treatise authors to resurrect cantus firmus composition *per se*. The use of a line in long values (generally semibreves or breves) was a pedagogical abstraction whose purpose was, in Zarlino's words, "to give [beginners] practice in recognizing the location and distances of the consonances."⁴ Once this skill was obtained and perfected, the composer could then move on to creating the whole polyphonic complex rather than fitting material around a pre-existing part.

Since improvising on a cantus firmus was conjecturally a part of Byrd's training, it is not surprising that many of his early essays in vocal music were cantus firmus motets. This sub-genre would have permitted Byrd to use many of the contrapuntal procedures with which he would have been the most comfortable at this early stage in his training. Byrd's flirtation with the cantus firmus motet peaked in the period from about 1572-75, in which Byrd produced roughly half a dozen such works. Many of these works appeared almost immediately (for example, *Libera me, Domine* and *Peccantem me quotidie* were published in the Byrd-Tallis *Cantiones Sacrae* of 1575). However, one cantus firmus motet appeared in the 1589 *Cantiones* (*Aspice Domine*, 1589/11) and another pair (*Descendit de coelis* and *Afflicti pro peccatis nostris*) in Byrd's 1591 *Cantiones*.⁵

⁴Zarlino, *The Art of Counterpoint*, 92.

⁵Kerman asserts that these three motets were composed rather early (i.e. in the mid-1570s), in spite of their late publication date, see Kerman, "Chronology and Canon," 371. Harley, however, places them all slightly later (after 1575 but before 1581, see his chronology in *William Byrd, Gentleman*, 214).

I believe that Byrd's early interest in the cantus firmus sub-genre created a bridge for him between pedagogy and free composition, a musical laboratory in which he could develop contrapuntal techniques that would serve him in good stead when he moved on to freely-composed motets beginning around 1575. Vestiges of cantus firmus technique (the use of subject material in breves and semibreves as a structural underpinning) appear in these later motets, and influenced the design of his imitative points regularly into the 1580s.

That the cantus firmus influenced the rhythmic design of Byrd's subjects is a fact that been noted by various authors. Kerman describes the slow-moving subject in the Superius that begins *Vigilate* as "a solemn call...like a cantus firmus."⁶ It provides a foundation for the florid, fast-moving voice below it. Also, le Huray has commented on a similar pairing of rapid and slow-moving subjects in Byrd's cantus firmus motet, *Libera me, Domine, de morte aeterna*, from the 1575 *Cantiones*. Furthermore, he notes the similarity with Byrd's procedure in the freely composed motets *Libera me, Domine, et pone* and *Peccantem me quotidie*, likewise from the 1575 set⁷). Harley picks up Kerman's idea as well, noting that "passages written in something like cantus firmus style crop up from time to time in motets employing an otherwise freely imitative technique,"⁸ though he gives no examples. I suspect that Kerman, le Huray and Harley were all

⁶Kerman *The Masses*, 152-53.

⁷le Huray, "Some thoughts," 12.

⁸Harley, *William Byrd, Gentleman*, 229-30.

pointing to subject material in long rhythmic units as an evocation of cantus firmus technique, though the slow-moving line was newly composed rather than pre-existing.

Given the experience that cantus firmus composition provides with placing florid lines against a slow-moving supporting voice, it is not surprising that Byrd uses this procedure when he comes to design subject material in his freely-composed motets. The interval patterns created by the pairing of slow and faster-moving subject material still evoke the cantus firmus motet sub-genre, at least locally. A cantus-firmus-like melodic segment (i.e. a subject in longer rhythmic units), like a true cantus firmus, exerts control and shapes harmonically the faster-moving voices around it. Thus, I assert that a cantus-firmus-like subject in Byrd's freely composed motets has the same basic function as the pre-existing cantus firmus does in Renaissance pedagogy. It is a shallow middleground structure that controls the melodic flow and dissonance content of a phrase.

Thus abstracted, cantus-firmus-like melodic lines (subjects in longer rhythmic units) retain an influence as an organizing factor even in Byrd's compositions that are not arranged around pre-existing material. Byrd abandons the cantus firmus *per se*, but its typical rhythmic values remain. The procedure of pairing a slow subject with a faster one, which has its origins in Renaissance pedagogy and cantus firmus composition, provided Byrd with an abstract framework for dissonance treatment and shaping of tonal goals in his freely composed motets. The possible origin and wide-ranging implications of this framework for long-range planning are worth examining in some detail. The musical effect of cantus firmus-like lines also contributes to the overall style and rhythmic shape of these works.

I will explore the precise nature of this framework in two musical examples: the opening 26 measures of *Memento Domine* (1589/5), and the opening 17 measures of *Defecit in dolore* (1589/1). These two examples can be taken as models for how Byrd proceeds in other imitative points that begin with a cantus-firmus-like line in at least one part. All of Byrd's other uses of this procedure in the 1589 *Cantiones* will appear in an appendix at the end of Volume 1; this will be an exhaustive list of instances of cantus firmus values in beginning gestures.

II. Cantus Firmus Motions and Form

Motions in semibreves and breves in Byrd's motets concentrate particularly in two formal locations: beginning gestures and cadences. The former is of particular importance in imitative writing, since opening material typically is a single recurring subject or subject pair that will then dominate the ensuing measures. The latter, to be explored at length in the following chapter, is important primarily as a form of generic musical punctuation, though a cadence, if embellished the same way with each appearance, could have motivic significance as well. Both beginning and ending gestures carry great musical weight in Byrd's style, due to their frequent repetition. Due to the recycling of material from both of these formal locations, many of Byrd's 1589 *Cantiones* display a saturation of the contrapuntal fabric with cantus firmus values. I will first discuss the relation of cantus firmus technique to opening gestures in Byrd's 1589 *Cantiones*, and show how this type of material plays out in a complete imitative point.

The relation of beginning gestures to cadences, both of which share the presence of one or more voices in cantus firmus values, will be the topic of Chapters 3 and 4.

Typically in Byrd, as in his contemporaries, opening material tends to recur and develop in works that are organized around the technique of imitative polyphony. This reworking of initial material results in a preponderance of motions in slower values throughout an imitative passage when these motions occur in the opening subject. By tracing the presence of these slower rhythmic motions from their first appearance in a section through the cadence, one can get a sense of what the important goal pitches of the section may be. Since this slow-moving subject need not be confined to a single voice as in a cantus firmus motet, it can act as a migrating *soggetto*, as suggested by Benito Rivera: “Zarlino tells us that every composition must have a *soggetto*, which functions like a cantus firmus in some significant ways.”⁹ Thus, like a cantus firmus, this line provides a structure and control for the pitch content and succession of an imitative point. Though Rivera points out that the *soggetto* need not be in longer values,¹⁰ in Byrd’s double points, the slower-moving subject is invariably the one that, due to a limited array of transposition levels, emphasizes significant pitches (typically the final and its upper or lower fifth). The parallels between Rivera’s approach and reductive analysis are significant; in both instances the analyst must sift through a wealth of foreground detail to find this generative line upon which long-range musical direction depends.

⁹Rivera, “Finding the *Soggetto*,” 74.

¹⁰Rivera, “Finding the *Soggetto*,” 74.

It is instructive to examine exactly how far one might effectively proceed in this reductive endeavour. It should be noted that except in isolated cases, I do not believe that there is any single overarching tonal form at the level of the composition in Byrd's 1589 *Cantiones*. Most imitative points in this collection are self-contained as to their central pitch, often emphasizing the final at the beginning and end. Unless a point dovetails with subsequent material, or does not end on the final, there is little tonal necessity for further continuation. These sections, if tonally complete in and of themselves (i.e. if they return to their starting central pitch at the cadence), can be strung together by an additive process. Thus, an imitative point's tonal design seldom betrays its exact position within the motet, since most points cadence to the final. There is no large-scale departure and return built into the form of a work, as would soon be the case in the common practice period. We will have to examine details of texture and presentation to make distinctions between beginning, middle and end at the level of the composition. This issue will be pursued in Chapters 5-7.

III. Cantus Firmus Values and the Double Point

Cantus firmus rhythmic values are especially prevalent in Byrd's beginning gestures. Due to the Renaissance ideal of beginning a musical idea slowly and introducing faster rhythmic values gradually, initiating gestures in Byrd's motets often use breves and semibreves in at least one voice. Such "cantus firmi" are common in Byrd's freely composed motets until 1580. By 1589, he preferred to use shorter rhythmic values in most of his subject material, the better to veil the semibreve framework.

Nonetheless, cantus-firmus-like subjects occur as late as *Defecit in dolore* (1589/1), a motet that was written c. 1589, according to Kerman,¹¹ but they tend to be more brief in Byrd's motets from later in the 1580s than in the motets from about 1580.

One of Byrd's favourite initiating techniques in the 1589 *Cantiones* is organizing an imitative passage around a pair of subjects; one faster-moving, and the other in cantus firmus values. This pairing of differentiated subject material creates the so-called "double point of imitation" discussed by Andrews and Kerman.¹² The slower-moving voice behaves as a cantus firmus extract (at least regarding its melodic-rhythmic motion), whose clarity provides a foundation against which Byrd places a recurring florid voice. Thus, a link with true cantus firmus composition can easily be inferred, though the relative brevity of the cantus firmus segment in this procedure permits a more flexible continuation within an imitative passage.

The ensuing development of this initial pair of subjects will typically retain the longer rhythmic values of the double point's initial statement. This prevalence of longer values throughout such an imitative passage stems from the Renaissance tendency of recycling opening material at length: one can attribute this recycling to compositional efficiency. These slower beginnings and their later reuse therefore provide a skeletal framework for the passages that develop from them.

¹¹Kerman, "Chronology and Canon," 375, see also *Cantiones Sacrae 1589* (ed. Brown), preface, page x.

¹²Kerman, "Byrd, Tallis and the Art of Imitation," and Andrews, *Byrd's Vocal Polyphony*, 245-48; Andrews refers to this device as "double subject imitation."

IV. Cantus Firmus Values and Pitch Centricity:

1. The Opening Point of *Memento Domine*

Memento Domine (1589/5) illustrates how a subject in longer rhythms can create a middleground structure within a section. Though cantus firmus values are very much in evidence in the first three of the motet's four imitative points (the final imitative point of the motet breaks into longer values only at cadence points), they are particularly prominent in its first 21 measures. The opening subject of this section, set to the text, "Memento Domine," is entirely in breves and semibreves. Given the length of this subject (it spans seven semibreves), and its seven appearances within the opening imitative point, it is omnipresent for the first 21 measures of the motet. Therefore, the opening section of this motet is a good place in which to search for evidence of deeper-level pitch organization in Byrd's choice and ordering of his opening subject's transpositions.

Though the preponderance of long rhythmic values in this section already provides a clear framework with which to begin, further melodic reduction of the "Memento Domine" subject demonstrates the artful simplicity of Byrd's musical procedure. Since this opening subject is a double neighbour figure around its starting pitch, each of its statements can be reduced to this structural note that begins it. The ordering of the structural pitches that begin each of the seven statements of the subject provide Byrd with a framework for the overall direction of this passage. (Byrd, however, can choose to shape this framework more subtly by the particular scale degrees on which he cadences, as will be seen later.)

The neighbour motion present in the cantus-firmus-like subject generates much of the melodic content in the faster-moving voices as well. Most importantly, it looms large in the supporting second subject, “congregationis tuis.” The central portion of this subject is a rhythmically florid version of the “Memento Domine” subject; in other words, the second subject is a loose rhythmic diminution of the first (see Example 2.1). This similarity melodic shape between the two recurring subjects will be vital to the motivic unity of the whole when Byrd prepares for the final cadence using only the second subject.

Byrd uses and orders the transpositions of his “Memento Domine” subject first to project a stable central region in the opening measures, and then later on to deviate from this region, thereby giving the imitative point a subtle sense of direction. This shaping created by this subject and its transpositions occurs in two phases. The first phase, consisting of the first four entries, is rather static, providing a sturdy platform (the opening A and its upper fifth E) from which to deviate. The second phase (the remaining three entries), is more dynamic, creating a sense of departure. These two phases are shown below in Table 2.1:

Table 2.1: *Memento Domine*, measures 1-21: Entries of Subject 1

Phase	Measure # and Voice	Transposition
1	1, tenor	A
1	4, contratenor	E
1	6, superius	A
1	9, medius	E
2	12, bassus	A
2	15, superius	E
2	18, medius	B

Once Byrd abandons the opening subject material in measure 21, a third phase in the musical curve ensues. This rather brief segment consists of the cadential return. Byrd's primary rationale here is to balance the departure of phase two with a return to the initial A, and ultimately beyond it to D. This emphasis of D creates some doubt as to whether or not the final A is truly the central pitch: I will explore this notion in greater detail in Chapter 4. Notably, measures 22-26 are the only part of this imitative point in which the "Memento Domine" subject does not appear. Thus, in this closing gesture, Byrd combines re-emphasis of the initial A with liquidation. That is, the most prominent melodic features of the opening measures disappear, to be replaced by conventional cadential material.

The initial four statements of the “Memento Domine” subject articulate a stable region: the alternation of entries on A and E emphasize at the deeper level the harmonic division (Zarlino’s term for division of the octave at the upper fifth¹³) of the octave A. Byrd highlights the opening A as the central pitch of these measures; the E is of secondary status due to its role as an octave divider. This emphasis on the perfect fifth above A contains within it the seeds of a more aggressive push to the dominant, or sharp side, of the key. This subtle musical foreshadowing does not override the impression of this passage as a stable beginning, but does provide Byrd with the musical means for the passage’s subsequent departure and return.

The final three entries of the “Memento Domine” subject demonstrate a type of continuation function (the formal function that begins the Classical sentence’s second phrase, which I use as a metaphor for “middleness”¹⁴). That is, they develop and rework, motivically and pitch-wise, previously stated subject material. These entries realize the move to the dominant previously hinted at, and carry it one step further. A bass entry on A is followed by entries on E and B-natural, pushing the harmony outside of the one-flat system established initially. These entries therefore create a remote tonal area within the context of the work’s original emphasis on D, A and E.

The return to the primary pitch of the section (the A that was emphasized in the opening measures) is effected following the statement of “Memento Domine” on B; this is the third, cadential phase of the imitative point. This phase is not shown on Table 1

¹³Zarlino, *On the Modes*, 35-36.

¹⁴Caplin, *Classical Form*, 9-10.

since it involves the second subject only; the cadential gesture is presented instead as Example 2.2. As before, Byrd moves by successive fifths. The second subject “congregationis tuae” also reaches its extreme sharp point at this juncture. It appears in the medius voice beginning on E (this occurs in measure 21, coinciding with the final note of the “Memento Domine” subject transposed to B). Byrd stretches out the second subject to include primarily semibreves, thus making explicit the underlying melodic similarity of the double point’s two subjects.

Subsequent entries of the second subject move rapidly by descending fifth through A and D. The move to the flat side of the initial A is made even more extreme by the presence of a prominent G in the bass.) This D now moves to the bass, leading upward by fifth to A, and then cadentially to the D in measure 26. Byrd makes the D goal of this passage plausible, however, by the transpositions he chooses for the supporting second subject. While the first subject emphasizes the upper fifth of the initial structural A, the second subject, “congregationis tuis,” at the same time moves to the subdominant side (lower fifth) of this central pitch. Entries on D and G predominate in the first 12 measures, followed by entries primarily on A and D until the cadence in measure 26. The single statement on E in measures 21-23 is significant. It is the extreme sharp transposition of the second subject, corresponding to the “Memento Domine” subject’s statement on B that immediately precedes it. Thus, both subjects achieve their most remote transposition nearly simultaneously.

The dichotomy between dominant and subdominant emphasis at the middleground level of the passage implies a conflict between harmonic and arithmetic

division of the tonal space. This conflict dominates the remainder of the motet, and is only resolved (in favour of the opening A) with the work's final cadence.

2. Defecit in dolore

The opening point of *Memento Domine* is an extreme example of Byrd's use of longer rhythmic values in subject material, but it is not wholly unrepresentative of Byrd's procedure in the 1589 *Cantiones*. One sees a similar procedure at work in the opening measures of *Defecit in dolore* (1589/1). The cantus-firmus-like first subject set to the opening word of the motet resembles that of *Memento Domine*, but it is more concise. The subject is a single neighbouring motion, either upper or lower, around its starting pitch (both versions of the subject appear as Example 2.3). This more concise subject results in an imitative point of greater brevity. The opening point of *Defecit in dolore* spans 17 measures, and is thus more condensed than the 26-measure opening section of *Memento Domine*, discussed above.

In this imitative point from *Defecit in dolore*, it seems not to matter to Byrd which form of the subject he uses (i.e. whether the middle note is an upper or lower neighbour), as he explores both possibilities within the structure of the opening measures. The starting pitches of each subject entry are presented in Table 2.2, below. I have noted any overlap between successive entries, because such an overlap could create a larger periodicity and hierarchy between structural pitches. In other words, overlapping entries can make one starting pitch function as subordinate to the other.

Table 2.2: Starting Pitches of “Defecit” motive

Measures	Structural Pitch	Neighbour Type	Overlap (Y/N)
1-2	E	upper	yes (w/below)
2-3	A	lower	yes (w/above)
3-4	E	upper	yes (w/below)
4-5	A	lower	yes (w/above)
7-8	B	upper	no
9-10	E	upper	no
11-12	B	upper	no

Notably, as in *Memento Domine*, the opening cantus firmus segment appears seven times, the first four in pairs. These entry pairs create a stable region (Phase 1) in which the final A and its upper fifth E combine. These entry pairs articulate the harmonic division of the octave A, much like in *Memento Domine* (though here, by contrast, the upper fifth E appears first and is then retroactively stabilized by the overlapping statement on A). Though the key signature differs between these motets (*Defecit in Dolore* has a natural signature whereas *Memento Domine* has one flat), the similarity of central pitches (both motets emphasize the final A and its upper and lower fifths E and D) helps to outweigh this difference.

This similarity with *Memento Domine* continues as the opening point of *Defecit in dolore* moves away from its central pitch, into Phase 2. The three extra statements of the subject material are more widely spaced in time, and suggest a distinct move to the sharp side of the central A. The B-E-B sequence of entries resembles the E-A-E sequence of the second through fourth entries, though the greater space between entries produces a new, freer musical dynamic. Unlike the opening measures, where the entries on E were anchored by ensuing entries on the final A, the entries on B are tonally remote, considering the motet's final and signature.

Byrd's procedure in Phase 3, the return to the central A, is less systematic than in *Memento Domine*. The earlier piece moves by descending fifth from B to E, and then past A to D. *Defecit in dolore*, though less methodical, is more elegant. Below the final entry on B in measures 11-12, Byrd places an extended E in the bassus. Above it in the tenor, a new subject ("vita mea") appears, ending with an E-F-E neighbour motion (this new subject had already appeared on the same pitch-classes in the medius, measures 10-11). This subject then recurs in augmentation, forming a new "cantus firmus" in the bass in measure 13, once again ending on E (see Example 2.4a). This E could easily have moved down by fifth to the opening A, but Byrd suppresses this goal in all but the medius and contratenor voices. Moreover, he superimposes a new imitative point against this melodic goal (A) when it finally arrives in measure 17, as shown in Example 2.4b.

This "vita mea" subject is not as new as it first appears to be. The apparently-new "vita mea" subject, when slowed down to a mixture of breves and semibreves in measures 13-16, reveals clearly its melodic link with the opening subject: the final three

notes are the upper neighbour figure that begins the motet. Therefore, the opening gesture of the motet (“defecit”) not only controls the pitch succession of the imitative point, but also generates some of the more important supporting subjects that later accompany it.

V. Conclusion

These are two of many examples I could cite to illustrate the influence of cantus firmus technique on localized passages within Byrd’s 1589 *Cantiones Sacrae*. This technique is extremely prevalent in this group of motets: only *In resurrectione tua* (1589/10) avoids the procedure entirely. Cantus firmus motions (motions in breves and semibreves) occur in over half of Byrd’s imitative points in the 1589 *Cantiones*. As shown in the appendix, a total of 64 imitative points in the 1589 *Cantiones* have subjects that are exclusively or predominantly constructed around material in semibreves and breves. Since most of these subjects then receive an imitative development, the cantus-firmus-like foundation will then play itself out for the remainder of the point that follows the initial presentation of subject material.

By tracing the presence of breves and semibreves in Byrd’s melodic subjects, and the successive transpositions of their appearances, I have created a reductive plan for the succession of musical events within an imitative point. The prominence of longer rhythmic values in Byrd’s strategies of subject design therefore has a major impact on his long-range tonal planning. Moreover, I have sought to show how the rhythmic link between subjects in long values and cantus firmus technique demonstrates how Byrd’s

freely composed motets arose out of his earlier experiences as a musician. His training as a vocalist and keyboard player, and later, his extensive cultivation of the cantus firmus motet genre in the late 1570s (six such works have survived) had an effect on the subject material he chose to construct in a freely composed work. Though the presence of a melodic subject in longer rhythmic values is not the sole determinant of a passage's tonal shape (accompanying voices in florid rhythm and cadential articulation are important as well), it certainly contributes significantly to the deeper-level processes by which Byrd shapes an imitative point. Byrd's use of cadences to emphasize particular motions within his "cantus firmus" subjects helps to complete the tonal picture; this topic will be taken up in the following chapter.

Cantus Firmus and Cadence

I. Introduction

As noted in the last chapter, the structural line in cantus firmus values is one of many factors that influences the overall pitch content and direction of an imitative point. The ensuing discussion will consider one of these other factors; namely, cadential articulation, and how its intersection with a melodic line in cantus firmus values helps to focus the musical direction of a point. Cadential punctuation is vital for moulding the generic motions of a cantus-firmus-like line into a cogent tonal shape. In sum, a line in longer values contains within it cadential potential that the remaining voices can unlock.

The ensuing discussion will summarize Bernhard Meier's views on the Renaissance cadence, with particular attention given to his concept of melodic-cadential roles (cantizans, tenorizans, basizans and altizans). I will extend Meier's concept by categorizing all melodic-cadential motions that deviate from their expected goal (evaded motions) or are left incomplete (abandoned motions). Then, in the following chapter, I will show how these melodic motions (primarily motions by step or descending fifth) can appear in Byrd's subject material, thus creating cadential potential that the remaining voices in the texture can unlock. I will conclude by returning to *Memento Domine*, and will show how the cadential potential of subject material in long values, and Byrd's cadential articulation of it, gives this motet its particular shape and direction.

II. Links Between Beginnings and Cadences

I suggested above (Chapter 2, pages 56-57) that there is a probable link between beginnings and endings in Byrd's music that is evident in his 1589 *Cantiones*. I will now clarify precisely the nature of this link, which arises in part from an underlying similarity of melodic and rhythmic shape. This similarity permits beginnings to become cadential when they occur in the appropriate temporal location, or cadences to contain beginning-like recurring subject material. Thus, beginnings and endings can become inextricably linked as Byrd introduces and develops his subject material during an imitative point.

The common denominator between beginning and ending gestures is the presence of motion in semibreves. According to some music theorists of the sixteenth century, cadences generally contain at least one voice in semibreves. Nicola Vicentino calls this cadence the *cadenza minore*.¹ (The cadence at the breve level, or *cadenza maggiore*, was by then archaic, and the minim cadence, or *cadenza minima* was restricted to madrigal style, where it is associated with *note nere* notation. Such a cadence differs from the *cadenza minore* in appearance only, since the semiminim, or quarter note, is taken as the tactus in *note nere* notation, whereas it would normally be the minim).² Since the semibreve is the usual rhythmic value of the pre-existing line in Byrd's cantus firmus motets, it would have been both easy and natural for him (given his training) to compose cadences around particular melodic motions in such a line. These cadences could support possible melodic cadential goals with appropriate harmonic configurations, or create new

¹See Meier, *The Modes*, 92, where he summarizes Vicentino's cadential terminology.

²Meier, *The Modes*, 92.

intermediate cadential goals in circumstances where no apparent melodic goal existed in the cantus firmus line (i.e. the segment in long rhythmic values) itself.

This technique of manufacturing cadential goals from melodic gestures within lines in longer rhythms is equally important in Byrd's freely composed motets. However, unlike the cantus firmus motet, where the line in long values is pre-existing, and the possible cadence locations thus to some extent pre-determined, in a freely-composed motet, Byrd chooses his own melodic motions, and therefore his own potential cadential goals when he uses long values in his subject material.

The above-mentioned melodic link is a classic chicken-egg situation. One could claim that Byrd incorporated melodic motions with cadential potential into his imitative points for the express purpose of unveiling this cadential potential later on. It would be equally valid, however, to claim that Byrd began with the cadence, broke it into its component melodic parts, and distributed these parts into his opening gestures. Which of these procedures Byrd followed in designing an imitative passage is immaterial. What is important is the musical result; namely, the underlying melodic similarity. These melodically similar motions occur at two diametrically opposed locations within an imitative point: the beginning and the end.

In spite of (or perhaps because of) its use of generic melodic motions in formulaic combinations, the cadence is a particularly distinctive example of musical rhetoric, a pitch-based analogue to punctuation in language. The familiarity of this musical gesture very quickly placed it in the realm of conventional material. As a result, the cadence has undergone little change since the early days of polyphony. Its standard configuration in

the Renaissance period was stepwise parts in contrary motion forming a major sixth-to-octave interval structure. This pair of voices was often combined with a descending perfect fifth in the bass (as noted above in Chapter 1, page 17). This confluence of motions became the most overt signal by which a composer could indicate musical completion. As motions by step and perfect fifth are common in Renaissance style, melodic motions in semibreves that can articulate closure appear frequently throughout Byrd's 1589 *Cantiones*. Due to this regularity of use, it is vital to examine at length the nature of the cadence and the melodic gestures that can form a part of it. Byrd's emphasis on these cadential motions in different formal locations gives the analyst an important key with which to unlock the features of his tonal planning at the level of the point, and possibly beyond.

III. Categories of Melodic-Cadential Motions

1. Bernhard Meier's Cadential Roles

Since cadences in the Renaissance include common and frequently occurring melodic motions, just about any melodic motion contained within a subject in semibreves or breves could become part of a cadence if the composer wanted some articulation of closure. The ensuing discussion will begin by enumerating the types of motions which are characteristic of cadential gestures. This will be an extension of Meier's melodic-cadential roles outlined in *The Modes of Classical Vocal Polyphony*.

Meier focuses primarily on the melodic-rhythmic roles that combine to create the cadence. These roles are defined primarily by their melodic motion and secondarily by

their registral location in a cadence. These are the *cantizans*, *tenorizans*, *basizans* and *altizans*.³ The first two of these melodic-cadential roles are the foundation of the cadential gesture, forming together a sixth-to-octave motion to a melodic goal. The optional *basizans* role adds structural support in the bass. Meier's fourth role, the *altizans*, I include for the sake of completeness; it is variable in melodic shape, hidden in the middle register and thus, in my opinion, purely a supporting melodic gesture rather than a structural one. Therefore, due to this motion's secondary status, I will not use it as a cadential determinant in my own analysis. These melodic roles can be defined according to the scale degrees that they contain, as will be seen below. Since the use of scale degree labels is analytically anachronistic, I will place them in quotations.⁴

Cantizans motions ascend by semitone, except in the Phrygian cadence (i.e. the cadence to E and its transpositions), where the motion is by whole step. I label these motions "7-8" when they occur in a cadential context.⁵ ("8" and its octave transposition "1" are the local melodic goals of a cadence.) In florid counterpoint, a suspension usually leads to "7." Following Morley and Zarlino, however, I permit an unembellished *cantizans* as part of a simple cadence (see Examples 1.1 and 1.7). Such cadences, though, are of lesser finality than they would be if the suspension were present.⁶

³Meier, *The Modes*, 90-101.

⁴This models on Schubert, see *Modal Counterpoint*, 131-37.

⁵By convention, one voice must move by semitone at the cadence, so that the sixth preceding the octave will be major. If both *cantizans* and *tenorizans* move by whole step, *musica ficta* would need to be applied to one of the voices for closure to occur.

⁶Morley's term for the simple cadence (with unembellished *cantizans*) is "formal closing without a discord or Cadence" (*Plaine and Easie*, 75).

Tenorizans motions are those which descend by step. This step is a whole tone, except in the Phrygian cadence, where it is a semitone. The descending stepwise gesture can be described as a scale degree “2-1” motion in a cadential progression. It typically pairs with the cantizans “7-8” to form the sixth-to-octave *clausula vera*, as noted above (page 74). The tenorizans, unlike the cantizans, is generally left unembellished.

Basizans motions have a role that is slightly subordinate to that of the previous two. Basizans motions proceed by descending fifth or ascending fourth, providing “5-1” bass support in a cadence. (The Phrygian basizans is an exception; it moves either “7-4,” “7-3” or “7-6.”⁷) Basizans motions accompany the cantizans and/or tenorizans lines in a cadence. Zarlino and Morley permit a cantizans-basizans cadential pair in two parts, though they imply that this pairing is more typical of a three-voice texture, presumably with tenorizans added to clarify the cadential intent.⁸

Altizans motions form Meier’s final category; they are a supporting voice in the middle register that comes to rest on a scale degree other than the local cadential goal tone. Unlike the other three roles that have a single melodic form (the Phrygian basizans excepted), the altizans role comes in a variety of shapes, such as “4-5,” “5-3,” “5-5” and “4-3.”⁹ As noted above, I consider the altizans role to be secondary for cadential definition; its absence barely affects the finality of the gesture. Therefore, I will not use the altizans as a structural cadential role in the current study.

⁷Meier, *The Modes*, 97. See Example 3.1.

⁸Zarlino, *The Art of Counterpoint*, 147-48, and Morley, *Plaine and Easie*, 75.

⁹Morley, *Plaine and Easie*, 74, “Examples of well taking a discord with a Cadence.”

2. Hierarchical Rank of Cadential Roles

Meier ranks his cadential roles as follows. The cantizans-tenorizans framework is structural,¹⁰ whereas his other two roles (basizans and altizans) are adjuncts to this framework. Each of these melodic roles is merely a contributing factor in creating a sense of closure; this closure is all the more convincing if all of them are present. One might be tempted to rank the tenorizans role above the cantizans for historical reasons. The descending step “2-1” is the most typical melodic closure at the end of a Gregorian chant phrase, and therefore would seem to have historical priority over the other cadential roles that developed with the advent of counterpoint in the Middle Ages. If so, the other roles (cantizans, basizans and altizans) would at some level be ancillary since they were added after the fact to the “2-1” melodic-cadential gesture. By Byrd’s time, however, the tenorizans seems to have lost some of its structural status. Zarlino permits a cantizans-basizans cadence in two parts, but not tenorizans-basizans. Morley introduces a tenorizans-basizans combination only after having presented the reader with many examples of cantizans-tenorizans and cantizans-basizans pairings.¹¹ From the order in which the above authors introduce various cadence types, we can infer that the tenorizans in Renaissance practice is second in importance to the cantizans. Moreover, in Zarlino’s cadence examples, the tenorizans can be omitted from the cadence, whereas the cantizans generally cannot, confirming the greater importance of the latter melodic role.

¹⁰Meier, *The Modes*, 90.

¹¹Morley’s first tenorizans-basizans cadence in *Plaine and Easie* appears on page 87; his cadences with cantizans begin on page 74.

The cantizans motion is the most important voice within the Renaissance cadence. Its melodic motion by ascending step is the mirror image of the tenorizans role, forming quite naturally a complementary pair with it. Zarlino's first example of a cadence in *The Art of Counterpoint* is exactly such a cantizans-tenorizans pair,¹² implying the primacy of this cadential pairing over the other possibilities discussed later. Moreover, the cantizans role is the one that typically contains the cadential suspension, a vital foreground signal of closure. This important aspect of the cadence, the presence of embellishing figures, will be discussed below.

The basizans role is a bit difficult to categorize in Byrd's era, though Meier's survey of Renaissance treatises suggests that its importance grew during the Renaissance. According to Meier, though the cantizans-tenorizans structural pair was still primary, the presence of the basizans was necessary to make a cadence perfect.¹³ This is borne out in Byrd's practice in the 1589 *Cantiones*: cadences that mark main formal junctures almost invariably include the basizans role, along with both tenorizans and cantizans roles. The increased importance of the basizans is apparent when it combines cadentially with either cantizans or tenorizans in a two-voice texture (this is a typical cadential pairing in the common practice period). In such a case, the basizans would be reckoned as one of the primary structural voices of the cadential gesture rather than a supporting one. Though Zarlino permits a basizans-cantizans pair in two voices, he immediately states that this pairing is better avoided, "since such ascending and descending leaps are more suitable to

¹²Zarlino, *The Art of Counterpoint*, 143.

¹³Meier, *The Modes*, 93-94.

the lowest voice of a composition for more voices, where such cadences are common.”¹⁴ Morley likewise permits a basizans-cantizans cadence in two voices, describing it as “the best way of closing” if the plainsong ascends a fourth at the end of a phrase¹⁵ (or descends a fifth, as he later illustrates).¹⁶ In conclusion, the basizans motion is best considered secondary to the cantizans and tenorizans in Renaissance cadential practice. The basizans is preferably added to a pre-existing cantizans-tenorizans pair, rather than to the cantizans or tenorizans by itself. I rank the basizans as a secondary structural role within the cadence. Its absence from a cadential gesture does not prevent closure from being perceived, but it does lessen the cadence’s degree of finality, as Meier, citing Dressler and Burmeister, asserts.¹⁷

The altizans, which normally ends on a note other than the local melodic goal of the cadence, can be freely omitted with little effect on the finality of the cadence: one notices the resulting thinner texture, but little else differs. Therefore it is the least important voice within the Renaissance cadence, merely supporting rather than structural. Its cadential status is context-specific and cannot be inferred without the presence of at least two of the structural voices (cantizans, tenorizans or basizans). Lassus does on occasion use a cantizans-altizans pair in his duos as a pseudo-cadential gesture;¹⁸ however, the absence of the tenorizans makes this pairing unconvincing as a cadence.

¹⁴Zarlino, *The Art of Counterpoint*, 147-48.

¹⁵Morley, *Plaine and Easie*, 74.

¹⁶Morley, *Plaine and Easie*, 75.

¹⁷Meier, *The Modes*, 93.

¹⁸Schubert, “A Lesson from Lassus,” 3, footnote 5.

The lack of a consistent melodic shape for the altizans also suggests a subordinate role: the altizans motion is varied so that it may combine smoothly with the other roles (cantizans, tenorizans and basizans) in the cadential gesture.

When any of the three structural melodic motions (cantizans, tenorizans, basizans) occur in cantus firmus values (i.e. in breves or semibreves), regardless of the voice in which they are placed in the case of cantizans and tenorizans,¹⁹ the potential for cadential articulation exists.²⁰ Moreover, if this potential exists, then suggesting a cadential goal and subsequently subverting it is also possible. This is an evaded cadence, in which at least one of the melodic-structural roles in the gesture avoids its expected goal, thus playing on the expectations of the listener. Zarlino notes that in the evaded cadence, “the voices give the impression of leading to a perfect cadence, and turn instead in a different direction.”²¹ I shall discuss the various methods of evading the cadence that are typical of Renaissance style and their effect on cadential finality.

3. Evaded and Abandoned Cadential Motions

I will now extend the scope of Meier’s categories of cadential motions by including evaded cadential motions (in which the line is diverted from its expected goal) and abandoned cadential motions (in which a rest substitutes for the melodic goal).

Deflecting a melodic cadential gesture from its expected melodic goal (or even

¹⁹This is not true of the basizans, as will be seen below.

²⁰I exclude the possibility of the “cadenza minima” (the cadence at the half-note level), which Meier equates with madrigal style and *note nere* notation (*The Modes*, 92).

²¹Zarlino, *The Art of Counterpoint*, 151-53.

abandoning the line altogether) is both frequent in Renaissance style and musically effective, as is evident from contemporary writings (as noted on the preceding page, the technique is discussed and recommended in Zarlino). The observations below therefore have a wider significance beyond the collection of Byrd motets under consideration.

Table 3.1 summarizes the melodic-cadential motions for the three structural roles in the proper cadence (cantizans, tenorizans, and basizans), and then lists typical evaded or abandoned forms of these roles. It should be pointed out that not all of these melodic-cadential motions could be evaded or abandoned at the same time. Unless one of these roles occurs in its complete form, there can be no realistic expectation of a cadence.

Table 3.1: Proper, Evaded²² and Abandoned Cadential Motions

Cadence Role	Proper	Evaded	Abandoned
Tenorizans	"2-1"	"2-3," "2-5," "2-6," "2-4"	"2-rest"
Cantizans	"7-8"	"7-6," "7-5," "7-4," "7-2" ²³	"7-rest"
Basizans	"5-1"	"5-6," "5-4," "5-3"	"5-rest"

²²Listed in Schubert, *Modal Counterpoint*, 132-33; I have placed the most common evaded motion in the Byrd 1589 *Cantiones* first on the list in each case.

²³The "7-4" and "7-6" motions could also be Phrygian basizans; compare Meier's Phrygian cadences in *The Modes*, 97 (Example 1.11).

The most common evaded cadential gesture is the “evaded tenorizans” motion. This primary motion in the cadential gesture, rather than moving “2-1” to establish a goal pitch, instead moves “2-3” (less often “2-5, “2-6” and “2-4”). For the attentive listener, the melodic arrival of “2” in long values permits the expectation of a cadence, which is subsequently denied. By concluding on a note other than the expected cadential goal, this type of melodic gesture feels incomplete: the melodic line seems to require continuation rather than creating a sense of closure. The “2-3” evaded tenorizans motion is an occasional exception to this rule; it occurs at a cadence that ends an imitative point in *Tristitia et anxietas*, measure 42 (cited below as Example 8.1). Byrd’s use of a “2-3” evaded tenorizans gesture at such a major formal division suggest that this motion may represent a midpoint between evasion and full closure.

The sense of incompleteness created by an evaded tenorizans motion is greatly lessened provided the cadence contains both cantizans and basizans roles. Since both of these roles, when complete, come to rest on the cadential goal, the tenorizans is free to move elsewhere, most often to the third above this pitch, thereby creating a full-sounding closing sonority. The absence of this third was less crucial for Renaissance composers working from a dyadic structural framework that it would be once the triad was acknowledged as the fundamental building block of tonality. Nonetheless, there was already a sense that the third above the bass in some way complemented an otherwise bare perfect fifth. Thus, the evaded tenorizans motion slightly weakens the sense of melodic arrival within the cadence, but improves the sonority of the goal chord.

The “2-rest” motion is a special category. I will use the term “abandoned” rather than “evaded” to describe this category, since the goal tone of the cadence is eliminated rather than merely substituted. However, the resolution tone is seldom absent entirely. Often, the cadential motion will resolve indirectly in another voice. The cadence that closes the first imitative point of *Memento Domine* is a good illustration of this procedure; see Example 2.2 and the accompanying discussion on page 64.

Cantizans motions, unlike tenorizans motions, tend not to evade their melodic goal. The presence of the leading tone in this melodic gesture usually demands upward resolution. This is especially true where the seventh degree is altered by *musica ficta*, since chromatic alteration draws attention to the upward tendency of this melodic tone. However, the evaded cantizans motion is not entirely absent in Byrd’s 1589 *Cantiones: a dolore* (1589/1). At measure 10 of this motet (see Example 3.1), Byrd couples a tenorizans motion (F-E, or “2-1” in a Phrygian cadence) in the bassus with a “7-6” evaded cantizans motion above it in the medius. The status of this passage as a cadence gesture is further enhanced by the suspension in the cantizans role. The emphasis of E as an intermittent pedal tone from measure 10 until the cadence to A in measure 17, marking this pitch as an important local goal, helps as well. The effect in measure 10 is one of closure plausibly suggested, but not firmly emphasized.²⁴

²⁴The “cadence with simultaneous cross-relation,” discussed by Andrews in *Byrd’s Vocal Polyphony*, 108-10, is a related case. One voice moves “7-8” (usually with *ficta*), and another “7-6” (or “7-5”). This cadence is pervasive in *Aspice Domine*, measures 51-52 serving as one example among many.

Abandonment or delaying of the cadential goal in the cantizans line happens equally rarely: Byrd seems to have been sensitive to the active melodic tendency of the seventh degree, since he generally avoided delaying its resolution (a rare exception to Byrd's usual procedure in this regard will be discussed below). The principle is the same as in the abandoned tenorizans discussed above: the cantizans line moves "7-rest," thus suppressing its intended goal. A passage in *Aspice Domine*, measures 95-96, will serve as illustration (see Example 3.3). At this cadential point, the two lowest voices both have basizans motions (forming octaves by contrary motion) from A to D. A new point of imitation begins in the contratenor, adding an evaded tenorizans motion to the cadence ("2-3"). Against this group of cadential voices, the uppermost part arrives on a semibreve C#, and then is silent for more than a full measure: this motion is "7-rest" in the context of the remaining voices. (Though the suspension in the cantizans is absent, the presence of complete basizans and evaded tenorizans permits a cadential reading here.)

The basizans voice, like the other two roles mentioned above, can also evade or abandon its intended melodic goal. Here, the musical result is more striking than with an evaded tenorizans or cantizans, as a change of lowest pitch affects the harmonic context in which the listener perceives the voices moving above it. The "5-6" evasion is the most common adjustment to the conventional "5-1" basizans (the "occupaverunt-interiora mea" imitative point provides many examples of this motion, one of which I present as Example 3.4), though "5-4" and "5-3" evasions are also possible.

A related phenomenon occurs in the case of the cadence to the fifth. This cadential possibility, though still current in the mid-1500s, at least in theory,²⁵ is rare in Byrd. If the cantizans voice is designated as “7-8,” the tenorizans motion accompanying it could be reinterpreted as “5-4,” a type of evaded basizans gesture. I prefer this reading to the alternative, which would be to designate the lower voice as “2-1” and the upper voice as a “#4-5” altizans motion. This latter interpretation produces one structural voice and one supporting voice, whereas the “7-8” plus “5-4” interpretation produces two structural voices, one complete and one evaded. In either reading, one voice comes to rest on a non-goal tone, thus creating a cadence of lesser finality than the cadence to the octave. Finally, as a subcategory of evaded basizans motions, we have one more possibility: the abandoned cadence in the bass. As with the tenorizans and cantizans cadential roles, there are two possible strategies. The basizans voice can omit its cadential goal altogether, or it can transfer this tone to another voice. (In keeping with the system of labelling already outlined for tenorizans and cantizans motions that suppress their goal tones, abandoned basizans motions will be designated as “5-rest.”) One of Byrd’s rationales for this type of evaded gesture is to turn a cadential goal tone into a new beginning (e.g., *Defecit in dolore*, measure 17, see page 67 and Example 2.4b). The suppressed goal of the cadence becomes the starting pitch of a new melodic subject, thereby initiating an entirely new imitative point. This fusing of ending and beginning function will be considered in greater detail in Chapter 4.

²⁵Morley illustrates such a cadence in *Plain & Easy*, 147. See Example 1.7.

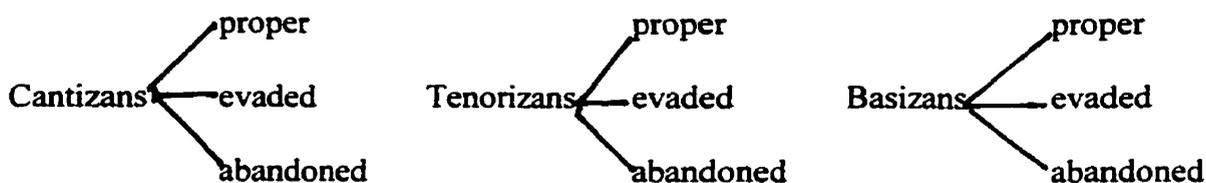
IV. Melodic-Cadential Roles and Cadential Finality

To conclude this discussion, I shall consider briefly how the presence or absence of particular melodic-cadential roles in a cadential gesture affects the degree of finality. I do not propose a cadential ranking or formula for creating a cadence on the basis of these melodic motions, however. Musical factors other than Meier's cadential roles have a role to play in suggesting closure, as we will see below on pages 88-89. However, certain general principles can be asserted. First of all, the more complete melodic-cadential roles a cadential gesture contains, the more final sounding it will be. Secondly, a complete structural role always contributes a greater degree of finality to a cadential gesture than any evaded or abandoned one. If a cadence contains both a complete structural role and an evaded or abandoned form of the same role (a cadence with both "2-1" and "2-3" is common), the complete role takes precedence.

Evaded and abandoned motions, due to their melodic variability, cannot define a cadence on their own: their effect requires a realistic expectation on the part of the listener that a melodic line is coming to a close (i.e. the listener must be able mentally to supply the expected melodic goal). Therefore, a cadence must contain at least one complete structural role ("2-1," "7-8" or "5-1") for it to be possible to interpret other surrounding voices in the gesture as being evaded or abandoned melodic-cadential motions. The presence of at least one complete structural role creates the expectation of a cadence, which can then further be confirmed by the complete or incomplete melodic-cadential motions around it. These cadential possibilities can be presented as a chart, in

which the cadential motions with the most conclusive effect appear at the top. Various less final possibilities for closure appear at a lower level (see Table 3.2, below).

Table 3.2: Chart of Cadential Possibilities



As one moves down or to the right on this chart, the cadential potential diminishes. Thus, a cadence in which one or more of its roles has been evaded or abandoned will be less final in effect than one whose roles are complete. Similarly, a cadence with cantizans missing will be less final than a cadence with tenorizans or basizans missing: cantizans is the most essential of Meier's three melodic-cadential roles, so its absence is more keenly felt. It is difficult to quantify this information into a cadential ranking, however.

Certainly, substituting "7-6" for the proper cantizans, or "2-3" for the proper tenorizans, lessens the sense of finality, but it is difficult to determine which of these evasions has the greater musical effect in the absence of the overall musical context. For example, a cadence with evaded tenorizans "2-3" can occur at the end of a section (*Tristitia et anxietas*, measure 42), whereas the other evaded motions do not. Thus, "2-3" is a special category of evasion from the others, perhaps denoting a "semi-final" cadence, analogous

to Morley's "passing close."²⁶ Beyond this distinction, ranking the other evaded and abandoned motions in a particular order cannot profitably be done. To distinguish between different degrees of cadential weighting, it will be necessary to look beyond the presence of cantus firmus values in the cadential gesture. One must also examine other signals of closure: text completion, textural change and melodic embellishing tones.

V. Other Signals of Cadence Points

A cadence contains more than simply an assortment of melodic motions in long values leading to a common goal pitch. I will first discuss issues of text and texture and how they assist in cadential articulation. Then, I will consider two of the common foreground embellishing motions (the suspension and the cambiata figure) that assist the listener in recognizing a cadence. As for text setting, a convincing final cadence must be marked by a coincidence of musical and textual completion, as Zarlino asserts (quoted above, page 8). If one or more voices "cadence" in the middle of a text segment, the feeling of completion will be greatly weakened. Thus, motions by step or descending fifth in cantus firmus values is not, in and of itself, sufficient to create closure. Also, one should consider the number of voices that actually participate in the cadence. For example, the cadence in measure 42 of *Tristitia et anxietas* (1589/4) is made subtly less complete due to the absence of the superius voice. This absence of one or more parts never occurs at a motet's final cadence in the 1589 *Cantiones*. Finally, the registral

²⁶ See Morley, *Plaine and Easie*, 132-42, discussed above (Chapter 1, 15).

location of a cadence's melodic-structural roles is important. The cantizans typically occupies the uppermost register; if it is hidden in the middle register, the cadence will be of lesser finality.²⁷

However, the most compelling features that help to define the cadence in Byrd's practice are particular dissonance types by which melodic tension is created and then resolved in the cadential gesture. Byrd reserves two specific types of embellishment, the suspension in the cantizans voice and the cambiata figure for his most final cadences. I shall discuss each of these embellishing devices in turn. The suspension added to the cantizans is almost an obligatory feature of any cadential gesture. Though both Morley and Zarlino discuss the simple cadence (i.e. without suspension) as a viable possibility, it is clear that they consider this cadence type to be less final in effect. Similarly, Cristle Collins Judd makes a hierarchical distinction between "formal" cadences (the most final type, typically with suspension in the cantizans voice) and "simple" cadences, i.e. without suspension.²⁸ The suspension is therefore seen as an embellishing device that contributes greatly to the sense of closure in a Renaissance cadence. The introduction of a melodic goal as a suspension dissonance (the initial "8" of the "8-7-8" embellished cantizans role that forms a dissonant interval of a second or seventh with the "2" of the tenorizans role) creates tension that subsequently requires resolution.

Equally important in Byrd's most final cadences is the four-note cambiata figure. Typically, Byrd uses this melodic gesture as a way of enlivening the "5-3" motion at a

²⁷ Judd asserts this point in "Some Problems," 214.

²⁸ Judd, "Some Problems," 214.

cadence point. This motion appears at the end of the *Prima Pars* of *Defecit in dolore* (1589/1, see Example 3.5a), and at the end of both *partes* of *Domine praestolamur* (1589/2, see Examples 3.5b-c). That the cambiata signals final closure is particularly evident in the *prima pars* of *Tristitia et anxietas* (1589/4). Byrd composes three final-sounding cadences to conclude sections (measures 42, 82 and 113). The first two cadences seem conclusive: they mark the end of a significant segment of text in all voices, and contain a complete assortment of cantizans, tenorizans and basizans roles (plus supporting altizans as well). However, neither of these seemingly final cadences contains the cambiata embellishment. Byrd saves this melodic device for the cadence that ends the *Prima Pars* in measure 113 (see Example 3.5d). Thus, Byrd creates a cadential hierarchy in this motet's *Prima Pars* solely through the presence or absence of the cambiata embellishment in the cadential gesture.

VI. Conclusion

In this chapter, I have sought to define the Renaissance cadence, both in its strongest form (with complete tenorizans, cantizans and basizans roles present) and its more elusive forms (when one or more of its melodic roles is evaded or omitted). This study illustrates the way in which Byrd creates form through cadential articulation of various weights. I have shown how, due to their use of at least one voice in longer rhythmic values, cadences have their origin in cantus firmus technique. Consequently, as I have asserted in Chapter 2 concerning beginning gestures, cadential gestures originate in Byrd's training as a musician, specifically, in his experience of improvising and

composing against a line in long rhythmic values. Finally, I have explored briefly how issues of text, texture and foreground melodic embellishment contribute to musical closure in Byrd's 1589 *Cantiones*. Complete cadential gestures provide the musical punctuation by which we can demarcate large formal units in Byrd's music and that of his contemporaries. The less conclusive evaded and abandoned forms of the cadence may suggest smaller divisions within a formal unit, or elision from one formal unit to the next. Byrd's use of the cadential gesture to close a section, or his denial of this gesture to create a need for continuation, imparts a distinct musical shape to each imitative point. The cadence is an important form-building element in Byrd's 1589 *Cantiones*, a means by which the composer segments his musical material.

Cadence and Subject Material

Given the basic diatonic nature of the cadence's melodic components, latent cadences abound in Byrd's 1589 *Cantiones*. In this chapter, I will examine two aspects of this cadential potential. First, I will explore the cadence as a motivic element, either added onto the end of a melodic subject as a "cadential tail"¹ or existing as a subject in its own right. Then, I will explore cadential potential as latent musical punctuation within subject material in cantus firmus values, (i.e. breves and semibreves),² and its role in shaping the pitch succession at the level of the point. Finally, to conclude this discussion, I will provide a complete analysis of the cantus-firmus-like subjects in *Memento Domine*, and their cadential shaping, as illustration of Byrd's procedures.

I. Cadence and Motive

Once the cadential motion becomes elevated to the status of a motive, it can appear anywhere in a composition, *even as an opening gesture*, and still retain vestiges of its concluding function. This assertion has interesting consequences in the case of Byrd's 1589 *Cantiones*, where instances of cadentially significant motions embedded in the

¹This term is from le Huray (he refers to "head and tail" technique in "Some thoughts," 12). I will limit le Huray's term in this chapter to a subcategory of "tails" that include one of Meier's melodic-cadential roles (tenorizans, etc.).

²The cadence at the minim level is more typical of madrigals (Meier, *The Modes*, 92).

initiating melodic subjects of imitative passages occur frequently. In these cases, the cadential potential of the subject is often hidden from view until the passage occurs at a point where Byrd needs cadential articulation, at which time he brings the latent function of his subject material to the surface.

Whether or not Byrd realizes the latent cadential function of his melodic motions may depend on a variety of factors. Among the most important of these factors would be the desire for large-scale formal articulation and the needs of the text. (Needless to say, these two demands, musical and extramusical, are often intertwined.) If potential cadential motions in cantus firmus values occur in an opening imitative point, there is a dichotomy between gesture and function: thus, the same melodic gesture could then equally be heard as introductory or closing. The effect of such a blending of formal opposites will be explored below.

II. Examples of Cadences in Opening Material

1. Explicitly Cadential Openings

The link between introductory motivic material and cadential function is an important aspect of Byrd's musical style, judging from the number of instances illustrating the procedure in his 1589 *Cantiones*. When an opening gesture involves multiple parts (for example, the homophonic beginnings of *O Domine adjuva me*, *Tristitia et anxietas* and *Ne irascaris*), this link can be explicit: in short, a piece can begin

with a two or three-voice cadential gesture, at least melodically if not syntactically.³ The presence of melodic-cadential roles at the beginning of a phrase is not enough to evoke a cadence, however; the most obvious problem is that the location in the unit is wrong. In addition, such a “cadence” would be more convincing if it included a suspension in its cantizans role (or the four-note cambiata figure characteristic of Byrd’s strongest closes), and coincided with text completion.

The above situation (beginning with a “cadence”) is a solution that Byrd employs in a small minority of cases. More often, the cadential potential of Byrd’s opening gestures is less evident, especially if a motet starts with imitation. When a motet begins imitatively, single-voice presentation of subject material at the outset precludes any cadential articulation immediately, since a cadence requires a minimum of two voices for its articulation. However, the motions contained within a single line can suggest a number of potential cadential goals. Roughly two-thirds of all common diatonic melodic motions can participate in a cadence (i.e. any motion by major or minor second, perfect fourth or perfect fifth).⁴ Therefore, cadential potential is almost unavoidable in any melodic subject so long it occurs in the appropriate rhythm (i.e. in semibreves or longer values). These potentially cadential motions can be made evident when combined with additional voices that bring their cadential potential into clearer focus.

³This technique occurs in later periods as well, cf. the beginning of Haydn’s String Quartet, op. 50, no. 6 (“The Frog”).

⁴I exclude leaps of a seventh and all diminished and augmented intervals, as they are rare in the *prima prattica*.

There may be a discrepancy between cadences that are possible in theory versus those that Byrd actually makes explicit (by adding other cadential voices, adding a cadential suspension or cambiata figure, or completing a text segment in one or more voices). This discrepancy can give insights into his decision-making processes and their impact on his compositional planning. By cadentially focusing his subject material in one direction or another, Byrd can control and shape the deeper-level tonal design of his musical discourse. The above discussion boils down to one underlying truth: both cadences and imitative passages can have as their basis the presence of at least one voice in cantus firmus rhythmic values. If one agrees that the “cantus firmus” is the common link, its local manifestations in Byrd’s motets, whether cadential or introductory, are simply details of presentation.

Since cadential articulation is only possible given a multi-voiced presentation, the best place to look for cadence-like opening gestures is in motets that do not begin with imitation, such as *O Domine, adjuva me* (1589/3), *Vide Domine* (1589/6), *Ne irascaris* (1589/12), and *Tribulationes civitatum* (1589/14). These motets, plus the largely imitative *Tristitia et anxietas* and *Deus venerunt gentes* (1589/7), begin with predominantly homophonic, almost declamatory passages. Within this group of motets, one can make a distinction between whether the cadential gesture is a component part of the opening subject, or whether it is simply grafted onto the end of the subject as a type of musical punctuation. The opening measures of *Ne irascaris* (1589/12) and *Tribulationes civitatum* (1589/14, presented as Examples 4.1a and 4.1b), fall into this latter category, and need not be considered further. In both examples, Byrd combines initiating and

closing functions, but separates these functions clearly. Likewise, one can throw out the homophonic openings of *Tristitia et anxietas* and *Vide Domine*: these openings are prolongational (expanding their initial chords via a neighbouring sonority) rather than potentially cadential.

The opening of *O Domine adjuva me* (1589/3, see Example 4.2) is more ambiguous and intriguing: in this opening gesture, the initial subject material motions have cadential potential. This two-subject combination forms a simple cadence in two voices, consisting of a sixth-to-octave motion in unembellished, note-against-note rhythm (i.e. a cantizans-tenorizans pair). This gesture doesn't function as a cadence at its first appearance (nor its second, in measures 4-5), since its position in the textual phrase is wrong. Rather, it is a motivic unit made up of stock cadential material, serving an initiating function in this 12-measure formal unit. The absence of the cadential suspension creates some doubt as well, as a cantizans motion is seldom left unembellished at a true point of cadential articulation.

Byrd clarifies the cadential potential of this two-subject opening gesture in measures 7-8; see Example 4.3. He brings back his opening subject material in the contratenor and bassus to conclude the opening phase of this imitative point (new material brings us to the ultimate conclusion in measure 12). The bassus voice this time around has the cantizans role of the cadence, whereas the contratenor has the tenorizans role. Though the text in the bassus differs (and thus the rhythm as well), Byrd retains the structural voice leading of the opening measures (parallel thirds followed by an octave or unison). The one notable feature added to the structural voice leading that imparts a

sense of closure to this two-subject pair is the cadential suspension. Thus, at this point in the composition, Byrd finally reconciles the gestural and temporal meaning of the initial cadential figure, and clinches this cadential meaning by adding the expected cadential suspension as a foreground embellishment.

2. Implied Cadences in Openings

A cadential gesture need not be as explicit in the course of the motet as it was in the preceding example; Byrd is seldom so obvious. Often, he buries cadential motions in a longer melodic subject and uncovers their potential for closure later on in the section (i.e. whenever text completion and the combination of two or more melodic-cadential voices coincide). In the 1589 *Cantiones*, Byrd's use of cadential motions in his introductory gestures is inextricably linked with his preference for using semibreves in his subject material. This examination of a few representative imitative points will demonstrate the variety and ingenuity of Byrd's compositional procedure in the way he manipulates subject material to create or deny musical closure. To get such a sampling, I will examine one particular work that relies heavily on subject material in cantus firmus values: *Memento Domine* (1589/5).

III. Cantus Firmus and Cadence in *Memento Domine*

Memento Domine (1589/5) effectively demonstrates the intersection of cantus firmus values and cadential articulation. The opening double point of this motet contains the longest cantus-firmus-like subject in the 1589 *Cantiones*, but cantus firmus values

also play a major role in shaping two of the remaining three imitative points of the work as well. I shall therefore examine this influence in each of the work's four imitative points. From these two factors, cantus-firmus-like subjects and Byrd's shaping of them, I will draw conclusions about this motet's overall tonal design.

1. The Opening Imitative Point

The *Memento Domine* subject moves exclusively by ascending and descending steps. Thus, its monophonic initial statement has cadential potential (namely, cantizans and tenorizans roles) that can be realized upon combination with additional voices. I have already discussed how the transpositions of the cantus-firmus-like "Memento Domine" subject control the overall melodic shape of the first 26 measures (Chapter 2, pages 60-64). In the ensuing discussion, I will demonstrate how Byrd uses the various cadential possibilities implicit in the subject to give this passage its distinct pitch architecture.

First of all, I will list the cadential possibilities for each of the melodic motions contained within the opening subject of the motet. I limit the cadential possibilities to the proper (i.e. complete), evaded and abandoned forms of what I consider to be the three *structural* roles in the cadence only (tenorizans, cantizans and basizans), as discussed above in Chapter 3, pages 73-76. This eliminates Meier's altizans as a cadential role. Secondly, I will examine which of these possible cadence opportunities Byrd actually uses within the imitative point. In the case of this particular passage, the possibilities are quite numerous. The way in which Byrd limits himself to a smaller subset of these

possibilities is instructive, demonstrating the dichotomy between what is possible and what is expedient for the proper expression of a coherent tonal language. For the sake of easy comparison, I will summarize both the cadential potential of the subject and the actual cadences in which the subject participates in Tables 4.1 and 4.2.

The initial subject of *Memento Domine*, which comprises the primary motivic material of the passage, is a neighbour motion around the initial A in breves and semibreves. This circular motive both begins and ends with a descending step, which is a latent tenorizans role (a “2-1” motion) within a potential cadence. Therefore, the initial motion of the subject, a descent from A to G, allows for a cadence to G. The latter semitone descent from B-flat to A, could be the tenorizans role in a Phrygian cadence to A. The initial descending step could also be an evaded basizans motion (“5-4” in a cadence to D). The step at the end of the subject could in theory have the same role in a cadence to E-flat, but this would be a remote pitch for a cadential goal in Byrd’s style, even given the flat in the key signature.

The final note A, standing alone, could also be the basizans of an abandoned cadence to D. Given the rest between this note and the beginning of the second subject (“congregationis”), the ensuing second subject could potentially complete this cadential motion to D with a (delayed) resolution by descending fifth. The A standing by itself could be a “2-rest” or “7-rest” gesture as well, thus an abandoned tenorizans motion in a cadence to G, or an abandoned cantizans gesture in a simple cadence to B-flat.

The intervening motions of the subject include two ascending steps (G to A, A to B-flat), each of which have cadential potential as well. The G-A step could be an evaded

tenorizans motion (“2-3”) in a cadence to F, or a cantizans motion (“7-8”) of a Phrygian simple cadence to A. If this motion occurs in the lowest voice, it could also be an evaded basizans motion (“5-6”) in a cadence to C (the same motion occurring in an upper voice would be an evaded altizans and thus lose its structural status within the cadence). The motion from A to B-flat that concludes the subject has the same cadential potential as the former, though with different melodic goals. The three possible interpretations in this case are a cantizans motion (“7-8”) in a simple cadence to B-flat, an evaded tenorizans motion (“2-3”) in a cadence to G, or an evaded basizans motion (“5-6”) in a cadence to D.

All later statements of the subject retain the same cadential potential discussed above, though their goal pitches vary. This information is presented as Table 4.1. For each of Byrd’s three different transpositions of the opening subject, listed in their order of appearance in the motet, I have catalogued all cadential possibilities for each motion contained within it. The table includes, for the sake of completeness, cadential goals that are possible in theory but unusual in Renaissance practice (in this case, the remote and dubious cadence on E-flat discussed above on page 98). Potential cadences that Byrd actually uses in the passage are in bold type; these are presented as Table 4.2.

Table 4.1: Cadential Potential of opening subject of *Memento Domine* (cadences realized by Byrd are in bold type).

Transposition on A (Tenor, mm. 1-4; Superius, mm. 6-9; Bassus, mm. 12-15)

Notes	Tenorizans	Cantizans	Basizans
A-G	"2-1" (G)	"7-6" (B ^b)	"5-4" evaded (D)
G-A	"2-3" (F)	"7-8" (A)	"5-6" evaded (C)
A-B ^b	"2-3" (G)	"7-8" (B ^b)	"5-6" evaded (D)
B ^b -A	"2-1" (A)	none	"5-4" evaded (E ^b)
A	"2-rest" (G)	"7-rest" (B ^b)	"5-rest" (D)

Transposition on E (Contratenor, mm. 4-7; Medius, mm. 9-12; Superius, mm. 15-18)

Notes	Tenorizans	Cantizans	Basizans
E-D	"2-1" (D)	"7-6" (F)	"5-4" evaded (A)
D-E	"2-3" (C)	"7-8" (E)	"5-6" evaded (G)
E-F	"2-3" (D)	"7-8" (F)	"5-6" evaded (A)
F-E	"2-1" (E)	none	none
E	"2-rest" (D)	"7-rest" (F)	"5-rest" (A)

Transposition on B (Contratenor, mm. 18-21)

Notes	Tenorizans	Cantizans	Basizans
B-A	"2-1" (A)	"7-6" (C)	"5-4" evaded (E)
A-B	"2-3" (G)	none	none
B-C	"2-3" (A)	"7-8" (C)	"5-6" evaded (E)
C-B	"2-1" (B)	none	none
B	"2-rest" (A)	"7-rest" (C)	"5-rest" (E)

The cadential possibilities that Byrd actually does use in measures 1-21 represent only a fraction of the theoretical possibilities. Since some of these cadential choices occur more than once, it is expedient to isolate them on a separate table, in order of appearance. It is also instructive to compare the cadential potential of the subject (Table 4.1, above) with those cadences that Byrd actually uses (Table 4.2, below). These musical choices are an important way in which Byrd gives this point its unique pitch-class architecture.

Table 4.2: Cadential goals in *Memento Domine*, measures 1-21 (cf. Table 4.1).

Mm.	Trans	Notes	Goal	Role	Description
7-8	A	A-B ^b	G	"2-3"	evaded tenorizans
9-10	E	E-D	D	"2-1"	tenorizans
10-11	E	E-F	D	"2-3"	evaded tenorizans
12	E	E	D	"2-rest"	evaded tenorizans
12	A	A-G	D	"5-4"	evaded basizans
15	A	A	D	"5-rest"	evaded basizans
15	E	E-D	D	"2-1"	tenorizans
16-17	E	E-F	D ⁵	"2-3"	evaded tenorizans
18-19	B	B-A	A	"2-1"	tenorizans
19-20	B	B-C	A	"2-3"	evaded tenorizans
21	B	B	A	"2-rest"	evaded tenorizans

⁵I assume a ficta C# added in the bass as per the parallel passage in measures 7-8.

I will now summarize briefly the content of Table 4.2. The ascending semitone motion between the third and fourth notes of the subject is always treated as an evaded tenorizans motion (the first instance of this treatment in measures 7-8 is presented as Example 4.4). Though this step is a semitone, Byrd never sets it as the cantizans of a simple cadence. He also avoids the using this ascending semitone as an evaded basizans "5-6" motion. The one place where this ascending step is in the bass (measures 13-14), Byrd cannot cadence. The presence of an F in the tenor prevents him from raising the C to C# to create the leading tone in the medius part. Thus, any possibility of closure is eliminated, or at least greatly weakened.

The ascending whole step between the second and third notes of the subject never gets a cadential articulation, though this is possible in theory. Basically, Byrd had a choice to make: he could treat either the third or fourth note of his subject as a cadential goal, since the melodic approach to each was identical. He chose the latter course of action. To set up and reinforce this cadential goal once that decision had been made, Byrd accompanies the motion between the second and third notes with a consonant preparation and suspension. This enhances the sense of arrival on the fourth note.

The descending steps in the subject are of two types: the whole step at the beginning, and the semitone at the end. Given that the latter step would be part of a Phrygian cadence if it were treated as a tenorizans motion, one might suspect that Byrd would treat this step differently from the former. This is indeed the case. Whereas Byrd incorporates the opening whole step of the subject into a cadence four times (three times as a tenorizans motion, once as an evaded basizans "5-4" motion; see Examples 4.5a-d),

he *never once* gives the descending semitone at the end of the subject cadential weight. Therefore, Byrd avoids the Phrygian cadence that might have resulted. This is an intriguing musical choice. One would think that Byrd would exploit the Phrygian cadence as a natural consequence of the prominent descending semitone in the subject.

The final note of the subject, standing alone, can also participate in abandoned cadential motions, as, for example, in measure 12 (this procedure happens again in the bassus at measure 15, and the contratenor in measure 21, the final entry of the subject). At measure 12, the closing E of the motive in the medius coincides with an embellished cadential suspension in the contratenor (D-C#), supported by A in the bass (see Example 4.6). Though all three of these voices imply resolution to D, this cadential motion is abandoned in the two upper voices and deflected down by step (evaded) in the bass. Therefore, the E is an abandoned tenorizans motion within an expected cadence on D.

The pattern of cadences within these measures also helps to generate a larger grouping of material. The first four cadences that include the “Memento Domine” subject (a cadence to G, followed by three more to D) are exactly duplicated a fifth higher from measure 15 onward, with the subject playing the exact same roles in the first four cadences as it does in the last four. By this parallel formal structure, Byrd creates a pattern of entries that, upon repetition and transposition, leads naturally to the subject’s unusual transposition on B in measure 19. Moreover, Byrd’s re-use of measures 5-14 transposed up a fifth in measures 15-24 results in E-centricity as the imitative point develops. This brief shift of central pitch within the point imparts a Phrygian character to this A-centric passage. This repeated pattern of cadences also helps to clarify a

performance practice issue in measure 16: whether or not to add a *ficta* C# in the bass. The repeat of measures 5-14 in measures 15-24 is just cause for sharpening the C, thus strengthening the cadence to D in measure 17. With the accidental, the superius-bassus pair of measures 16-17 exactly matches the superius-tenor combination in measures 7-8 (see Example 4.7).

2. Quam Possedisti

The following imitative passage (measures 26-47) is also built around a subject in long values, which, like the previous “Memento Domine” subject, is circular in structure (it returns to its opening note at the end). In this case, the effect of this subject is far less cantus-firmus-like, for two reasons. First of all, Byrd splits one of the subject’s semibreves into two minims, for reasons of text setting (namely, to provide space for an extra syllable of text), thus creating a rhythmicized cantus firmus segment. Secondly, Byrd presents this “cantus firmus” as an imitative pair.

The subject combines at two time-intervals: the semibreve and the breve, which occur with equal frequency in the passage (see Example 4.8). Byrd carefully controls transposition levels and time-interval of entry so that the basic interval content is identical: thirds followed by sixths when the upper voice leads, sixths followed by thirds when the lower voice leads. I present the transposition levels of each entry pair in Table 4.3, below:

Table 4.3: Transposition Levels of “Quam Possedisti”

Mm.	Leading Voice	Time Interval	Trans. Level (guide)	Trans. Level (consequent)
26	upper	semibreve	A	D
28	upper	breve	D	A
33	lower	semibreve ⁶	A	D ⁷
34	upper	semibreve	A	D
38	upper	breve	G	D ⁸
39	lower	breve	D ⁹	A

As in the preceding imitative point, the transposition levels are not widely varied; the cantus-firmus-like subject is there primarily for stability of pitch content: to emphasize the two primary tones of the motet (D and A). The one transpositionally anomalous duo pair (measure 38) is loosely structured rhythmically, and effects a brief departure, though the subsequent immediate return to the opening transposition level in measure 39 makes this departure fleeting at best.

⁶Byrd delays the first note by a minim, but the combination is as in measure 26.

⁷Forms an imitative pair at the breve with the guide of the following pair (measure 34ff.)

⁸Breaks off early, rhythmically adjusted.

⁹Preceded by “fake” entry on C that adjusts midway through to end on A.

The progression of two interlocking voices in cantus firmus values moving mainly in parallel sixths makes the formation of convincing cadences difficult in this passage. The descending third motion at the beginning of the subject has only one possible structural role: an evaded basizans motion. The ascending steps at the end of the subject could be evaded tenorizans, evaded basizans, or cantizans (without suspension). As a result, the most frequent type of cadence in which the cantus-firmus-like subject participates in this passage is the weaker “simple cadence,”¹⁰ as opposed to the proper cadence, with suspension, as will be seen in Table 4.4, below:

¹⁰cf. Zarlino, *The Art of Counterpoint*, 143, and Morley, *Plaine and Easie*, 74.

Table 4.4: Cadential Articulation of “Quam Possedisti” (cantizans roles that include a suspension are in bold type)

Measure (beat)	Goal Tone	Cadential Roles in Subject ¹¹	Cadential Roles in Other Voices
27 (3)	A	“7-8” (superius), “2-3” (bassus)	“2-1” (tenor)
28 (1)	D	“7-8” (bassus)	“2-3” (contratenor)
30 (1)	D	“7-8” (medius)	“2-rest” (superius), “5-1” (bassus)
31 (1)	A	“7-8” (tenor)	“2-1” (bassus)
31 (3)	D	“5-rest” (tenor)	“2-1” (contratenor), “7-3” (medius) ¹²
33 (3)	D	“5-3” (bassus)	“2-rest” (tenor), “7-8” (contratenor)
34 (3)	A	“7-8” (bassus), “2-3” (tenor)	none

¹¹i.e. tenorizans, cantizans and basizans, either proper, evaded or abandoned.

¹²I assume a *ficta* alteration of C to C#; compare measures 38 and 39, contratenor.

(Table 4.4 continued)

Measure (beat)	Goal Tone	Cadential Roles in Subject	Cadential Roles in Other Voices
35 (1)	D	"7-8" (tenor), "5-rest" (bassus)	none
36 (1)	A	"7-8" (superius), "2-3" (contratenor)	none
36 (3)	D	"7-8" (contratenor)	"5-1" (bassus)
39 (3)	D	"2-3" (medius)	"5-1 (tenor), "7-8" (contratenor)
40 (1)	G	"7-8" (medius)	"5-3" (bassus)
41 (3)	A	"2-3" (tenor)	"5-1" (bassus), "7-8" (contratenor)
42 (1)	D	"7-8" (tenor)	"5-1" (bassus)
43 (1)	A	"7-8" (superius)	"2-1" (bassus)

Thus, the cadential articulation exactly coincides with the transposition levels; cadences to D and A alternate, often pairing in close succession. However, in most cases, these cadences are missing the cadential suspension (only the cadences to D in measures 31, 33 and 39 have one), and therefore pass without undue notice. The cadence to G in measure 40 moves us an additional fifth to the flat side, while the final cadence returns us to one of the primary pitches of the motet, the A.

The ensuing passage contains a subject in long values (“ab initio”) that descends a fourth (see Example 4.9). This passage shifts the emphasis from the D-A fifth of measure 43 to the A-E fifth of measure 47; transposition levels on D, A and A in tenor, bassus and superius, respectively, effect this shift. After the initial D-A melodic span of the subject is stated, two statements ensue, transposed down a fourth, emphasizing the A-E melodic span. An E-A descending fifth version of the subject (medius, measures 45-47) also confirms this shift of emphasis. Thus, Byrd returns to the pairing of the final A with its upper fifth E, whereas the preceding passage paired the final with its lower fifth, D.

3. Libera Eos

The role of the cantus-firmus-like subject differs greatly in the following imitative point. Rather than permeating the contrapuntal fabric as it had in the first two sections, the subject in long values initiates the passage as part of a three-voice homophonic block, and then fades into the background, giving way to free material in florid rhythm. The rhythmicized cantus firmus gesture that begins the passage (measures 48-49, then transposed down a fifth and repeated in measures 53-55; see Example 4.10) is a “Phrygian sigh” (an upper neighbouring semitone) in parallel thirds, supported by a plagal motion in the lowest voice. This declamatory presentation lends a pleading quality to the text, “Libera eos” (free them).

This cantus-firmus-like motive plays a less prominent role after its second declamatory presentation in measures 53-55. However, Byrd does combine it with a florid “tribulationibus” subject in measures 59-61, forming a two-subject pairing. He

then repeats this pair in measures 61-63, reversing the subjects' respective registral positions (see Example 4.11). This final statement of the "cantus firmus" ends with a Phrygian cadence to A. However, the firm cadential arrival on A is later contradicted by two even more forceful cadences to D (measures 67 and 72, the latter with *cambiata*). Thus, as in the first imitative point, A is established a central pitch, but later turns out to be the upper fifth of the section's ultimate goal.

Byrd then abandons cantus firmus-like subjects entirely for the remainder of the motet, concentrating instead on subjects in florid rhythm. Virtually the sole remaining instances of longer rhythmic units are the two-note "tail" of "et mitte eis," which is a descending step in semibreves, and "auxilium," a rhythmic variant of "eis." Neither "cantus firmus" is a complete subject. Byrd uses these two-note segments in long values exclusively for their cadential potential. They appear as "2-1" tenorizans motions, both proper (to D) and Phrygian (to A), as summarized in Table 4.5, below (P denotes Phrygian cadence):

Table 4.5: “Eis” and “Auxilium” as cadence members

Mm.	Goal	Eis (Y/N)	Role	Auxilium (Y/N)	Role
75	A	no ¹³		yes	tenorizans (P)
76	D	yes	tenorizans ¹⁴	no	
78	A	yes	tenorizans (P)	no	
84	A	yes	tenorizans (P)	no	
88	D	no		yes	tenorizans

Thus, contrary to the preceding sections, where material in longer units served a dual function as initiating subject material and latent closing material, here the longer units are reserved exclusively for endings.

4. Summary and Conclusion

There are two observations that I will make from the above analytic information. First of all, I will consider the overall musical shape of *Memento Domine*, based on the presence and prominence of cantus-firmus-like subject material in each of its four imitative points. Secondly, I will summarize the cadential articulation of the motet’s four sections, and suggest a large-scale strategy of pitch organization for the work.

¹³Present as supporting role only (“4-3”); ditto “auxilium” subject in measure 78.

¹⁴free continuation supplies “1”

The dynamic curve of Byrd's procedure moves broadly from melodic and rhythmic rigidity at the beginning to relative freedom by the final cadence of the motet. The opening imitative point contains an omnipresent, extended "cantus firmus" subject ("Memento Domine"). This subject is melodically straightforward in the extreme, never moving more than a tone from its starting pitch. The second imitative point shows a gradual progression away from this simplicity. Though a new cantus-firmus-like subject (*quam possedisti*) controls the overall shape of the passage, it is shorter and less pervasive than the "Memento Domine" subject of the preceding section, and melodically more dynamic (it skips a third from its starting pitch). Moreover, its imitative presentation adds a subtle complexity to the melodic and rhythmic shape of the imitative point.

The third section continues this move toward rhythmic freedom: as with Sections 1 and 2, the opening gesture is in cantus firmus rhythmic values, here presented in a three-voice texture. Thus, we have a gradual increase in density of presentation as the motet ensues (monophonic presentation in the opening imitative point, an imitative pair in the subsequent point, and finally, three-voice homophony in the third point). The subject in longer values is less pervasive than it was in Sections 1 and 2. In fact, this subject disappears eight measures before the section's final cadence. Finally, the concluding imitative point virtually abandons cantus firmus values altogether, other than brief subject "tails" that articulate closure. Thus, overall, there is an increase of rhythmic and melodic complexity as the motet moves toward its conclusion.

Accompanying this global shift from simplicity to complexity is an interesting tonal plan. Byrd creates a conflict between A and D as competing tonal centres from the

beginning of the motet. Though A is both the initial note and the final, its status as the central pitch of the motet is far from incontrovertible, as I will explain below.

In the opening measures, the transpositions of the “Memento Domine” subject gravitate to the sharp side of the initial A (other entries are on the upper fifth E and its own upper fifth, B, quite remote in a one-flat piece). The accompanying second subject balances the tonal motion by emphasizing the lower fifth D, and its own lower fifth, G. Since A remains the central point of this arrangement by fifths, one might expect it to be the ultimate goal of the imitative point, but Byrd moves beyond the A to cadence on D. This move to D at a point of closure hints at a possible D-centricity for the motet, notwithstanding the prominent A and E transpositions of the “memento” subject. The second imitative point, much like the first, sets up two plausible pitch centres with its pattern of entries: A and D. These two notes are paired together in the first four imitative “cantus firmus” statements. This time, Byrd seems to be suggesting D as the central pitch, especially when he moves a perfect fifth to the flat side (the G-D imitative pair in measure 38). However, the initial A gradually takes over at the end. As if the simple cadence to A in measure 43 was insufficient, Byrd adds a brief “ab initio” passage to confirm more forcefully the primacy of A.

The second half of *Memento Domine* (“libera eos” onward) is similar in design to the first. It begins by emphasizing A as central pitch at the outset: the bass D in the opening gesture (see Example 4.10) is prolongational, supporting the upper neighbours F and D in the upper parts. However, this prominent A gives way to D; the cadence to D in measure 72 is the most final of the motet, containing cantizans (with suspension),

tenorizans, and a cambiata embellishment in the medius. The only weakening factor is the abandoned or delayed resolution of the basizans; this once again mirrors Byrd's procedure at the end of the opening imitative point. Finally, the tonal design of the fourth imitative point mirrors that of the second. Byrd moves to D but sets up an opposition with the opening A (as seen above, proper cadences on D alternate with Phrygian cadences on A). Unlike the second imitative point, however, the D wins out in the end, with a cantizans-tenorizans pair in measure 88, seemingly effecting final closure. However, Byrd adds a statement of the "et mitte eis" subject in the bass to this upper-voice pairing, placing a B-flat below the cadential goal. The cadential D could still return, but Byrd instead places a pedal A in the superius from measure 89-93, and slowly winds the bass downward to the concluding A as well. A 4-3 suspension over this A evokes the cantizans role of a proper cadence ("7" embellished by a cadential suspension), creating the expectation of a resolution to D, which Byrd suppresses.

One senses the primacy of A in the closing measures, but given the prominence of D in the final section, one cannot quite reckon this A as the central pitch. Thus, we have a situation akin to what Sarah Fuller has described in Guillaume de Machaut's ballade, *Pas de tor*: "The effect of the final...sonority remains more that of an acceptable end point than an inevitable tonal center."¹⁵ Byrd has built this ambivalent role for the A final into all aspects of the motet, from choice of transposition levels for his subject material to

¹⁵Sarah Fuller, "Exploring Tonal Structure in French Polyphonic Song of the Fourteenth Century," in *Tonal Structures in Early Music*, ed. Cristle Collins Judd (New York and London: Garland Publishing, 1998), 75. See also Fuller's Footnote 34.

cadence points, especially those that occur at or near the end of sections. The overall shape of the motet, regarding its primary transposition levels of cantus-firmus-like subject material and its primary cadential goals appears below as Table 4.6. I have arranged the transpositions and cadential goals in either ascending or descending fifths from the central A. A pattern of ascending fifths shows arithmetic division (a move sharpward through the tonal space). A pattern of descending fifths shows plagal division (a move flatward through the tonal space). Thus, the conflict between the arithmetic and plagal divisions of the tonal space in Sections 1 and 3 is made evident to the eye.

Table 4.6: Summary of Main Cadences/ Subject Transpositions in *Memento Domine*

Section/ Measures	Transpositions of CF Subject	Primary Cadence Goals (Final cadence in bold)
1 (1-26)	A, E, B	A, D , G
2 (26-47)	A, D, G	A , D
3 (48-71)	A, E	A, D , G
4 (72-93)	(no CF subject)	A , D

This information regarding the overall shape of the motet can be simplified even further. To conclude, I present as Example 4.12 a voice-leading plan for *Memento Domine*. This is a non-Schenkerian background graph that illustrates the motet's overall tonal design. The reduction shows how Byrd's large-scale pitch architecture differs from

that of a common-practice tonal piece. Rather than a dominant-tonic polarity, we have an alternation between the opening A and its lower fifth. Rather than a stepwise descent to A (or D) in the upper register, we have a sustained A as a deeper-level pedal tone, creating a fundamentally static effect.

This static effect, I believe, is one of the main features of the work. It is projected not only at the deepest levels of the piece (as suggested by Example 4.12), but also at the level of detail. Each subject in longer rhythmic values, “Memento Domine,” “Quam possedisti” and “Libera eos,” returns to its starting pitch, thus creating an area of static stability within the section. Even the florid “et mitte eis” subject of the fourth point tends to “chase its tail.” Its first statement in measure 73 and its last five following the cadence to D in measure 88 all return to their starting pitch. However, despite the melodic circularity of subjects in *Memento Domine*, this motet is far from motionless at the level of the imitative point. The unusual transposition of the initial “Memento Domine” subject to B in the opening point, plus occasional cadences to G (for example, in measures 8 and 43) create a slight deviation from the competing A and D central pitches. Nonetheless, this motet, as David Stern has said about Byrd’s *Mass for Five Voices*, “tends to create a gentle sense of motion rather than a strong dynamic thrust.”¹⁶ Byrd’s careful manipulation of a limited number of cadential goals and subject transposition levels within a largely static background in *Memento Domine* plays a major role in creating this “gentle sense of motion.”

¹⁶Stern, “Mass for Five Voices,” 211.

Presentation Types in Byrd's 1589 *Cantiones*

We have already seen how Byrd uses *cantus firmus* rhythmic values in at least one voice to structure both opening subject material and cadences. I have shown how these longer values provide a middleground connection between these two formal areas. The second phase involves taking this musical material and deciding on its density and its method of presentation. Subject material may be thin-textured or full-textured. Its presentation may be imitative, non-imitative (homophonic) or somewhere in between these two extremes. These decisions provide the musical fleshing out of the structural skeleton; the ensuing discussion will illustrate the exact nature of this fleshing out.

In this chapter, I will provide models for the methods by which Byrd presents his material at beginnings. I shall call these models *presentation types*, after Schubert, as an extension of his three types discussed in Chapter 1 (non-imitative module, imitative duo and canon).¹ These models will be presented in order of textural complexity, beginning with two voices, and proceeding through three and four voices. The models in three and four voices represent a fusion between presentation and development, since they may contain a two-voice cell that recurs in varied form within the presentation type.

¹Schubert derives these presentation types from Cerone's "commonplaces" (two-voice imitative and non-imitative cells), and describes their role in designing a multi-voiced texture in *Modal Counterpoint*, 264-77.

entry, against which the composer can place either additional entries or free material. When this subject material appears regularly as a distinct, non-separable unit, then we have the presentation type of Figure 5.1. Kerman sees this method as typical of Thomas Tallis, in which the initial subject material, following its initial imitative presentation, returns in full (or nearly so) with each restatement.² Kerman sees this technique as more typical of Tallis than Byrd, though Byrd also constructs an imitative point in this manner on occasion; e.g. *O quam gloriosum* (1589/13), Example 5.1.

The situation changes considerably if Byrd separates the continuation of a subject (i.e. the part that overlaps with the second entry in Stage 2, as shown in Figure 5.2) from its opening notes. Then, in Kerman's words, we have a situation where the melodic figures contained within a point "were conceived from the start as separate or separable elements."³ In such an instance, it is better to view the imitation as consisting of two distinct subjects rather than one, as shown above in Figure 5.2. This division of subject material into two discrete units creates what Andrews calls "double subject imitation,"⁴ Kerman the "double point of imitation,"⁵ and le Huray "head and tail technique."⁶ These terms are analogous; they all refer to a procedure in which two recurring, combinable subjects circulate in an imitative point. I will use Kerman's term to describe this procedure, since it is the most widely known.

²Kerman, "Byrd, Tallis and the Art of Imitation," 520-21.

³Kerman, "Byrd, Tallis and the Art of Imitation," 529.

⁴So designated by Andrews in *Byrd's Vocal Polyphony*, 245.

⁵Kerman, *The Masses*, 143.

⁶le Huray, "Some thoughts," 12; his footnote 14 ascribes the procedure to text setting.

The main distinctions between Figures 5.1 and 5.2 require some discussion. Since these models are similar, one might ask how a composer might mark an imitative duo as having two separate elements rather than just one. Perhaps the simplest way is to separate the two melodic units with a rest, thus creating two discrete shorter subjects (this is the exact procedure illustrated in Example 5.2, the opening double point from *Memento Domine*, discussed below). A second way to make this division relates to the relation of subject material to the text. Byrd's imitative points often set texts with two distinct phrases (e.g. the text segment from *Tristitia*: "vae mihi, quia peccavi," or "woe is me, for I have sinned").⁷ Byrd preserves this textual division in his setting by giving each segment a musically distinct subject.

This procedure apparently became a habit of Byrd's, since he uses this opposition of distinctive material in his double points even when the text seems not to require it. The "occupaverunt interiora mea" ("have taken hold of my inmost being") imitative point (from *Tristitia et Anxietas*, measure 20ff.) does not seem to require separation into discrete musical units judging solely from the text. However, Byrd sets this text to a pair of distinctive subjects anyway (a cantus-firmus-like "occupaverunt" subject and a florid "interiora mea" subject). Thus, Byrd's motivation for presenting two distinct, brief subjects in an imitative setting is not purely textual but arises from musical concerns. Kerman points to Byrd's preference for "two distinct, shorter subjects in flexible conjunction" in an imitative point (my Figure 5.2) rather than a single, long subject (my

⁷This and all subsequent English translations of Byrd's text are from *Cantiones Sacrae 1589* (ed. Brown), xxii-xxix.

Figure 5.1) as in Tallis.⁸ The greater degree of segmentation permits Byrd greater ease of combination as he develops his material. This ease of construction may well have influenced Byrd's presentational choices as he planned out a point.

The opening section of *Memento Domine* (1589/5, see Example 5.2) illustrates these two methods by which Byrd partitions his subject material into discrete units. Byrd designs two distinct segments: the initial "memento Domine" subject and the ensuing "congregationis tuae," which are rhythmically and melodically very different from each other. One could infer a deliberate musical distinction being made by Byrd between God (Subject A, a stately, cantus-firmus-like melodic segment) and his people (Subject B, a more rhythmically diverse melodic line). Byrd separates these two recurring melodic units from each other by a rest. This musical break further emphasizes the subjects' distinct existence as two shorter separate units rather than a single longer one.

A third way of highlighting the separate existence of the two subjects of a double point relates to the succession of musical ideas. Stage 3 of Figure 5.2 is instructive: in this model, Subject B need not return in the consequent voice. If Byrd intends a single long subject to be perceived as a whole in an imitative duo, the material of the guide ought to come back in its entirety in the consequent, both in its initial presentation and likely its subsequent statements as well. If Subject B does not return in the initial presentation of the double point, and the continuation following Subject A is instead free, then the subject material was likely conceived from the beginning as two separate units. Byrd can further enhance this separability if Subjects A and B have distinct texts. In an

⁸Kerman, "Byrd, Tallis and the Art of Imitation," 527.

imitative duo with a single subject, the second voice typically enters in the middle of a textual unit, making the separate existence of Subjects A and B all the more apparent. The non-imitative character of the Subject A-Subject B pair rises to greater prominence, thereby lessening the imitative effect created by the staggered entries of Subject A.

2. Non-Imitative Presentation

This sense of “two-ness” suggested by Figure 5.2 is made even more evident if Byrd chooses to present both subjects of a double point at the outset as a non-imitative pair. This procedure can be illustrated as follows (see Figure 5.3, below):

Figure 5.3: Non-imitative Presentation, Two Subjects⁹

Text 1 A

Text 1 B

Melodically speaking, the presentation type illustrated above is Figure 5.2 with the initial statement of subject A removed. Hence, though the two-subject pair is arrived at differently in Figure 5.3 than it is in Figure 5.2, the musical result is the same; we have a combination of two distinct melodic subjects. The main difference between Figures 5.2 and 5.3 is the text. In Figure 5.2, subject A precedes subject B in its initial statement;

⁹This is Schubert’s non-imitative module. Jessie Ann Owens asserts that such modules can act as “building blocks” as a composer sketches out a composition (Jessie Ann Owens, *Composers at Work: The Craft of Musical Composition, 1450-1600*, Oxford: Oxford University Press, 1997, 188).

thus the text of the two subjects will differ. In Figure 5.3, due to the simultaneous presentation of material, the text for both subjects is the same.

A classic example of the presentation type illustrated in Figure 5.3 is the opening measures of *Vigilate* (1589/9, see Example 5.3a). This opening gesture, much like the opening measures of *Memento Domine*, contains two distinct melodic subjects. Here, the two subjects occur in the superius and the medius, setting the single word “vigilate.” Byrd’s non-imitative subject pair can be homogeneous and declamatory as well; compare the opening gesture of *Vigilate* with the homorhythmic gesture that begins *O Domine adjuva me* (1589/3; see Example 5.3b). The latter introductory passage is a note-against-note cadential gesture; therefore, the two subjects fuse together into a larger unity rather than existing as distinct, separable elements.

II. Presentation Types in Three Voices

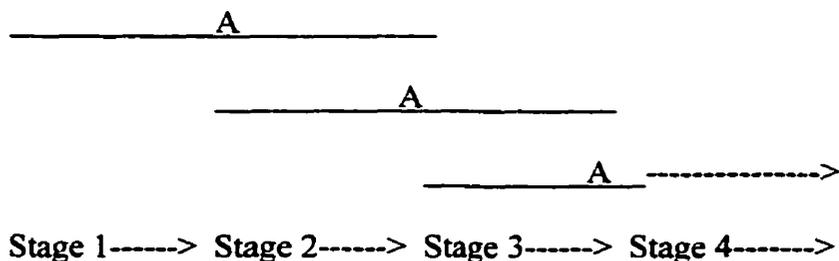
Byrd often adds a third voice to a two-voice combination as further development of a two-voice model that had appeared earlier. However, these complex presentation types (complex due to the increased density of texture) can also be used as opening gestures. Adding a third voice creates three possible categories: along with imitative and non-imitative presentation types, we now have the possibility of hybrid presentation types that blend imitative and non-imitative procedures. I shall discuss these three types below (imitative, non-imitative and semi-imitative, or hybrid presentation), and give examples of each from the 1589 *Cantiones*.

1. Imitative Presentation Types

First, I will consider the possibility of adding a third entry to an imitative duo. This addition of an extra voice at the same time interval as was found between the initial pair of voices creates a canon, as defined by Schubert (see Chapter 1, pages 24-25): a one-subject combination in which three or more entries occur at the same time-interval. This is an extension of the single-subject imitative presentation type discussed above as Figure 5.1. Since the imitative duo formed by the first two entries of a canon recurs in varied form between the canon's second and third entries, it could be said that canon not only presents material, but also develops it. This combination of presentation and development is an integral feature of many presentation types that contain three or more voices.

I will provide two closely related models for this three-voice combination which differ as to the registral position of the third voice compared to that of the first two. The first brings in the extra voice at the same pitch interval as was found between the first two entries. This presentation type Schubert terms "transposed canon" (as defined above, page 25); it can be schematized as follows (see Figure 5.4a below):

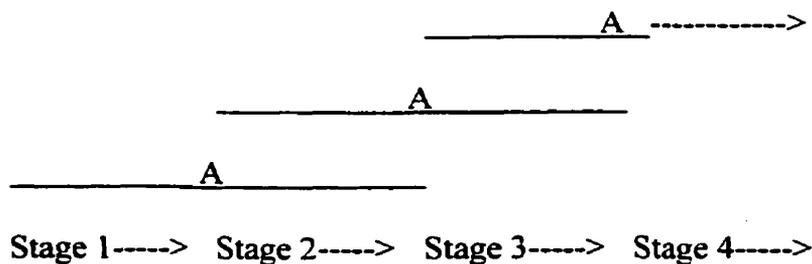
Figure 5.4a: Transposed canon, "Top down"



As with the preceding imitative presentation types (Figures 5.1 and 5.2), I have divided this model into various stages of activity, which can be rather brief, as shown in Example 5.4a, from *In resurrectione tua*, measures 26-28. This passage is a canon by descending fifth that begins an imitative point in the middle of this motet. Stage 1 is the monophonic initial presentation (here partially veiled by parallel doubling at the lower third in the medius; this doubling suggests a new four-voice hybrid model that will be discussed below). The overlap in Stage 2 forms an imitative duo that recurs between the upper two voices in Stage 3. Similarly, the combination formed by the end of the first entry and the middle of the second entry in Stage 3 recurs in Stage 4 between the middle of the third entry and the end of the second. The dotted line at the end of Entry 3 indicates that this entry need not continue beyond where the overlap with the second entry stops. It may either continue to the subject's end (as it does in this example), or break into free material.

This model also occurs in Byrd's 1589 *Cantiones* with the lowest voice taking the lead. This variant of the preceding model is illustrated by Figure 5.4b, below:

Figure 5.4b: Transposed Canon, "Bottom up"



This is Byrd's exact procedure in *Vide Domine* (1589/6), measures 46-48 (see Example 5.5). Note the brevity of the various stages, shown on the example: since Byrd separates the canonic entries by only a semibreve, Stage 1 consists merely of the first two syncopated notes of the subject. The second entry is above the first, creating the initial two-voice combination, which I have designated as Stage 2. Then, the third voice enters below the second, altering the original combination's interval structure by invertible counterpoint in what I call Stage 3. Since the opening duo of the canon is varied both by interval content and register in this presentation type, one could claim that the invertible canon is of greater complexity than the transposed canon (Figures 5.4a and 5.4b), in which the initial duo is merely shifted in register. This model furthermore gives the analyst a window into Byrd's development procedures later on in a point. Invertible counterpoint is one of his favourite means of variation, as we will see in Chapter 7.

Figure 5.5, above, is one of many possible registral arrangements that can produce this model. Schubert has listed the four possible registral arrangements in three voices (upper-lower-middle, lower-upper-middle, middle-upper-lower and middle-lower-upper) in *Modal Counterpoint, Renaissance Style*.¹⁰ These four arrangements in register share one general principle: the harmonic interval structure formed by the first two canonic entries is immediately varied by invertible counterpoint when it recurs between the second and third entries of the canon.

¹⁰Schubert, *Modal Counterpoint*, 220-23.

2. Non-Imitative Presentation

Non-imitative presentation with three voices allows for two new possibilities that are unavailable in two parts. One of these possibilities is a three-voice presentation type with two subjects, with one subject doubled in parallel motion. The other new type is a homophonic combination of three independent subjects. The first possibility is the simpler one, given the lesser number of independent subjects, so I will consider it first. A three-voice combination in which two of the voices are in parallel motion occurs on occasion as an initiating gesture in the 1589 *Cantiones*. This is a two-subject non-imitative module (similar to Figure 5.3) “thickened” by the parallel doubling of one of its subjects. The most common registral arrangement of this presentation type is two parallel upper parts plus an independent, supporting bass line; see Figure 5.6, below:

Figure 5.6: Non-Imitative Module plus Parallel Doubling:

text 1 A (parallel)
 text 1 A (parallel)
 text 1 B

Byrd uses this model to brilliant effect in the opening measures of *Tristitia et anxietas* (1589/4; see Example 5.6), in which the three-voice combination that begins the motet combines affective semitone motions in the upper two voices with plagal support in the bass. Byrd duplicates this procedure to begin the third imitative point of *Memento Domine* (1589/5, cited in Chapter 4). The “libera eos” homorhythmic block in measures

48-49 of this motet (see Example 4.10) is identical to that which opens *Tristitia*, but for slight rhythmic details of text setting.

If the three voices are sufficiently distinct from each other (if the module contains three independent subjects), one could refer to this presentation type as a “triple point.”

This model is an extension of Kerman’s “double point.”¹¹ See Figure 5.7, below:

Figure 5.7: Non-imitative Presentation with Three Subjects

Text 1 A

Text 1 B

Text 1 C

This model differs from Figure 5.6 only in the motivic distinctiveness of its parts; the two figures are identical in texture, if not in subject material. This presentation type is particularly easy to accomplish in a cantus firmus motet: it arises every time a subject pair combines with a repeating melodic motion in the cantus firmus part. Thus, it is not surprising that a three-subject combination occurs many times in *Aspice Domine* (1589/11), the only cantus firmus motet of the 1589 *Cantiones*. A striking three-voice cadential package that Byrd uses in measures 51-52 and elsewhere in the motet (see Example 5.7a) exemplifies this type. Byrd uses this combination as a motivic signal that

¹¹Kerman discusses the possibility of a triple point in *The Masses* (footnote, page 143) when he considers the beginning of the *quarta pars* from *Deus Venerunt Gentes* (1589/7). However, this passage involves successive rather than simultaneous presentation of subject material.

initiates the concluding imitative point of the *prima pars*. (I will discuss this example later on in greater detail; it aptly illustrates Byrd's unique use of variation through invertible counterpoint).

An incontrovertible triple point of this type is rare in a freely composed motet; often, one or more of the "subjects" will simply be accompaniment, (or double another voice in parallel motion, as with Figure 5.6). To show the difference between true subject material and mere homophonic and textural support, I present the opening measures of *Vide Domine* (1589/6, see Example 5.7b). I hesitate to call each voice of this opening gesture a subject, even if the five-voice combination had been emphasized by returning in its entirety (which in fact it does not; only the structural outer voices return), since the "subjects" in the middle three parts are melodically trivial. I view this passage as a two-subject non-imitative duo (Figure 5.3) with textural padding added.

However, if an initial presentation of material has melodic lines that are sufficiently distinct in shape, it is possible to speak of a homophonic triple point. The opening gesture of *Tribulationes civitatum* (1589/14, see Example 5.7c) demonstrates the difference between independent subjects and textural padding. Though the lower two voices of the three-subject combination run in parallel thirds for the first two semibreves (similar to Figure 5.6), they become independent lines afterward. Thus, the effect of three distinct subjects is attained. Similarly, during the *secunda pars* of *Deus venerunt gentes* (1589/7), Byrd uses another three-subject type (see Example 5.7d). This homophonic combination begins an imitative point on "carnes sanctorum." As with the three-subject homophonic type from *Tribulationes civitatum*, the lower two subjects run

parallel to each other for most of their length (though the uppermost subject is quite distinct from the other two). However, the different melodic goals of these two lower voices (and their distinct free continuations) make them convincing as independent parts. The progression of subject material in long rhythmic values betrays its origin in *cantus firmus* technique, with only the most subtle of foreground embellishments added.

Finally, as a more dubious example of this type, there is the long homophonic three-voice unit that opens *Ne irascaris* (1589/12, see Example 5.7e). This homophonic block is similar to the opening of *Tribulationes civitatum*, in that all three voices are quite distinct from each other. Kerman speculates that these two works date from about the same time,¹² his dating perhaps influenced by this outward resemblance of beginning procedure. The two opening gestures differ primarily in their expansiveness. In *Ne irascaris*, Byrd presents the listener with a recurring block of such extreme length (ending with a proper cadence) that it almost gives the impression of a complete musical idea rather than merely an introductory gesture consisting of a combination of subjects. Presentation, in the sense in which Caplin means it, requires continuation and development to complete the formal unit. This opening gesture does not give the impression of being a small initiating unit or basic idea requiring further development. Instead, it seems complete in and of itself. Thus, the only thing Byrd can do to extend the section is to repeat the gesture (this is actually Byrd's procedure; the opening measures immediately return an octave lower).

¹²Kerman, *The Masses*, 162.

3. Hybrid Presentation Types

Interesting musical possibilities abound when an opening three-voice combination contains a mixture of imitative and non-imitative features. These combinations can be viewed as hybrids, since they represent a textural midpoint between imitation and homophony. The simplest such type is the combination of imitative duo and parallel doubling in a three-voice texture; that is, one voice of the imitative pair is doubled in parallel motion (typically thirds or sixths, for obvious technical reasons). This presentation type can appear in two forms, presented below as Figures 5.8a and 5.8b:

Figure 5.8a: Imitative Duo plus Parallel Doubling (Type 1)

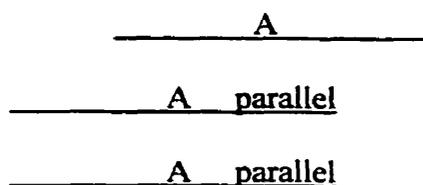
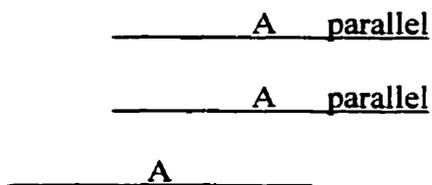


Figure 5.8b: Imitative Duo plus Parallel Doubling (Type 2)

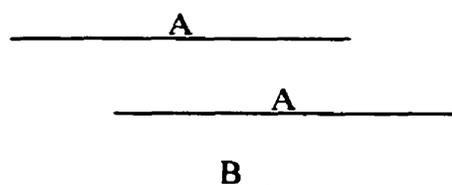


These two types differ only as to whether the guide or the consequent is the voice that appears in parallel motion. (Additional registral variants would include an upper-lower doubling, possibly at the tenth, followed by a single voice in the middle register; also a

single voice in the middle register followed by an upper-lower pair.) The first model corresponds to Byrd's procedure at the beginning of the "et miserere" imitative point from *Tristitia* (*secunda pars*, measures 156ff, Example 5.8a). The second model is exemplified by the concluding three-voice combination of the "oculi mei" imitative point from earlier in the same work (see Example 5.8b). This passage (measures 79-80) consists of the tenor entry followed by a contratenor-bassus pair. A registrally-varied restatement of this presentation type follows immediately in measures 80-81. This time, the leading tenor voice is in the middle register, and the consequent follows in parallel tenths in the outer voices (contratenor and bassus).

If two subjects combine in a hybrid presentation type, the situation is more complex. This type can be described either as "semi-imitative" or "semi-homophonic" since it combines elements of both two-voice presentation types. I will refer to this type as semi-imitative, since the imitative portion of the combination is its more striking aspect. This type arises when Byrd presents one subject of a double point as an imitative pair, while a third part provides homophonic support. One registral possibility is illustrated below as Figure 5.9.

Figure 5.9: Semi-Imitative Presentation



The clearest example of semi-imitative presentation as an opening gesture in the 1589 *Cantiones* is the “consolare” passage from the *secunda pars* of *Tristitia et anxietas* (1589/4, measures 135-36, see Example 5.9). This semi-imitative presentation type follows a forceful cadence; thus its status as a new beginning is assured. The upper two parts (medius and contratenor) form an imitative pair at the semibreve, while the lowest voice (tenor) adds an independent supporting bass part.

III. Presentation Types in Four Voices

Presentation types in four voices are musically feasible extensions of the presentation types in two and three voices described above. Some of these models never appear (or appear only rarely) in Byrd’s 1589 *Cantiones* as presentation types, but instead arise through later development of a texturally thin opening cell. However, since one cannot rule out the possibility that these types may figure more prominently in other Renaissance repertoire, they warrant some discussion. I will provide musical examples for those types that do appear in the collection under examination.

1. Homophonic Presentation Types

Homophonic presentation types in two or three voices (Figures 5.3, 5.6 and 5.7) change very little when a fourth voice is added. There are three ways in which these models can be extended to four voices: a homophonic double point with both subjects doubled in parallel motion, a homophonic triple point with one subject doubled in parallel motion, and a homophonic quadruple point. I will illustrate each of these models in turn.

Adding voices in parallel imperfect consonances to a pre-existing combination has but little effect other than an increase in density, as Figures 5.10 and 5.11 demonstrate. The former is derived from the homophonic double point (Figure 5.3), whereas the latter combines features of the homophonic double point with one part duplicated in parallel (Figure 5.6) and the homophonic triple point (Figure 5.7).

Figure 5.10: Two-Subject Homophony with Parallel Doubling

Text 1 A parallel

Text 1 A parallel

Text 1 B parallel

Text 1 B parallel

Figure 5.11: Three-Subject Homophony with Parallel Doubling

Text 1 A parallel

Text 1 A parallel

Text 1 B

Text 1 C

Figure 5.10 is too technically restrictive to be of much use for Byrd or his Renaissance contemporaries, given the careful use of dissonance in the *Prima Prattica*. (This presentation type does appear in J.S. Bach: his use of this model in his *Fugue in G Minor*, from Book 2 of the *Well-Tempered Clavier*, is a technical *tour de force* made

possible by greater freedom in dissonance placement in Baroque style.¹³) Figure 5.11, however, appears twice in the 1589 *Cantiones*. Byrd uses this presentation type as a beginning in *Vide Domine* (1589/6), measures 81-85 (see Example 5.11a), and in the *secunda pars* of *Ne Irascaris*, measures 106-108 (see Example 5.11b).

Adding a fourth independent part (or any number of parts, for that matter) to a non-imitative module likewise changes little but texture and density of material. This model is illustrated as Figure 5.12, below:

Figure 5.12: Homophonic Quadruple Point

Text 1 A

Text 1 B

Text 1 C

Text 1 D

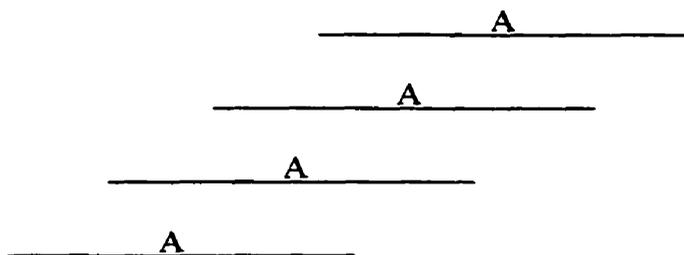
This presentation type never occurs in the 1589 *Cantiones*. When Byrd combines four voices in homophony, the voices either include parallel doubling (as in Figure 5.11) or nearly-stationary supporting voices which provide textural thickening, but no new distinct subject material (as in the opening measures of *Vide Domine*, discussed above).

¹³Discussed in Murray Dineen, "The Contrapuntal Combination: Schoenberg's Old Hat," in *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein (Chicago: University of Chicago Press, 1993), 435-48.

2. Transposed Canon in Four Voices

As with the homophonic presentation types discussed above, the transposed canon changes in density, but not intrinsically in procedure with the addition of a fourth voice. If Figure 5.4 (transposed canon in three voices) is compared to Figure 5.13 below, the only difference in the latter model is the presence of an additional transposed statement of the imitative duo which began the canon (i.e. the sub-unit created by the combination of the first two entries). Thus, transposed canon is intrinsically no more complex in four or more parts than it is in three parts.

Figure 5.13: Transposed Canon in Four Voices



This procedure is problematic for registral reasons. With transposition by octave, the canon would quickly move outside the range of a standard vocal ensemble. Transposed canon at the fifth (or another smaller interval) is more registally expedient, but Byrd never uses it in the 1589 *Cantiones*. When Byrd writes a canon in four or more parts, he alternates between transposed and invertible canon (i.e. one of the voices will reverse in register with respect to the remaining canonic entries). This possibility will be discussed below as a complex canonic presentation type.

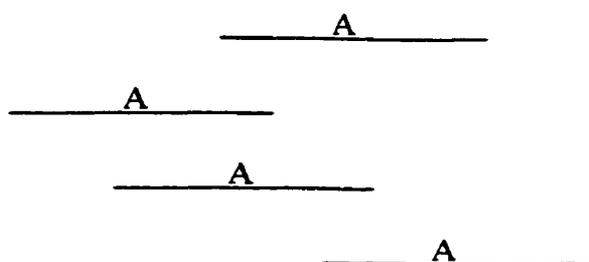
3. Complex Models in Four Voices

Unlike the above examples (Figures 5.10-5.13), certain other presentation types do vary noticeably with the addition of a fourth voice. These complex presentation types belong to two main categories: semi-imitative types and hybrid canons. As with invertible canon and transposed canon, these new types combine features of presentation and development. They all contain an initial cell that is subsequently varied, or to which additional subject material is added. Various types of canon loom large in Byrd's style, so I will present all four-voice possibilities of this presentation type first. I will then conclude this discussion of complex presentation types with additional models for semi-imitative presentation in four voices. These models give a very clear sense of the presentational diversity possible within a dense texture.

a. Hybrid Canons in Four Voices

There are three possible models for canon in four voices that combine features of transposed and invertible canon. Though these models are all fully periodic, their unique grouping of material in register can create a clustering into various sub-units. This aspect of four-voice combinations will be discussed in greater depth below. The blending of features from the invertible canon and transposed canon creates what I will term a *variably constructed canon*. As with many of the three-voice presentation types models discussed above, there are a wealth of musically feasible registral arrangements for such a four-voice unit, of which I present one possibility as Figure 5.14:

Figure 5.14: Variably Constructed Canon, Type 1 (pair of imitative duos)



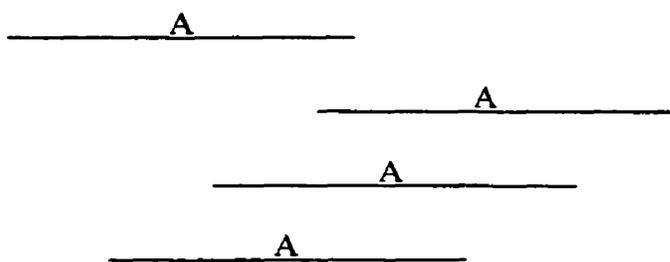
This model is one of 24 possible arrangements in register that alternate transposition and invertible counterpoint in a canonic texture. However, these 24 permutations reduce to three distinct related models (labelled henceforth as Types 1, 2 and 3). Each of the 24 permutations has one entry whose registral position in its immediate surroundings is different from the others; i.e. where the canon goes from being transposed to invertible, or vice versa. The position of this change (either after the first, second or third entry) determines to which of the three types the canon belongs. With 24 possible permutations falling equally into these three basic categories, each type will have eight possible arrangements in register; I will confine myself to one registral model for each.

Figure 5.14 (Type 1) reproduces the registral order of entry of the invertible canon that begins the *secunda pars* of *Defecit in dolore* (1589/1, see Example 5.14). If one observes the registral order of entry, the contrapuntal combination formed by the first two entries is varied by invertible counterpoint when it recurs between entries 2 and 3. However, this interval pattern formed by the first two entries repeats almost exactly with the combination of entries 3 and 4: the primary difference is the transposition level. Consequently, this arrangement in register strongly suggests a pair of imitative duos that

overlap. In spite of the fully periodic presentation, this canon partitions registrally into a sub-grouping of two imitative combinations that contain a pair of voices each.

The following two examples demonstrate a different blending of invertible and transposed canon. If the registral arrangement of the voices reverses immediately following the first entry, or just before the last entry, the effect is like a three-voice transposed canon with a stray voice added at the beginning or end. There are two possible registral arrangements of this model. If the fourth entry lies in the same registral relation to the third entry as the third entry does to the second, the result is an invertible canon that becomes a transposed canon. (This canon is formed by the final three entries.) One possible arrangement in register that can create this situation is illustrated by Figure 5.15, below:

Figure 5.15: Variably Constructed Canon, Type 2 (Invertible-->Transposed Canon)¹⁴



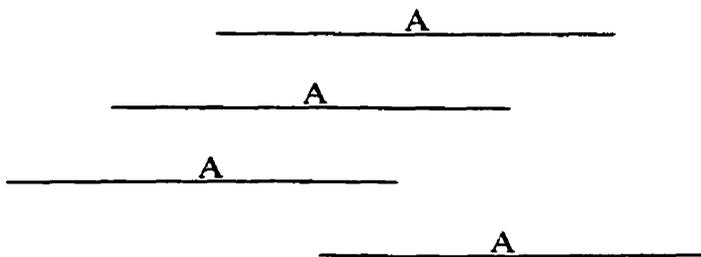
It should be noted that the transposed canon between the final three entries is only recognized in retrospect. The initial three entries form a standard registral arrangement

¹⁴The arrow stands for “becomes,” a shorthand I borrow from Caplin (*Classical Form*, 45-46).

for the invertible canon in three voices. Thus it is only with the final entry that we are made aware of the change to transposed canon. The effect is like a homogeneous group of three voices (the transposed canon at the end) with an incidental single voice added at the beginning. However, since this added voice has to fit harmonically with its canonic surroundings, it is more than just incidental.

If this pattern is reversed, a transposed canon can become an invertible canon. That is, the non-varied recurring pair is the intervallic combination between the first two entries, which is then immediately transposed and restated between the second and third entries. The fourth entry is therefore the one that reverses the registral relation of the opening combination. This model is illustrated as Figure 5.16:

Figure 5.16: Variably Constructed Canon, Type 3 (Transposed--->Invertible Canon)

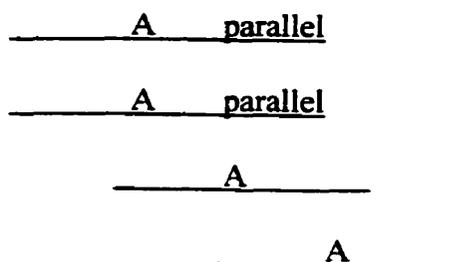


Much like Figure 5.15, this variably constructed canon subdivides into a group of three voices (the transposed canon at the beginning) with an extra voice added, this time at the end. In conclusion, though Figures 5.14 through 5.16 share canonic traits, they all are distinct in one respect. Their periodicity is a common feature, but registral grouping distinguishes them.

This presentation type would then contain two overlapping occurrences of a pair of subjects. This type poses the question: which are the voices that are to be paired together? Is this four-voice group an imitative subject A-A pair supported by a parallel subject B-B pair below it? Could it instead be a subject A-B double point that forms a stretto with the subsequent subject A-B pair? This is never an analytical problem in Byrd's 1589 *Cantiones*, as can be seen from the beginning of *Vigilate* (cited above on page 124). Here, the first A-B pair is sufficiently separated from the second (by temporal distance and free material as well) that the better reading is a pair of homophonic double points (as in Figure 5.3). The partition of this four-voice presentation type into duo pairs is easier if Byrd presents a two-voice subset of this combination first. Then, one could determine which pairing of voices takes priority from the larger context. However, if this overlapped group of subject entries occurs in its entirety at the beginning of an imitative point, the effect is equally imitative and non-imitative; thus no convincing criteria for partitioning this presentation type one way or another could exist.

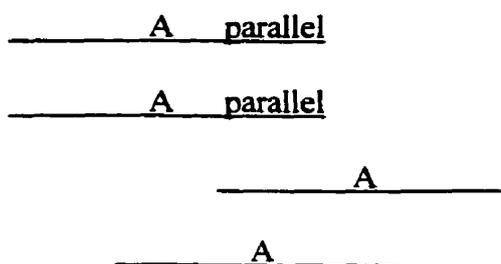
Another category of semi-imitative variants involves adding a non-periodic supporting voice (either in parallel motion with one of the entries, or free) to a transposed or invertible canon. The first type, adding parallel doubling to one of the canonic entries, is the more straightforward of the two. This type has two variants, one each for the transposed and invertible types of canon. I illustrate the first variant, an extension of transposed canon, as Figure 5.19, below:

Figure 5.19: Transposed Canon plus Parallel Doubling



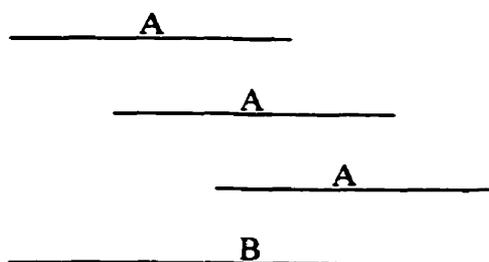
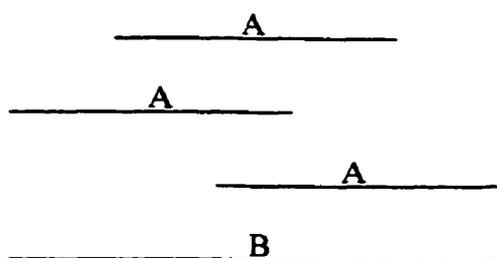
This is one of many possible arrangements. Any of the three canonic entries could in theory be doubled in parallel motion, or the transposed canon could move from low to high. I depict this particular distribution of voices because Byrd provides a rare example of its use as an opening device: this presentation type occurs in measures 26-28 of *In resurrectione tua* (1589/10, Example 5.18). Byrd here writes a transposed canon by descending fifth, and doubles the first canonic entry at the lower third for most of its length. (This voice breaks off at a point where further continuation would have resulted in parallel unisons with the second entry.) Byrd's use of parallel doubling in this hybrid presentation type helps to offset the somewhat mechanical nature of the transposed canon. Given the regularity of time-interval and pitch-interval of entry, combined with the regular rhythm and constant scalar motion of Byrd's subject, this canon would have been far less varied musically if the voice in parallel motion had been absent.

The invertible canon, due to its more intricate registral shifting of entries, generally does not have voices in parallel motion joined to it as a means of creating variety. However, this type does exist in Byrd. I illustrate this possibility as Figure 5.20:

Figure 5.20: Invertible Canon plus Parallel Doubling

This is the registral arrangement that Byrd uses in *Vigilate* (1589/9), measures 101-03 (see Example 5.19). The lower of the two parts in parallel motion breaks off early in this particular case, marking it as the subordinate voice. As in the preceding example from *In resurrectione tua*, the addition of a voice in parallel motion gives homophonic weight and emphasis to the first canonic entry.

One final semi-imitative presentation type in a four-voice texture combines canon in three voices with an independent subject in the remaining voice. This type greatly resembles the preceding one, but for the melodic nature of the supporting voice. I derive this presentation type from three-voice semi-imitative presentation (in which an imitative duo is given homophonic support). The presence of three fully periodic entries expands the imitative duo portion of Figure 5.9 into a canon. I will term this presentation type “accompanied canon.” This type has two subcategories, depending on whether the canon is transposed or invertible. One registral arrangement of each subcategory will suffice; see Figures 5.21 and 5.22, below:

Figure 5.21: Accompanied Transposed Canon**Figure 5.22: Accompanied Invertible Canon**

Both of these types appear in the 1589 *Cantiones*. The first type, accompanied transposed canon, makes one slightly dubious appearance in *Aspice Domine* (1589/11), measures 43-48. Byrd sets three canonic voices (bassus, medius and superius) against a repeating two-note ostinato figure in the cantus firmus tenor line. I call this type “dubious” for three reasons. First of all, the transposition levels differ (successive entries are up a sixth, and up a third). Secondly, an fourth (though incomplete) entry in the contratenor *below* the superius (measure 47) turns this transposed canon into a variably constructed canon (Type 3, or transposed--> invertible, Figure 5.16). Finally, this group of voices never recurs, making it unclear as to whether Byrd conceived it as a larger unit.

This passage is the closest Byrd ever comes to this model in the 1589 *Cantiones* (one would likely find similar examples in his other cantus firmus motets, however).

A three-voice invertible canon with an added independent part (Figure 5.22) occurs in *Tribulationes civitatum* (1589/14), measures 20-21 (see Example 5.22a). Byrd writes a close canon at the minim, in which the order of entries is medius-bassus-tenor, while the contratenor voice supplies a second subject. This passage is later stretched to five parts; Byrd retains the three-voice invertible canon, and doubles the independent supporting subject in parallel sixths (see Example 5.22b). This five-voice model could be termed “accompanied invertible canon plus parallel doubling.”

This discussion is now on the verge of passing from the practical to the hypothetical. We have reached a degree of complexity where intricate presentation types merge into larger units. I will conclude by suggesting a pair of four-voice extensions of the semi-imitative presentation type: accompanied semi-imitative presentation (cf. Figures 5.21 and 5.22) and semi-imitative presentation plus parallel doubling (cf. Figure 5.20). These two models appear below as Figures 5.23 and 5.24:

Figure 5.23: Accompanied Semi-Imitative Presentation

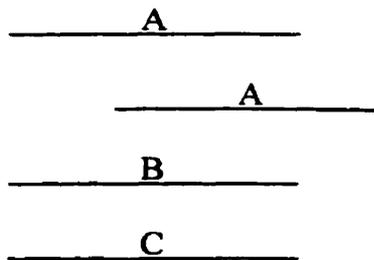
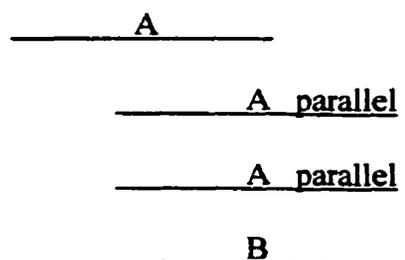


Figure 5.24: Semi-Imitative plus Parallel Doubling



The presentation type diagrammed above as Figure 5.24 appears in *Tristitia et Anxietas* (1589/4), measures 6-8 (see Example 5.24). It results from expansion of a previously stated homophonic double point plus parallel doubling; this passage will be discussed in Chapter 8. Accompanied semi-imitative presentation (Figure 5.23) could similarly arise as an expansion of an earlier, more simply constructed type. Given the rarity of the three-voice semi-imitative module (Figure 5.9) from which it derives and which it expands, there is no example of accompanied semi-imitative presentation in the 1589 *Cantiones*.

One could extend this discussion further to include five-voice presentation types. However, unless such a five-voice type is particularly clear in textural and registral design (e.g. a five-voice non-imitative module or a five-voice transposed canon), registral clustering of subject material would likely suggest a combination of smaller units rather than a single large one. The presentation types listed above will be sufficient for the vast majority of cases in the 1589 *Cantiones*.

IV. Conclusion

One conclusion that we can draw from Byrd's 24 presentation types is that there is not always a clear division between presentation and development in the 1589 *Cantiones*. The more complex, texturally dense presentation types (especially Figures 5.14-5.24) merge aspects of beginning (since they initiate an imitative point) with aspects of development (continuation function). For example, variation procedures such as transposition and invertible counterpoint occur in an invertible canon. Due to the presence of these variation procedures in an initiating gesture of this type, the boundary between presentation and development is blurred. This blurring of formal boundaries is analogous to the combining of initiating and cadential function mentioned in Chapter 4 concerning the cantus-firmus-like melodic subject.

There is a larger formal issue at work as well. Given that some presentation types have developmental features (typical of middles) and others do not, it should be possible to create a mapping of presentation types and formal functions at the level of the motet. As noted above (Chapter 2, page 58), there is seldom any difference in the tonal goal of a section that permits us to determine where we are in the overall form of a Byrd motet; virtually all imitative points cadence to the final in the 1589 *Cantiones*. However, Byrd can and does create these subtle formal distinctions by the type of presentation he uses to begin a point. That is, the particular method of presentation that Byrd employs as an initiating gesture (thin-textured versus thick-textured and complex) can vary depending on whether it occurs at the beginning, middle, or end of the composition. This topic will be the focus of the ensuing chapter.

Presentation Types and Beginnings

Having illustrated Byrd's models for presenting subject material, according to one of the 24 presentation types discussed in the preceding chapter, I will now explore how these types intersect with form in the 1589 *Cantiones Sacrae*. Byrd's use of these types within a motet can be divided into two main categories. Some are introductory procedures at beginnings of various types (beginnings of motets, versus beginnings of subsequent *partes*, versus "beginnings of middles," or internal openings). Others are subsequent procedures in middles by which presentation types introduced at beginnings are then fragmented, rearranged and otherwise developed. This chapter will concern itself with beginnings.

The musical content and textural density of Byrd's beginning material varies depending on two factors: its formal location within a composition, and whether or not it is to be repeated. One can isolate certain presentation types that occur only at the very beginning of a motet, and other types whose location in a composition is variable. Since the way Byrd begins an imitative point has a marked effect on how this material is then developed, it is worth examining Byrd's beginning procedures in some depth. Some of the presentation types (Figures 1-24 from Chapter 5) are almost exclusively opening gestures. This is generally true of the imitative duo, and particularly true of the non-imitative module, whose homophonic presentation requires a contrast of texture through

imitation upon further development. Other presentation types already contain within them the seeds of development, and are thus less common at beginnings of any type. An invertible canon, for example, contains within itself at least two statements of an imitative duo, related to each other by invertible counterpoint. Such a presentation type already includes development of its constituent sub-units. Thus, it may occur not only as an initiating gesture, but also within a developmental procedure. It may present new subjects, or develop pre-existing ones. As for hybrid presentation types, the combination of different textures (imitative and non-imitative) creates an intricacy that virtually precludes their use as beginnings. The two simplest such types, the imitative duo plus parallel (Figure 5.6) and the semi-imitative module (Figure 5.7) are the only types that occur frequently at beginnings, though usually at internal openings rather than to begin a *prima pars* or subsequent *partes*. A single example of a four-voice canonic hybrid as a beginning gesture occurs in the *secunda pars* of *Defecit in dolore* (1589/1); this example will be discussed below. These hybrid types more often arise through developmental procedures, due to the textural thickening of an imitative or non-imitative duo. Within them, Byrd can distinguish between content and function: their variation of a small cell suggests development, though their formal location can mark them as presentational.

The ensuing discussion will outline Byrd's particular use of presentation types in beginning gestures of motets (or *prima pars*, when the motet is in multiple sections) versus openings of *secunda*, *tertia* and *quarta pars*. There are subtle distinctions between these two categories of beginnings; these will be summarized below. I shall then compare these two categories of beginnings to opening gestures in the middle of a formal

unit (internal openings), emphasizing Byrd's unique procedures in the latter category of beginnings. The greater diversity of Byrd's opening gestures in the middle of a motet is evidence of his desire for development and increased complexity as a work progresses. Hence, this diversity gives insights into Byrd's variation procedures *within* an imitative point as well, an issue that I will take up in Chapter 7.

I. Formal Beginnings: Data and Commentary

Regarding Byrd's particular use of the presentation types outlined in the previous section, it is informative to see in what proportion he mixes them in the opening gestures of the 1589 *Cantiones*. First, I will examine the categories of imitative and non-imitative presentation, and their proportion at openings of main formal units in Byrd's 1589 *Cantiones*. I will not, for the time being, take note of the specific presentation types that subdivide these categories according to number of voices and number of subjects; this will be a later refinement. Hybrid presentation types do not come into play in this discussion since they are not found in this collection as opening gestures at the beginning of large formal units. This absence is noteworthy: it shows that Byrd does not randomly place different presentation types wherever he pleases. He reserves hybrid types for locations in a motet that suggest some degree of "middleness," that is, opening gestures that do not begin a composition. This creates a formal distinction between degrees of beginning that will be vital later on in the discussion of other looser formal regions.

One must of course define "tight" before one can define "loose," since the context for the second term is set by the definition of the first one. I will define tightness in the

current chapter by the musical characteristics of Byrd's presentation types that occur at the beginning of a motet. As we will see, the diversity of presentational procedures is less at the very beginning of a motet than it is with those that occur in the middle of a larger section. Byrd's motet beginnings, when they contain recurring material, tend toward thin texture, generally three voices or less. (If the opening material does not return, it may be full-textured, as in the openings of *Vide Domine* and *Deus venerunt gentes*.) Moreover, Byrd uses only imitative and non-imitative presentation types (no hybrids). This limits the possibilities to Figures 5.1 through 5.7 (two-voice imitative duos with one or two subjects, homophonic types with two or three subjects and canon). In Byrd's 1589 *Cantiones*, there are 29 opening gestures that are marked externally as beginnings (i.e. that begin *prima pars* or subsequent *partes*). I shall distinguish these beginnings from those that occur in the middle of a motet (termed "internal openings" for contrast). I will first examine the presentation types by which Byrd marks these 29 openings. I shall consider openings of *prima partes* and openings of other *partes* separately to show Byrd's unique handling of these two different degrees of beginning.

I have noted above that Byrd makes different choices as to the texture of his beginnings depending on whether he repeats the opening material or not. In the 1589 *Cantiones*, the former type, in which an opening module returns in some form throughout the imitative point, occurs far more frequently than the latter, in which the opening material is free (non-recurring). I present both types to show that Byrd's textural preferences operate independently of his desire for repetition of material. This information appears below as Table 6.1:

Table 6.1: Texture of Openings from Byrd's 1589 *Cantiones*

Texture	<i>Prima Pars</i>	<i>Other Partes</i>	Total
non-imitative, material returns	9	1	10
imitative, material returns	5	7	12
free non-imitative	2	2	4
free imitative	1	2	3

The above information elicits some interesting conclusions about Byrd's textural procedures in openings. Byrd uses non-imitative and imitative presentation in nearly equal proportion at openings in the 1589 *Cantiones*. Of the 22 openings in which the initial material recurs, 10 are non-imitative in texture and the remaining 12 are imitative. Thus, the division is close to 50/50, with a slight preference for imitation. This proportion changes little if the seven free openings are added, which divide 4 to 3 in favour of non-imitative presentation. This 50/50 split in the data is misleading, however. It doesn't take into account the great predominance of non-imitative openings when one isolates the statistics for *prima pars* only. In *prima pars*, non-imitative presentation outnumbers imitative presentation nearly two to one. The main reason for this imbalance is that, at least in the collection of motets under examination, Byrd prefers to use homophonic declamation at the very beginning of a motet for clarity of text presentation. This clarity is less of an issue for Byrd once a motet is underway. Admittedly, the sample is relatively small (16 openings of *prima partes* and 13 openings of *other partes*), but the

two-to-one split in the data is significant enough to suggest intentionality on the part of the composer.

If the openings of *prima pars* and their textural procedures are indicative of Byrd at his most thematically firm, any change from these procedures in other types of beginnings can be seen as a move toward greater fluidity of texture (i.e. loosening). Byrd's freer approach to texture can be seen in openings of *secunda*, *tertia* and *quarta partes*. In Byrd's 1589 *Cantiones*, these beginnings are quite different in texture from openings of *prima partes*; beginnings of subsequent *partes* tend toward imitative openings. Seven of eight openings that have recurrent material are imitative. We can conclude from this difference in procedure that Byrd viewed the subsequent *partes* of his motets as having distinct musical requirements from those of his *prima pars*. Byrd's different presentation procedures in later *partes* of the motets from the 1589 *Cantiones* confirms that they are not conceived as separate works.

Given the difference in the 1589 *Cantiones* between openings of *prima pars* and other *partes* as to texture, I have further refined the information of Table 6.1 to focus on the specific presentation types described in the preceding chapter; this information appears below as Table 6.2. Here, for greater precision, I have expanded the categories of Table 6.1 to make distinctions between number of voices and subjects. Whereas single points are by definition imitative (either an imitative duo or a canon, depending on the number of entries), double points can either be imitative or homophonic. I have also distinguished between openings that do not contain recurring material: these are categorized either as free imitative or free non-imitative.

Table 6.2: Opening Presentation Types in the 1589 *Cantiones* (“imitative” denotes imitative duo unless otherwise marked)

Motet	Title/opening text	Subjects	Sub-Category
1, 1ma	Defecit in dolore	2	imitative
1, 2da	Sed tu Domine	1	imitative (canon)
2, 1ma	Domine praestolamur	1	imitative
2, 2da	Veni Domine	0	free non-imitative
3	O Domine adjuva me	2	non-imitative
4, 1ma	Tristitia et anxietas	2	non-imitative
4, 2da	Sed tu Domine	0	free imitative
5	Memento Domine	2	imitative
6, 1ma	Vide Domine	2	non-imitative
6, 2da	Sed veni Domine	0	free non-imitative
7, 1ma	Deus venerunt gentes	0	free non-imitative
7, 2da	Posuerunt morticina	0	free imitative
7, 3ta	Effuderunt sanguinem	1	imitative
7, 4ta	Facti sumus	4	non-imitative

(Table 6.2 continued)

Motet	Title/opening text	Subjects	Sub-Category
8	Domine tu jurasti	2	imitative
9	Vigilate	2	non-imitative
10	In resurrectione tua	1	imitative
11, 1ma	Aspice Domine	1	imitative
11, 2da	Respice Domine	1	imitative (canon)
12, 1ma	Ne irascaris	0	free non-imitative
12, 2da	Civitas sancti tui	1	imitative
13, 1ma	O quam gloriosum	0	free imitative
13, 2da	Benedictio et claritas	1	imitative
14, 1ma	Tribulationes civitatum	3	non-imitative
14, 2da	Timor et hebetudo	1	imitative
14, 3ta	Nos enim pro peccatis	1	imitative
15	Domine secundum multitudinem	2	imitative
16, 1ma	Laetentur coeli	1	imitative (canon)
16, 2da	Orietur in diebus	1	imitative (canon)

The pair of openings that contain more than two subjects warrants further comment: the three-subject homophonic opening of *Tribulationes civitatum* (1589/14), and the quadruple point from the *quarta pars* of *Deus venerunt gentes* (1589/7). The

former example illustrates an opening with declamatory homophony, of which Byrd was quite fond c. 1580. The motets in the 1589 *Cantiones* that begin in this manner, 1589/3, 4, 6, 7, 12 and 14, date from c. 1580, according to Kerman's chronology.¹ The imitative point from *Deus venerunt gentes* is more complex. Byrd presents a double point in which he sets the text "facti sumus-opprobrium" to a pair of subjects, resulting in a quadruple point. Others have called this passage a triple point;² I imagine they do not consider the "opprobrium" motive in the bass (measure 195) to be a subject. However, as Example 6.1 demonstrates, this subject, though brief, combines consistently with the passage's other subject material, forming a harmonic motive. The subject's use as part of a larger unit bestows on it a certain rhetorical weight.

Finally, I summarize the preceding information in Table 6.3, below, a count of single, double, triple and quadruple points, and freely designed formal openings from the 1589 *Cantiones*. I have divided each of these points into two textural presentation types: imitative and non-imitative, and combined these as a total at the bottom of the table. Triple and quadruple points, of which there is a single example for each in this sample of opening gestures, require no such total. The statistical breakdown again shows that Byrd treats openings of a motet's subsequent *partes* differently from openings of *prima pars*. Double points dominate *prima partes* while free openings and imitative passages with

¹Kerman, "Chronology and Canon," 375.

²Kerman, *The Masses*, 143, and Craig Monson, "Byrd, the Catholics and the Motet: The Hearing Reopened," in *Hearing the Motet: Essays on the Motet of the Middle Ages and Renaissance*, ed. Dolores Pesce (Oxford and New York: Oxford University Press, 1997), especially 358-60.

one subject predominate in later *partes*. This preponderance of double points in *prima partes* stems from Byrd's preference for homophony as an initiating gesture.

Table 6.3: Single, Double, Triple and Quadruple Points in Openings of Byrd's 1589 *Cantiones Sacrae*

Sub-Category	<i>Prima Pars</i>	Other <i>Partes</i>	Total
Single Imitative	4	5	9
Single Canonic	1	3	4
Double Imitative	4	1	5
Double Non-Imitative	2	0	2
Triple Imitative	0	0	0
Triple Non-Imitative	1	0	1
Quadruple Imitative	0	0	0
Quadruple Non-Imitative	0	1	1
Free Imitative	1	2	3
Free Non-Imitative	2	2	4
Single Total	5	8	13
Double Total	6	1	7
Free Total	3	4	7

One intriguing aspect of Byrd's openings is the infrequent use of canon as a presentation type to begin a motet. This procedure occurs on three occasions in Byrd's 1589 *Cantiones* to begin a *secunda pars*: *Laetentur coeli* (1589/16), *Aspice Domine* (1589/11) and *Defecit in dolore* (1589/1; see Examples 6.2, 6.3 and 6.4), but only once to begin a *prima pars* (again, *Laetentur coeli*; see Example 6.5). Byrd's reservation of canon for the beginning of subsequent *partes* is yet another sign that a *secunda pars* has distinct musical requirements from a *prima pars*. Even with this small sample, however, Byrd makes a distinction as to degree of complexity. The canon that begins *Laetentur coeli* is a three-voice transposed canon by descending fourth, while the canon from the motet's *secunda pars* is a three-voice invertible canon. The latter canon adds the complicating feature of invertible counterpoint, therefore varying the interval content of the harmonic motive formed by the initial two entries. In the former canon, the harmonic motive is simply transposed down a fourth, thus retaining its harmonic interval structure upon restatement.

The invertible canon that begins the *secunda pars* of *Aspice Domine* resembles that of *Laetentur coeli, secunda pars*, but with cantus firmus added. As this cantus firmus is stationary for virtually the entire canon, it would be misleading to call it an independent subject (thus forming an accompanied invertible canon, or Figure 5.21). Instead, I see it as textural support within a simpler Figure 5.5. (For the distinction between independent subjects and textural filler, see Chapter 5, pages 130-32, concerning the three-voice homophonic presentation type.)

The canon that begins the *secunda pars* of *Defecit in dolore* is more intricate than any of the examples discussed above. It is a four-voice variably constructed canon that stratifies into a pair of duos (as indicated on Example 6.4), to which Byrd adds a free, supporting voice. The initial effect is semi-imitative presentation (the initial imitative pair in the contratenor and tenor, plus an independent second subject in the medius), but the ensuing pair of entries in superius and bassus at the same time interval expands this module into a canon. The continued presence of the free voice (it lasts until the end of the canon, marked by a cadence to E in measure 75), plus the registral subdivision into a pair of imitative duos, helps to conceal its periodicity.

II. Beginnings of Internal Openings

1. Complex Presentation Types and Loosening

The relative scarcity of canon as a presentation type to begin a motet in Byrd's 1589 *Cantiones* raises some interesting issues concerning the musical complexity of presentational devices. As noted above, Byrd restricts himself to a limited array of presentational possibilities when beginning *prima partes* or subsequent *partes* of a motet. Thus, one can say that Byrd's beginnings in the 1589 *Cantiones*, especially of a *prima pars*, are characterized musically by relative simplicity, both texturally and procedurally. This relative simplicity arises from Byrd's desire for further development. There is a limit to the degree of intricacy in an opening gesture that would still permit further development and even greater musical density to be achieved through the working out of the material. For example, if a motet were to begin with a four-voice invertible canon,

the presence from the outset of variation features such as invertible counterpoint would leave little room for further development. Therefore, in this collection, three-voice transposed canon (*In resurrectione tua*, 1589/16) is as complicated as Byrd permits himself to get at the very beginning of a motet. Greater presentational intricacy than this model would lead to excessive complexity upon further development, disturbing and distorting the overall musical shape of the composition.

However, what of openings that are of lesser formal weight, that is, beginnings that are not marked externally as such? In striking contrast to his somewhat cautious use of a limited variety of presentation types at the very beginning of a motet, Byrd often uses canon and other texturally dense presentation types to begin an imitative point that occurs in the middle of a large formal unit. This difference in presentational procedure suggests a new, looser category of beginnings: the “internal opening.” I will use this term to describe beginnings of middles. Internal openings display a greater variety of presentation types than openings that begin the *prima pars* or subsequent *partes* of a motet. The implications of this variety will be the focus of the ensuing discussion.

It is already apparent from the distinction between presentation types with which Byrd begins a *prima pars* and the ones that can open other *partes* of a motet that there are varying degrees of “beginning” in his 1589 *Cantiones*. The opening gestures of subsequent *partes* display greater presentational variety than the openings of *prima pars*. Similarly, internal openings display still more freedom: that is, greater density and variety of texture. In fact, this increased density (the presence of a greater number of voices with material that recurs) *permits* a greater variety and complexity of presentation types when

beginning an internal opening. The relatively more intricate presentation types with which Byrd begins internal openings fall into two main categories: canons and semi-imitative hybrids. These elaborate types are virtually or entirely absent at openings. The general tendency is clear: the lesser formal significance of the internal opening gesture allows for greater variety and complexity of presentation types as an initiating gesture.

To be certain, the presentation types described in the preceding section that typify the very beginning of a motet can and do occur to initiate internal openings as well (the thin-textured imitative and non-imitative presentation types schematized above as Figures 5.1-5.7). However, this occasional identity of presentational procedure is not the most interesting feature of internal openings. More intriguing is Byrd's more frequent use of canons, and the use of hybrids that are unique to internal openings. By beginning with canons and hybrids, Byrd sets different musical expectations for internal openings. I shall therefore focus on these complex types and their use in internal openings, giving examples of each from Byrd's 1589 *Cantiones*.

2. Internal Openings and Texture

One musical feature that affects the number of discrete presentation types in internal openings is texture and density of material. Byrd often works toward full texture gradually as his compositions get underway, especially when he begins with imitation. This progression from thin to thick texture allows for clear presentation of subject material with a small number of voices initially, and a dynamic curve toward a denser climax later on. As a result, openings that involve three or more voices that recur as part

of a harmonic motive occur far more commonly as internal openings than at beginnings. These thicker-textured presentation types include homophonic presentation in three or more voices (Figures 6-7 and 11-12), canon in three and four voices (Figures 4-5 and 13-16), imitation plus parallel doubling (Figures 8 and 17), and various semi-imitative complexes (Figures 9 and 18-24).³ The thicker texture of these models is an important determining factor in Byrd's tendency to reserve them for internal openings. (Openings of *prima pars* or subsequent *partes*, when they include recurring material, tend toward thin texture; the three-voice homophonic presentation type, Figures 5.6 and 5.7, is the most texturally dense type that Byrd uses regularly to open a motet or subsequent *partes*. Byrd's opening gesture of *Tristitia et anxietas*, 1589/4, is Figure 5.6, or two subjects plus parallel doubling. The first few measures of *Tribulationes civitatum* (1589/14) is Figure 5.7, the homophonic triple point. These have been illustrated as Examples 5.6 and 5.7c.

3. Canon as Presentation Type

Byrd frequently uses canons of various types to initiate an imitative point in the middle of a piece. This importance of canon as an internal opening device is not surprising, given the flexible ways in which it can be constructed. Six of the 24 presentation types from the preceding chapter are canonic. Four additional models combine canon and non-imitative features in a hybrid presentation type. Thus, nearly

³Figures 8-9 and 17-18 are imitative duos with homophonic support; Figures 19-22 are canons with homophonic support; Figures 23-24 are imitative duos plus *two* supporting voices (semi-imitative presentation plus an extra accompanying voice).

half of the possible models enumerated above have canonic features. I shall first focus on those models that are strictly canonic (no parallel doubling or accompanying voice).

Examples of each canonic presentation type from Byrd's 1589 *Cantiones* appear below as Table 6.4. This is not an exhaustive list, but rather a representative sampling. I have listed the one canon by alternating fourths and fifths in the 1589 *Cantiones* separately, but since it is a variant of the transposed canon (Figure 5.4), it requires no new model.

Table 6.4: Selected Canonic Types from Internal Openings in Byrd's 1589 *Cantiones*

1. Canonic Presentation Types in Three Voices⁴

Canonic Type	Figure	Example(s)
Transposed	5.4	<i>Vigilate</i> , measure 31, <i>Ne irascaris</i> , measure 71 (Exx. 6.6a-b)
Alternating 4ths/5ths	5.4	<i>O quam gloriosum</i> , measure 22 (Ex. 6.7)
Invertible	5.5	<i>Vigilate</i> , measure 44 (Ex. 6.8a)

⁴Measure numbers indicate the starting point of the canon.

2. Canonic Presentation Types in Four Voices

Canonic Type	Figure	Example(s)
Invertible, Type 1 (pair of duos)	5.14	<i>Laetentur coeli</i> , measure 15, <i>Ne irascaris</i> , measure 124 (Exx. 6.9a-b; also Ex. 6.5)
Invertible--> Transposed (Type 2)	5.15	none
Transposed--> invertible (Type 3)	5.16	<i>Aspice Domine</i> , measure 35 (Ex. 6.10)

The above sampling of canonic passages in three and four voices gives some sense of the variety with which Byrd proceeds when he constructs complex imitative openings. One notable absence is Figure 5.15, invertible--> transposed canon (hybrid canon, Type 2). One possible reason why Byrd avoided this type is related to control of musical complexity. Byrd's beginnings display a preference for starting simply (i.e. thin-textured, with one of a limited number of presentation types), allowing space to increase gradually in intensity before returning to their initial state. Transposed canon, which only requires restatement of the intervallic obligation at a higher pitch level, is a relatively simple procedure. Inverting the registral position of entries creates a greater level of complexity, since it varies the original combination by invertible counterpoint. Thus, in a transposed--> invertible canon, an increase in complexity from an initial simpler state is achieved. On the contrary, moving from invertible canon to transposed canon is a

simplification procedure whose proper location in an imitative point would be to lessen the musical activity following its climactic moment.

Another aspect of these canonic types is the difficulty of deciding exactly what the harmonic motive of the passage might be. The canonic passage from *Ne irascaris*, measure 124ff. (listed in Table 6.4 as an example of a variably constructed canon, Type 1, or Figure 5.14) aptly illustrates the problem (see Example 6.8b). At first, it seems that Byrd is beginning with an imitative duo (Figure 5.1) at the semibreve; nothing could be simpler. However, a third entry at the same time-interval turns this duo into an invertible canon (Figure 5.5). Then, a fourth entry in the contratenor suggests a variably constructed canon arranged as a pair of duos, or Figure 5.14 (which Byrd further complicates by doubling this entry in parallel thirds). However, Byrd doesn't stop there: he continues to add entries (two per measure) until the pattern finally breaks in measure 120. Thus we have *eight* fully periodic entries, some further amplified by parallel doubling. Moreover, after the pattern breaks, Byrd begins a second canon with six additional entries.

Given the complexity of this passage, the question must be asked: what *is* the harmonic motive here? At what point in the canonic process does presentation become variation? Attempting to draw a line in the sand at any point in this canon seems meaningless: one could argue with equal vigour for Figures 5.1, 5.5 or 5.14 as the initiating cell of the canon. What seems evident from Byrd's procedure is that complex presentation types can blend almost imperceptibly into the development by which he extends the imitative point. Thus, as will be explored in Chapter 7, canonic presentation types contain within them the seeds of further development, and in fact often shape the

nature of this development by the registral patterns of entry they create. As we will see, the same holds true for hybrid presentation types, to be examined below.

4. Hybrid as Presentation Type

Byrd also uses presentation types that combine imitative and non-imitative features to begin an internal opening. These hybrid types, due to their combination of different textural procedures, permit a more varied development, since they can change greatly in character and effect with the addition or removal of voices from the initial harmonic motive. I shall provide a representative list of these types and their use as initiating gestures in the 1589 *Cantiones Sacrae* (see Table 6.5, below) and then draw some conclusions as to the significance of this use.

Table 6.5: Selected Hybrid Presentation Types**Semi-Imitative Hybrids (imitation and homophonic support)**

Hybrid Type	Figure	Example(s)
Imitation plus Parallel Doubling	5.8	<i>Tristitia</i> , measure 157, <i>In resurrectione tua</i> , measure 25 (Exx. 6.11a-b)
Semi-Imitative	5.9	<i>Tristitia</i> , measure 135, <i>O quam gloriosum</i> , measure 50, (Exx. 6.12a-b)
Imitation, both entries with Parallel Doubling	5.17	none
Overlapping Duos	5.18	<i>O quam gloriosum</i> , measure 91 (Ex. 6.13)
Accompanied semi-imitative	5.23	none
Semi-imitative plus parallel	5.24	<i>Tristitia</i> , measures 6-8 (Ex. 6.14)

Canonic Hybrids (canon with homophonic support)

Canonic Hybrid	Figure	Example(s)
Transposed plus Parallel	5.19	<i>Domine tu jurasti</i> , measure 57, <i>Vigilate</i> , measure 101, <i>In resurrectione tua</i> , measure 26 (Exx. 6.15a-c)
Invertible plus Parallel	5.20	<i>Deus venerunt gentes</i> , measure 91, (Ex. 6.16)
Accompanied Transposed	5.21	<i>Aspice Domine</i> , measure 43 (Ex. 6.17)
Accompanied Invertible	5.22	<i>Tribulationes civitatum</i> , measure 20 (Ex. 6.18)

I present these semi-imitative types roughly in order of complexity. This complexity is defined according to the number of voices, number of subjects, and the variation techniques used in the presentation type. The first two types (imitation plus parallel and semi-imitative presentation) occur with greater frequency than the others as beginning gestures; their relative simplicity compared to the other types from Table 6.5 marks them as appropriate introductory devices. Byrd uses other hybrid types rarely in the 1589 *Cantiones*. The overlapping duo (Figure 5.18) occurs only once as an opening gesture. The imitative duo with both entries doubled in parallel motion (Figure 5.17) doesn't occur at all, nor does accompanied semi-imitative presentation (Figure 5.23). Semi-imitative presentation plus parallel doubling (Figure 5.24) only occurs as a developmental procedure (expanding the double point plus parallel from the opening measures of *Tristitia et anxietas*). Four-voice canonic presentation types are equally rare at beginnings. The most common type is the transposed canon with parallel doubling added (Figure 5.19), followed by invertible canon plus parallel (Figure 5.20).

Though Byrd occasionally adds parallel doubling to a canon, he seldom adds a free recurring voice (i.e. a distinct subject). The two accompanied canon types (Figures 5.21 and 5.22) occur once apiece in the 1589 *Cantiones*. An example of accompanied transposed canon from *Aspice Domine* was discussed above on page 147 (see Examples 5.21 and 6.17). The "quas passae sunt" passage from *Tribulationes civitatum* (1589/14), appearing twice at measures 16 and 20, as shown in Example 6.18, is the only example in this collection of accompanied invertible canon as an opening gesture. This passage does not seem canonic: the subject material is in long rhythmic values and the entries are

separated by a minim, so the overall effect is nearly homophonic. However, the three entries of Subject A are evenly spaced in time. Thus, according to Schubert's definition of canon (pages 24-25), the designation of this passage as such is valid.

III. Conclusion

In Chapter 5, I concluded that the line between presentation and development in Byrd's use of subject material is not always clear. This blurring of formal boundaries is one of the means by which Byrd creates subtle distinctions between beginnings and middles (openings of *prima partes* versus openings of subsequent *partes* versus internal openings) within a motet. The beginning of a motet displays the least diversity and textural complexity of presentational devices. The beginning of a *Secunda Pars*, however, often uses denser presentation types not typical of the beginning of a *Prima Pars*. Finally, the beginning of an internal opening may use complex presentation types that blend imitative and non-imitative presentation (hybrid presentation types) or present and immediately vary a two-voice contrapuntal combination (canonic presentation types). I call these models "complex" because they suggest both presentation and development. This blending of initiation and continuation typifies Byrd's presentational tendencies in middle sections of a larger formal unit. These complex presentation types, due to the variation procedures they contain, are a microcosm of the development procedures by which Byrd varies his subject material in the middle of an imitative point. Development procedures within an imitative point will be discussed in depth in the following chapter.

Variation Techniques and Motivic Development

Byrd's procedures in imitative points occur in three stages: first he presents material (according to the 24 types described in Chapters 5 and 6), then he varies it, and finally he cadences. This chapter will deal with the middle procedure in the musical succession: Byrd's variation procedures by which he develops his opening material, once it has been presented. These variation procedures fall into four categories: textural change, transposition, melodic variation and invertible counterpoint. I will examine each of these procedures in turn, giving examples from Byrd's 1589 *Cantiones* to demonstrate their use. At first, for the sake of clarity, I will focus on these developmental procedures in isolation from each other. Then, I will show how these techniques interact with each other in an imitative point.

I. Textural Change

The first way in which a presentation type can be varied is through textural change. This technique takes one of two forms: thickening of a type that was initially thin-textured, and thinning out of a type whose initial statement was hidden in a full texture, accompanied by additional voices. I shall discuss each possibility in order.

Textural thickening is very common in Renaissance style, especially when a motet begins with imitation (thus presupposing an initially monophonic presentation). This technique is most significant if it involves the addition of material that repeats in combination (forms a harmonic motive). Subjects that recur in combination show that Byrd was thinking of this group of melodic subjects as a unit. Textural thickening through the addition of non-recurring material is of lesser significance. Such free voices simply add textural density, and will therefore not be considered in the current discussion. Textural thickening through adding melodic subjects is of two varieties: parallel doubling and canon. Both devices have already appeared in certain presentation types (Figures 6, 8, 17, 19-20 and 24 for the former, Figures 4, 5, 13-16 and 19-22 for the latter).

Doubling a melodic line in parallel motion is the simpler case; this technique is common in the 1589 *Cantiones*. Once subject material has been presented, the initial melodic-harmonic unit can be “thickened” by doubling one (or more than one) of its constituent parts. As a result, for example, three or four voices can be generated from a contrapuntal combination that originally only contained two. This doubling is virtually always in parallel thirds or sixths, the only freely usable parallel consonances in Renaissance style.¹

Both of these doublings occur in the “exultet” imitative point from *Laetentur coeli* (1589/16, see Example 7.1). Byrd introduces a three-note descending semiminim figure in measure 9 as the non-variable ending of a variably shaped “et exultet” subject. Its first

¹One could argue for doubling in parallel fourths when this doubling involves upper parts; this technique never occurs in the 1589 *Cantiones*, however.

statement occurs against free material, but its next appearance is as an imitative duo at the minim, with the lower voice doubled in parallel thirds. This imitative duo plus parallel doubling immediately spawns an extended, dense canonic passage (measures 10-13). During this canon, three entries are doubled in parallel motion. Superius and bassus double in compound thirds (measure 11), tenor and bassus double in thirds (measure 12), and finally, superius and medius double in sixths (measures 12-13). Byrd's use of the technique provides homophonic support and emphasis to one of the voices of the original contrapuntal combination.

Another type of textural thickening occurs when Byrd adds a third entry to an imitative duo at the same time interval, creating a canon. This equality of time interval permits the vertical interval combination of the original pair of entries to recur in the next pair.² Often, the extra voices enter at a consistent melodic interval as well so that the melodic interval between the first two entries is preserved. The musical result is that the original imitative duo becomes a transposed canon.³ That is, the harmonic interval structure formed by the first two entries recurs at a different pitch level between all other successive pairs of voices within the canon. This canonic procedure has already been observed as a presentation type in an internal opening; as a middle gesture, the same canonic type derives from a thinner-textured initial module (i.e. arises from "thickening" an imitative duo), but the musical result is identical.

²This fully periodic pattern of entries (and the recurrence of the imitative duo that results) is the determining factor in Schubert's definition of canon (*Modal Counterpoint*, 216).

³Schubert's term, see discussion above, Chapter 1, 24-25.

Byrd uses the opposite development procedure on occasion: textural “thinning out” of a harmonic motive. *O Domine adjuva me* (1589/3), measures 18-20, illustrates this procedure (see Example 7.2). Here, a melodic subject appears first as two voices in parallel thirds, followed immediately by a presentation of the subject by itself. Since the thicker form of the harmonic motive precedes the single-voice presentation, Byrd adds free material the second time to maintain a consistent texture and density of material.

II. Transposition

1. Transposition and Pitch Centricity

The second developmental procedure to be discussed, namely, transposition, can be used in different ways to vary an initial presentation type. In Byrd’s opening sections, he chooses his transpositions carefully to establish one or two central pitches.

Transposition by octave of a two-voice harmonic motive (for example, a soprano-alto pair answered at the lower octave by tenor and bass), permits retention of the same pitch-classes in both its original and transposed forms. This technique can be seen in the opening measures of *Vigilate* (1589/9, see Example 7.3a). In this passage, Byrd presents two subjects at once in *superius* and *medius*, both of which begin on the final. This material later reappears in *tenor* and *bassus*, transposed down an octave, to begin a varied restatement of the opening measures. Byrd also uses this procedure to begin the *secunda pars* of *Ne Irascaris* (1589/12); see Example 7.3b.

It is also common for an opening pair of voices to be transposed a fifth (soprano-tenor answered by alto-bass, or vice versa). This reworking of opening material

introduces and emphasizes new pitches upon repetition: therefore, we have a contrapuntal manipulation that introduces new pitches, thereby producing variety. The link with the important pitch or pitches stated at the beginning seldom disappears upon transposition; one of the voices often retains one of the pitch-classes of the original pair. When this does not occur, we may instead have a polarity between the final and an important pitch a fifth away from it.

Transposition by fifth occurs at the beginning of the *Secunda Pars* of *Defecit in dolore* (1589/1, see Example 7.4). This section begins with an imitative duo (part of a four-voice variably constructed canon). The contratenor leads and the tenor follows a breve later. In this pair of entries, both voices begin on A. The next pair of entries (superius and bassus) answers the first pair by each beginning on E. Because of the registral position of each voice pair (two middle voices answered by an upper-lower pair), the upper part ascends a fifth, while the lower voice descends a fourth. This emphasizes the same pitch-classes as would have happened had both parts ascended a fifth.

2. Transposition and Canonic Procedures

The technique of transposition has broader implications in varying a presentation type that has more than two voices. For example, adding a third voice at the same melodic interval and temporal distance as the first two produces a transposed canon. Byrd seldom uses canon at the very beginning of a motet, though as we have seen in the previous chapter (pages 165-69), it more often begins an internal opening. However,

Byrd prefers to use canon as a developmental procedure within an imitative point, creating a sense of culmination rather than presentation.

Byrd's transposed canons can either confirm an important pitch locally (if the transposition level is the octave), or move away from one (if the transposition level is an interval other than the octave). As for the former case, the canon on the word "jubilate" in *Laetentur coeli* (1589/16), measures 18-20 (see Example 7.5), has successive entries an octave apart on C. This motet has F as its final; Byrd is emphasizing the final's upper fifth as a local goal.

Transposition by successive fifths creates a gradual departure from a central pitch, and is therefore an effective technique to articulate middles through tonal loosening. This is illustrated by Byrd's transposed canon at the fifth from *In resurrectione tua* (1589/10), beginning in measure 26 (Example 7.6). In this passage, Byrd combines transposed canon with parallel doubling to create a sense of tonal departure.

Transposed canon at other intervals than the octave and fifth also occurs in the 1589 *Cantiones*. For example, *Laetentur coeli* begins with a transposed canon by descending fourth, as shown in Example 7.7. This canon begins on the final F and then departs from it rather forcefully for a beginning gesture. The move to C is not surprising (it creates a polarity between the final and its upper fifth), but the subsequent move to G is unusual. Byrd balances this move by returning to the initial F a beat too early in measure 5. Thus, he disrupts the periodicity of the opening canon to re-establish the passage's primary pitch.

3. Canons with Varied Transposition Levels

Transposing the voices of a canon different distances, a variation process that changes the vertical intervals in the combination, is never found in the opening gesture of a motet, but may occur in middles. This technique occurs in a canon by alternating fourths and fifths, a subcategory of the transposed canon presentation type. This canon, which can potentially emphasize a central pitch and its dividing fifth, is technically problematic. If the canonic entries are successively a fifth and a fourth higher, the composer can design a contrapuntal combination in two ways. The composer could use consonant intervals that remain consonant when reduced in size by a tone (i.e. sixths become fifths, and fifths become fourths, the latter only possible between upper parts). Alternatively, the composer could use consonances that transform into legally treated dissonances. These limitations often force Byrd to combine canon at unequal intervals with melodic variation so that the vertical interval content works out smoothly.

The “amicti stolis” canon from *O quam gloriosum* (1589/13) offers a good example of this technique, and the necessity for melodic variation (see Example 7.8). The subject in the bass begins with three repeated C’s in minims. Byrd’s choice of transposition levels permits him to emphasize the final F and its upper fifth C in this passage. Once the subject begins to descend by step, the limitations of this type of canon become apparent. The interval of a fifth between successive entries on the downbeat of measure 23 will work out fine; it becomes a sixth in the corresponding place between entries 2 and 3 (measure 23, beat 3). However, the following sixth will become a lower neighbour seventh upon restatement, illegal in these rhythmic values. Thus, Byrd has to

adjust the second entry to avoid this dissonance (a descending third, melodically, substitutes for the expected descending step). This use of melodic adjustment to make the combination technically acceptable can create a transposed canon of great complexity: at times, the subject is so free in melodic shape that one gets the impression of rhythmic imitation only. Andrews has noted that “particularly in middle sections of movements, the extent of melodic alteration becomes so great that the attention becomes fixed rather on the rhythmic than on the melodic element of the subject.”⁴ However, Byrd normally provides a recurring core intervallic progression (albeit often brief), in spite of the variable melodic design.

This flexibility often complicates the identification of transposition levels within a canonic passage. The “tanquam aquam” canon from the *Tertia Pars of Deus venerunt gentes* (1589/7) is an especially good illustration of this complexity (see Example 7.9a). A group of entries in measures 144-45 create an apparent canon at alternating fourths and fifths, as bassus, tenor and contratenor present subject entries on F, C and F respectively. Though the “tanquam” portion of the subject preserves its shape, the melodic motion into “aquam” varies. The continuation of this passage is a transposed canon; the first two entries form an interval structure of 5-3-4 where they overlap. This combination then returns a fifth higher. A fourth entry on B-flat in the superius combines with the third entry’s ending to form the intervals 3-1-2 (the original 5-3-4 pattern, varied by double counterpoint at the third). Byrd makes this canon work by varying melodically his subject material; this is the most important means by which Byrd increases the flexibility

⁴ Andrews, *Byrd’s Vocal Polyphony*, 248-49.

and musical utility of his long canonic complexes (Examples 7.9b-c present two further restatements of this canon).

III. Melodic Inversion

The third type of development procedure by which Byrd can vary a presentation type is melodic inversion. This is a type of melodic variation that is more systematic than melodic changes for purely technical reasons discussed above. Morley describes melodic inversion as “the reverting of a point...when a point is made rising or falling, and then turned to go the contrarie waie, as manie notes as it did ye first.”⁵ Melodic inversion may be exact, preserving both the intervals of the subject and their quality upon manipulation, or inexact, in which the intervals are preserved but their quality is not. Both types of melodic inversion are valid in Renaissance style.⁶

Variation by melodic inversion occurs at the beginning of *Defecit in dolore* (1589/1, see Example 7.10a). The pairing of inversionally related subjects is the opening gesture of the piece: an upper neighbour motion on the word “defecit” is immediately answered by a second entry, inverted to become a lower neighbour figure. This passage is Byrd’s only use of melodic inversion at the beginning of a motet in the 1589 *Cantiones*. However, he uses this variation technique in middles on three other occasions. The *Secunda Pars* of *Domine praestolamur* (1589/2) begins with this

⁵Morley, *Plaine and Easie*, 85.

⁶Schubert, “A Lesson from Lassus,” 11, footnote 17. Zarlino illustrates this technique in *The Art of Counterpoint*, 165-70, but does not insist on semitone position being preserved.

procedure (see Example 7.10b). This section resembles the opening of *Defecit in dolore*. The recurring subject “veni Domine” begins with a lower neighbour figure that inverts to an upper neighbour figure upon restatement. Another example is from *Tribulationes civitatum* (1589/14), starting with measure 24 (see Example 7.10c). Byrd presents an upper neighbour motion (“Domine”), and answers it with a melodically inverted pair of voices in parallel thirds.

Finally, we have the “Amen” that concludes *O quam gloriosum* (1589/13). In measure 112 (see Example 7.10d), Byrd introduces a descending scale in the bass, followed four measures later by its melodic inversion in the superius (this variant could also be considered a retrograde form of the original, but when a subject is scalar, its inversion and its retrograde are identical). Since these two forms of the subject are subordinate voices within an imitative point on the word “saeculorum,” Byrd downplays their first appearance; the melodically striking “saeculorum” subject is in the forefront. Once Byrd achieves the ultimate cadential goal of the motet (the final F) in measure 119, the imitative and combinatorial potential of this “Amen” motive is revealed, as shown in Example 7.10e. The descending version of the motive forms a four-voice canon at the semibreve. Byrd uses an inverted entry (the ascending scalar form of the motive) in the middle of this canon. This inverted entry is metrically skewed, beginning on the accented minim (all other entries begin on weak minims in the measure). As a consequence of this rhythmic shift, an even tighter stretto occurs: the entry in the bassus creates a three-voice canon at the minim with the previous superius and the following medius entries.

IV. Invertible Counterpoint

1. Definition and Types

Invertible counterpoint is the final procedure by which Byrd can vary a presentation type; it occurs when one or both voices of a type are transposed so that the registral position of its melodic components is reversed. Variation by invertible counterpoint is one of the fundamental features of imitative polyphony, as it permits subject material to return while the interval structure between the voices changes. This technique is so prevalent in Byrd's compositional style that musical examples from the 1589 *Cantiones* are easy to find, and infinitely varied in procedure and musical content. This type of variation tends to combine with the others discussed above, so its musical effect seldom occurs in isolation.

Invertible counterpoint (henceforth ic) often occurs at the interval of an octave (or its compound, the fifteenth), the twelfth and the tenth. The latter two possibilities are demonstrated by Zarlino in *The Art of Counterpoint*. In his example of ic 12, Zarlino moves one voice the distance of an octave, and the other a fifth in the opposite direction.⁷ In his ic 10 example, Zarlino moves one voice an octave and the other a third (or compound third) in the opposite direction.⁸ These types of invertible counterpoint allow important pitches to return upon variation: with ic 8, the pitches of the original combination can return in both voices; ic 10 and 12 permit pitch retention in one part only. Inversion at the tenth often combines with parallel doubling, thus producing a

⁷Illustrated by Zarlino, *The Art of Counterpoint*, 160-61.

⁸Illustrated by Zarlino, *The Art of Counterpoint*, 163-64.

variant that inverts at two intervals at once. Inversion at these three intervals, either alone or in combination, figures prominently in both Zarlino and Morley, and in Byrd's 1589 *Cantiones*. Inversion at less common intervals (the sixth, seventh, ninth and eleventh) all occur in Byrd's *Cantiones* as well. For technical reasons, these types of invertible counterpoint are much less common than inversion at the octave, tenth and twelfth. However, Byrd's use of inversion at all possible intervals is significant: it is a sign of his diligent efforts to bring back subject material in innovative ways. The following section will explore Byrd's use of invertible counterpoint in his 1589 *Cantiones*, with special emphasis on the use of intervals of inversion not discussed in Renaissance treatises.

2. Invertible Counterpoint and "Ingenuity"

Byrd's use of invertible counterpoint at unusual intervals stems from a larger musical concern: an interest in varied repetition. Zarlino explains the necessity for musical variety as follows:

As variety brings pleasure and delight, so excessive repetition generates boredom and annoyance. Let us...be certain that our counterpoint is so varied that the same passage or harmonic progression is not repeated exactly...To an intelligent person, [such variations] are signs of a lively spirit and an abundance of invention.⁹

Giovanni Maria Artusi later codified Zarlino's opinions into a handy "flow chart" describing how the different elements of a contrapuntal combination may be varied. One

⁹Zarlino, *The Art of Counterpoint*, 153-154.

should vary the notes, the rhythms or the vertical intervals.¹⁰ Invertible counterpoint allows for variation of the vertical intervals,¹¹ and often the notes as well.

Zarlino's description of invertible counterpoint puts the Renaissance view of the technique into clearer perspective:

Here, a composition is so ingeniously designed that it may be sung with the parts interchanged. Thus a repetition will produce a harmony different from that first heard in the same two parts.¹²

Thus, Zarlino acknowledges the importance of invertible counterpoint as an element of a skilful composer's technique, since he explicitly refers to it as "ingenious." Nor is this technique merely an example of skill for skill's sake, but rather, an important tool with which a composer could make a musical composition more varied and effective.

Zarlino's comments about the musical desirability of varied repetition could be read as a challenge to the composers of his time to investigate the musical limits of this technique. One avenue of investigation is for composers to probe inversion at less common intervals, the better to display their "lively spirit and abundance of invention."

It is within this context of technical skill and musical creativity that William Byrd's use of invertible counterpoint must be understood, and the uniqueness of his procedures acknowledged. An experimental spirit permeates Byrd's musical style, especially in the collection of *Cantiones* currently under examination. These motets in

¹⁰This chart is reproduced in Schubert, *Modal Counterpoint*, 104-105; see also the accompanying discussion, 103.

¹¹The sole exception is the case of Zarlino's "second mode of double counterpoint," in which a combination of registral reversal and melodic inversion can result in the vertical intervals being retained upon variation. See *The Art of Counterpoint*, 165-66.

¹²Zarlino, *The Art of Counterpoint*, 159.

general are particularly notable for their contrapuntal ingenuity; Byrd himself described these works as displaying “greater skill and depth” than the collection of psalms, sonnets and songs that he had published in 1588.¹³ One could infer that this “skill and depth” manifests itself, at least in part, through Byrd’s distinctive methods of varying musical content by using rare intervals of inversion.

3. Common Intervals of Inversion (octave, tenth, twelfth)

Before examining Byrd’s use of invertible counterpoint, it is useful to examine the advantages and pitfalls of each possible interval of inversion from a purely technical standpoint. To this end, I will provide a chart of intervals for each type of invertible counterpoint from the third to the twelfth, beginning with the most common types and proceeding to the more rare ones.

The three common types of invertible counterpoint (inversion at the octave, tenth and twelfth; henceforth abbreviated as ic 8, ic 10 and ic 12) are also the most musically viable: they all contain many consonances that remain consonant upon inversion. These three intervals of inversion appear below as Tables 1, 2 and 3. In these and all subsequent tables, the upper line of integers shows the vertical interval in the original combination; the lower line shows the interval it will become upon inversion. Usable consonances in two voices are in bold type. Consonances that invert to fourths are only usable in three or more voices, where they can occur between upper voices as part of a 6_3 or 8_5 sonority; these I have put in italics.

¹³Cited by Brown, *Cantiones Sacrae 1589* (Ed. Brown), page v.

Table 1: ic 8

original	1 2 3 4 5 6 7 8
inversion	8 7 6 5 4 3 2 1

Table 2: ic 10

original	1 2 3 4 5 6 7 8 9 10
inversion	10 9 8 7 6 5 4 3 2 1

Table 3: ic 12

original	12 11 10 9 8 7 6 5 4 3 2 1
inversion	1 2 3 4 5 6 7 8 9 10 11 12

As shown above, ic 8, 10 and 12 all produce a number of usable consonances. With ic 8 (and its compound, ic 15), only the fifth is problematic, since it inverts to a potentially-dissonant fourth; the octave, third and sixth are usable. With ic 12, the interval of a sixth is unusable (it becomes a seventh upon inversion); the octave, fifth and third are all usable. With ic 10, all consonances (unison, third, fifth, sixth, and their octave duplicates) remain consonant in the inversion. However, since imperfect consonances invert to perfect consonances, parallel motion cannot be used in the original combination, as it will create illegal parallels in the inversion (parallel thirds become parallel octaves, while parallel sixths become parallel fifths). These three varieties of

invertible counterpoint can readily occur in a two-voice texture, as the great number of available consonances will permit construction of a melodically-interesting and intervallically-varied contrapuntal combination. Thus, it is far from surprising, given this relative freedom of choice, that these three intervals of inversion are the types that occur with the greatest frequency in the Renaissance musical literature.

4. Other Intervals of Inversion

Inversion at unusual intervals within the confines of Renaissance style and *Prima Prattica* dissonance treatment is difficult, but not completely impossible in the hands of an imaginative and skilled composer. I will discuss the musical possibilities and pitfalls for each of these rare intervals of inversion below. Invertible counterpoint at the seventh is the most flexible of the rare types. It is reasonably viable in two voices, though less so than ic 8, 10 and 12, discussed above. The intervals in the original map onto the intervals in the inversion as follows (see Table 4, below):

Table 4: ic 7

original	1	2	3	4	5	6	7
inversion	7	6	5	4	3	2	1

Thus, with ic 7, thirds and fifths are freely usable, since they interchange upon inversion. The fourth inverts to itself, making it a possible consonance in a combination of upper parts; all of the above applies to ic 14 (compound seventh) as well. This type of

inversion is less manageable than ic 8, 10 or 12, given the smaller number of consonances which invert legally.

Inversion at the sixth is equally limiting. In this type of invertible counterpoint, sixths and unisons invert to each other, as do fourths and thirds. This type of inversion is shown in Table 5:

Table 5: ic 6

original	1 2 3 4 5 6
inversion	6 5 4 3 2 1

Inversion at the fifth resembles ic 12 in its viable interval possibilities, though the tighter registral space limits the choices somewhat. Unisons and fifths invert to each other, and thirds to themselves, as seen in Table 6:

Table 6: ic 5

original	1 2 3 4 5
inversion	5 4 3 2 1

Inversion at the third is more problematic than the preceding types in a two-voice texture. Due to the cramped registral space in which to work, composers have shunned this interval of inversion. Unlike ic 6 and ic 7, there are no additional consonances that

invert correctly when a third voice is added, since the interval of a fourth is outside the range of this type of inversion. I present this interval of inversion as Table 7, below:

Table 7: ic 3

original	1 2 3
inversion	3 2 1

The viability of the two remaining intervals of inversion is even more limited than the preceding ones in a two-part texture. Both ic 9 and ic 11 have only a single consonance that inverts to another consonance (though each has additional possibilities in three parts), as shown in Tables 8 and 9, below:

Table 8: ic 9

original	1 2 3 4 5 6 7 8 9
inversion	9 8 7 6 5 4 3 2 1

Table 9: ic 11

original	1 2 3 4 5 6 7 8 9 10 11
inversion	11 10 9 8 7 6 5 4 3 2 1

Given the restrictions, these intervals of inversion are only marginally useful in two voices. The composer can expand his or her musical resources by designing consonant

passages that invert to properly treated dissonances, but this only slightly attenuates the technical difficulties. One way to make these rare intervals of inversion musically plausible is to add a third voice, thus making the interval of a fourth available as a consonance between upper parts. This extra consonance makes plausible intervals of inversion that are of little musical use in a two-part texture. In three or more voices, due to the consonant status of the fourth, any interval of inversion larger than a second creates a situation in which two or more consonances invert to other consonances. Thus, in a thicker texture, all intervals of inversion are somewhat viable between upper parts.

Returning to Tables 8 and 9, above: when inverting at the ninth, the usable consonances are the fifth in two voices, to which we add the fourth and sixth (which invert to each other) between upper parts of a three-voice texture. When inverting at the eleventh, the sixth inverts to itself, and is therefore usable in a two-voice texture. In three or more voices, one can add the octave and fourth between upper parts, which invert to each other. The musical potential of these intervals of inversion is somewhat limited, but not to the point where Byrd avoids them entirely. A brief example of ic 9 is found in *Deus venerunt gentes* (1589/7), measures 47-50 (see Example 7.11) as the incidental result of complex contrapuntal manipulations and melodic variation within a concluding canonic passage. A more extended use of ic 11 appears in *Aspice Domine* (1589/11); this passage will be discussed at length below.

5. Invertible Counterpoint and Beginnings

Now that the technical aspects of all intervals of inversion have been examined, I will proceed to a discussion of how Byrd's use of invertible counterpoint intersects with form. I will show how Byrd's use of invertible counterpoint helps to emphasize the contrast in musical content and procedure between beginning, middle and end. As with the 24 presentation types described earlier, types of invertible counterpoint that typify beginnings differ from those that occur mainly in middles.

Byrd's beginnings avoid the more unusual types of invertible counterpoint in favour of the common ones (especially ic 8 and 12). One seldom finds examples of unusual intervals of inversion at or near the beginning of a motet, or the beginning of its subsequent *partes*. Likewise, internal openings tend to be conventional in their use of invertible counterpoint. One can infer that Byrd prefers an initial clarity of presentation when he introduces his subject material, as well as in the initial stages of their variation. After Byrd presents subject material, he prefers to vary it initially by using intervals of inversion that allow retention of important pitches (e.g. the final and its upper or lower fifth) when the registral position of the voices is reversed. This process permits tonal clarity as the initiating subject material begins to be developed. Due to this desire for clarity of presentation, invertible counterpoint in beginnings is typically either at the octave (preserving the original pitch-classes in all voices upon inversion)¹⁴ or at the fifth

¹⁴Though it is possible to invert at the octave without preserving the pitch-classes of the original combination (one voice could ascend a fifth while the other descends a fourth, for example), this occurs rarely in Byrd: retention of pitch-classes is paramount in this type of invertible counterpoint.

or twelfth. Strictly speaking, interval of inversion and establishment of central pitches are separate musical considerations which operate independently of each other; nonetheless, Byrd carefully selects transpositions when he uses invertible counterpoint to highlight important pitches, at least when he uses this technique early on in an imitative point. For example, inversion at the twelfth (or at the fifth) permits Byrd to retain the original pitch-classes in one voice. Since Byrd often begins his motets by emphasizing the final and/or its upper fifth, inversion at the fifth or twelfth permits these pitches to be established as a stable region, as one of these important pitches can be retained in the varied form of the combination.

The beginning of *O Domine adjuva me* (1589/3, see Example 7.12) is a good illustration of how Byrd uses ic 8 to maintain an important pitch upon variation. The initial non-imitative module (measures 1-2) is a simple cadence to the final A. When this combination returns in measures 4-5 with its voices interchanged, this goal pitch is retained in both voices. Inversion at the twelfth is more interesting than ic 8 in that it permits introduction of new pitches while others are retained. The “occupaverunt-interiora mea” point from *Tristitia et anxietas* illustrates: as shown in Example 7.13, the medius and contratenor are a cantizans-tenorizans cadence pair leading to E in measures 23-24, above which Byrd adds a statement of “occupaverunt,” also ending on E. When this three-voice package returns in measures 25-26, the medius and tenor still lead to E, but Byrd places the “occupaverunt” subject a twelfth lower than in its preceding statement (ending on A). This new transposition varies the original combination by ic 12. The cadential arrival on E is retained, but the “occupaverunt” voice plays a different role

in the cadence the second time around. The second and third notes of the subject are an evaded basizans “5-6” in measures 25-26, whereas this subject segment was an evaded tenorizans “2-3” in measures 23-24. Thus, alteration by ic 12 creates an evolution of pitch content and tonal focus in this passage.

6. Parallel Doubling and ic 10

Byrd’s procedures in the *Tristitia* passage discussed above illustrate the types of considerations a Renaissance composer might have in moving from a texturally consistent opening gesture toward a climactic moment in the middle of an imitative point. At some stage, however, the composer may wish to create a sense of forward motion: invertible counterpoint of less conventional types often plays a vital role in this process.

One technique that Byrd uses in middles for the purpose of tonal departure is inversion at the tenth. Ic 10 introduces a new pitch a third above or below its original level, a remote tonal region. This remoteness is not present when one varies by ic 8, in which the original pitches can be retained in all voices. Ic 12, in which the new pitch introduced is a fifth above or below its original level (and often an important note in the tonal system), is equally stable tonally. Inversion at the tenth also often combines with textural thickening: it could arise as the incidental result of combining ic 8 or 12 with doubling in parallel motion of one voice from the original contrapuntal combination.

Byrd uses ic 10 as a variation procedure in the *Quarta Pars of Deus venerunt gentes* (1589/7), measures 220-38. In this section, he designs three different imitative passages, each more elaborate than the preceding one, to set the text “et illusio his,” (see

Examples 7.14a-c). An important means of variation in these three passages is the doubling of one voice from a previous combination in parallel motion, thus producing ic 10 as a side effect. The three passages display a variety of transpositions by third and doublings in thirds (or sixths), a veritable breeding ground for inversion at the tenth. The three imitative passages are illustrated below as Figures 7.1a-c. These diagrams chart first notes of subject entries and cadence points in each of the three “et illusio his” passages as a way of providing a reductive map of their salient musical features. I have placed each portion of the reductive diagram directly above the score to which it corresponds. It should be noted that each “et illusio” passage is preceded by a “subsannatio” subject. This subject I have omitted from the diagrams, seeing as it is not the primary focus of them.

As can be seen from Figure 7.1a and Example 7.14a, the opening imitative duo sets up an A-D polarity. This is the harmonic motive of the passage: the 3-6-5-3 interval pattern created by the imitative pair at the fifth, separated by a minim (I have circled this duo pair and its subsequent restatements on Figure 7.1a). Byrd’s first varies the motive by transposing it up a third, setting up a competing C-F dyad. Finally, Byrd retains the C, and transposes the consequent voice up a compound third to A, thus varying the original harmonic motive by ic 10. As is evident from the diagram, the harmonic motive is retained, though the reversal of register (lower voice first, rather than upper, as in the original) changes the interval pattern. Byrd leaves the last subject entry incomplete, though the four-interval pattern created by the overlapping duo pair is retained. The truncation of the melodic line affects only the *melodic* motive and not the *harmonic*

motive created by its overlap with a second voice. Thus, it would appear that Byrd considered the interval pattern 3-6-5-3 to be the central feature of the passage that he wished to retain, and not the individual melodic strands that combined to create it.

Measures 225-29 (Figure 7.1b and Example 7.14b) display a somewhat more intricate recasting of this duo. Byrd retains the three imitative duos of the earlier passage (I have again circled these duo pairs that form the harmonic motive on the figure). However, he adds a parallel voice to the first and third pairs. The tenor-medius pair (measure 225) varies the initial harmonic motive by ic 10, while the A-D tenor-bassus pair simply restates it an octave lower. This new three-voice combination is not a new harmonic motive. In measure 226, Byrd doubles the consequent voice in thirds, whereas in measure 227, he doubles the guide. Thus, he provides the listener with two different variants expanding the original two-voice cell. In measure 227, the lower two voices state the original combination at pitch (the A-D duo pair circled on the diagram), while the medius-bassus pair varies the harmonic motive by double counterpoint at the third. (Double counterpoint at the third, or dc 3 for short, is ic 10 without the registral reversal.

Finally, measures 233-38 (Figure 7.1c and Example 7.14c) display an even greater departure from the original harmonic motive of measure 220. (This passage follows a brief segment of free material, including a pair of “et illusio” entries at a new time-interval that lead to the cadence in measure 233.) The cluster of entries in measure 233 resembles measure 227, as Byrd doubles the guide in sixths. The contratenor-medius combination is the original harmonic motive varied by ic 10, whereas the tenor-medius combination varies it by ic 8. The latter voice pair is the one that has the closer relation to

the original due to the interval of a fifth between the entries' starting notes. The canon in measures 236-237 recalls all of the procedures seen earlier. This canon contains four successive statements of the original harmonic motive, circled on the diagram. The variations of the harmonic motive are, in order, ic 8, dc 3, ic 8 and ic 10. A concluding bassus-contratenor pair in measure 237-38 provides a final statement of the harmonic motive, varied by ic 10. The increased density of motivic material compared to the previous two "et illusio" passages gives a feeling of culmination.

This motion by thirds is paralleled at the middleground level by the overall cadential structure. Following a proper cadence to D in measure 218, the first "et illusio" cluster immediately moves by ascending third to prepare a cadence to F. This emphasis on F remains throughout the second group of entries, and most of the way through the third group. Finally, another transposition up a third prepares the cadence to A in measure 239, which immediately overlaps with a cadence to D that returns the passage to its starting point.

7. *Aspice Domine* and ic 11

Due to the desire for development and the introduction of new pitch classes, the middle of a motet or imitative point is the place where Byrd is most likely to use less common types of invertible counterpoint. Unusual intervals of inversion can introduce more remote pitches within the diatonic system, creating a contrast between middles and beginnings (or endings) which tend toward tonal stability.

The reverse occurs in Byrd as well: unusual intervals of inversion can generate stability in situations where the original combination being manipulated is contrapuntally peculiar. One might wonder if Byrd composed the less unusual version first, and withheld it until later in the passage. In any event, Byrd must have worked out the developmental and combinatorial possibilities of his motives beforehand. Without this planning, he would not have had a framework within which to decide exactly how and where to distribute his motivic material in the imitative point.

The “et vide” point from the cantus firmus motet, *Aspice Domine* (1589/11), demonstrates the possibility of presenting a peculiar combination and normalizing it through the use of invertible counterpoint at an unusual interval. This passage begins with the initial statement of its primary motivic material in measures 51-52, as shown in Example 7.15a. This three-subject harmonic motive is made of two florid parts over a descending step E-D in the cantus firmus tenor line. The contratenor is a cantizans motion to D, creating a sixth-to-octave motion against the cantus firmus. The medius, in presenting the main melodic motive of the passage against the contratenor-tenor cadential pair, subverts the cadence with its dissonant C-natural. Byrd states this intriguing contrapuntal combination two more times at the original pitch level (in medius, contratenor and tenor at measures 61-62 and in contratenor, tenor and bassus at measures 67-68, as seen in Example 7.15b). The non-varied recurrence of this combination and its striking use of dissonance help the listener to recognize it as an integral structural element. Between the second and third statements of the combination at pitch, Byrd writes a remarkable variant. In this passage (measure 64), Byrd retains the cantus firmus

descent E-D, and moves it to the bassus. Above this motion, Byrd shifts the middle voice of the original combination up an octave, and transposes the upper voice down a fourth. The end result of this pair of transpositions is ic 11 with respect to the original combination; this variant is shown in Example 7.15c. Oddly enough, this unusual interval of inversion has a stabilizing effect. The cross-relation disappears, as the voice that caused it now provides a G-F supporting altizans motion in the cadence. This tonal equilibrium is short-lived, however. The original combination wins out in the end with its final appearance in measures 67-68. The return of this peculiar initial combination at the end of the section effectively subverts the stability briefly created by the less dissonant variant of measure 64.

8. Unusual Inversions and Concluding Canon

One also finds unusual types of invertible counterpoint near the end of a composition (or approaching a large formal boundary within a composition), through which Byrd creates a feeling of culmination. Such passages are often typified by a thinning out of melodic material to a single subject, which then appears in imitation at various intervals of transposition and inversion. Among the interesting examples of this category is the canonic passage that concludes the *Quarta Pars of Deus Venerunt Gentes* (1589/7), which I will now discuss in detail.

The closing measures of *Deus Venerunt Gentes* contain a pair of four-voice canons on a cadential figure, “nostro sunt.” The first canon (Example 7.16a) varies the contrapuntal combination formed by the initial pair of canonic voices through variation

by unusual intervals of inversion. The second canon (Example 7.16b) confirms the final by moving from unusual inversions at the passage's beginning to more common ones at the end. Byrd's contrapuntal procedure in this passage articulates a sense of departure and return as a deeper motivation for the particular sequence of motivic details on the musical surface.

The harmonic motive is formed by the contratenor and bass entries that begin the first canon (measures 259-60). This sequence of vertical intervals includes a pair of striking dissonances: an accented passing ninth in the upper voice (formed by the first of the pair of eighth notes) and a 9-10 suspension in the lower part. This relatively long combination has clarity of rhythmic shape and a striking use of dissonance that makes it readily recognizable upon manipulation later on. The first variation by invertible counterpoint is routine: a third canonic entry in the tenor combines with the contratenor voice, varying the initial combination by ic 8. However, the next variation is more greatly divergent. The superius-tenor pair (the third and fourth canonic entries) varies the original combination by ic 7. One consequence of this variation is the complete reworking of dissonance content: the only dissonance within the combination is the lower neighbour formed by the second of the pair of eighth notes in the lower part. This passage illustrates one of the intriguing aspects of inversion at unusual intervals; when a combination is inverted at the octave or twelfth, consonances generally remain consonant and dissonances remain dissonant. Byrd's approach is novel here, since he creates a harmonic motive that will admit to a variety of possible contexts for dissonance. The end

result in this passage is a more substantial reinterpretation of the original combination upon variation.

As noted above, the second canon (measures 262-63; see Example 7.16b) reverses the procedure of the first one, moving from unusual to common types of invertible counterpoint as it progresses. Byrd re-establishes the final D as the cadence approaches by returning to a more typical sort of invertible counterpoint to conclude the motet. The opening pair of voices in the second canon (medius and tenor) lies a fourth further apart than the original combination; this variation is dc 4. The next variant (the tenor-contratenor pair) is ic 10. Finally, the last pair of entries (contratenor-medijs) achieves stability: Byrd restates the initial combination on its original pitch classes. With this last statement of the harmonic motive, Byrd returns to the final D, clarifying it as the ultimate goal of the motet.

V. Conclusion

The foregoing discussion outlines the procedures by which Byrd develops opening material. I have examined how an increase in textural density (parallel doubling) can create emphasis on a melodic subject within an imitative point. I have also explored how Byrd uses transposition to create a sense of tonal departure and return, and how transposition relates to various types of canon in Byrd's 1589 *Cantiones*. For example, transposed canon by fifth can effect a rapid departure from a central pitch, whereas canon by alternating fourths and fifths permits retention and emphasis of a central pitch and its upper or lower fifth in a passage. I have examined melodic inversion as a (somewhat infrequent) means of subject variation in this collection. Finally, I have demonstrated

how invertible counterpoint at a variety of intervals is not only common in Byrd's 1589 *Cantiones*, but furthermore can be used as an indicator of where we are in an imitative point: beginning, middle or end. As with simple transposition, invertible counterpoint can be used to retain central pitches or to depart from them. Thus, the exact interval of inversion that Byrd uses as a means of varying a contrapuntal combination can be a major determinant of a passage's tonal shape and direction.

Furthermore, I have demonstrated how Byrd combines these variation techniques in an imitative point, creating an effect of great musical intricacy. The "nostro sunt," "et illusio his" and "et vide" imitative points examined above are a veritable summary of the variation procedures described in this chapter: textural change, transposition, melodic variation and invertible counterpoint. Byrd's use of these procedures in combination with each other provides a fascinating solution to the universal concern of balancing unity and variety in a musical work.

8.

Contrapuntal Strategies

in Tristitia et Anxietas

To conclude this detailed consideration of Byrd's contrapuntal strategies in his 1589 *Cantiones*, I will apply the analytical tools of the preceding chapters to a complete motet: *Tristitia et anxietas* (1589/4).¹ First, I will discuss general features of *Tristitia*, including its pitch centricity, cadential goals, text and formal structure. I will demonstrate that Byrd subdivides his imitative points into a number of distinct phases. These phases are characterized by the interaction of subject material and cadences and recurring harmonic motives. The presence of these features within a phase allows us to talk about form within an imitative point, in particular, distinctions between Byrd's beginning, middle and ending strategies. Thus, following Schubert's study of the Lassus duos, I will posit an intersection of form and contrapuntal procedure in Byrd's compositional planning.²

¹The 1937 edition, *Cantiones Sacrae 1589* (ed. Fellowes), gives separate numbers for motets in multiple *partes*, following Byrd's edition of 1589. Hence, *Tristitia et anxietas* appears as motets 6 and 7 in any citations before 1988 (the publication year of Brown's revised edition).

²cf. Schubert, "A Lesson from Lassus," 4.

I. General Information

Tristitia et anxietas dates from the early to mid-1580s, according to Kerman,³ and belongs to a series of works that display the first maturity of Byrd's middle period style. Kerman has singled out this motet for special commendation, describing it as the masterpiece among the works from this period, and relating it to an earlier unpublished motet, *Peccavi*.⁴ Other motets of substance, *Vide Domine* (1589/6), *Deus venerunt gentes* (1589/7) and *Ne irascaris* (1589/12) date from this period as well; one could see 1580 as a watershed in the composer's development.

Tristitia et anxietas has a natural signature and A as its final. The motet's main affective element is the semitone between E and F that is prominent in the opening imitative point and elsewhere (e.g. the "vae mihi" subject). Though Kerman has commented on the absence of the sharp sixth degree (F#) "almost entirely, except in incidental contexts" in A pieces,⁵ *Tristitia* juxtaposes passages where F-natural dominates (measures 1-21 and 82-113) with other passages that use F# in more than incidental fashion (measures 23-26, 114-19 and 145-47). However, the prominence of the E-F semitone from the outset gives the motet a distinct Phrygian flavouring, further confirmed by Byrd's frequent addition of B-flat.

³According to Kerman's chronology, see Kerman, "Chronology and Canon," 363. In *The Masses*, Kerman dates *Tristitia* a little later than *Peccavi*, which appeared in a manuscript dated 1581. (*The Masses*, 138-39).

⁴Kerman, *The Masses*, 137.

⁵Kerman, *The Masses*, 69.

Tristitia et Anxietas divides into two *partes*, a “sackcloth and ashes” *prima pars* followed by a more hopeful *secunda pars*.⁶ This is a typical textual procedure in the 1589 *Cantiones* also found in *Defecit in dolore*, *Domine praestolamur*, *Vide Domine*, *O quam gloriosum* and *Laetentur coeli* (1589/1, 2, 6, 13 and 16). The complete text is as follows, both in the original Latin and in Alan Brown’s English translation.⁷ Each line of text corresponds to an imitative point in Byrd’s setting; the caesuras in the Latin text mark a break between subjects of a double or triple point. Cadences in bold type contain the *cambiata* figure typical of Byrd’s most final cadences.

Table 8.1a: Text and Cadences in *Tristitia et anxietas*

Prima Pars

<u>Measures</u>	<u>Text</u>	<u>Cad. Goal</u>
1-21	Tristitia et anxietas	A
18-42 ⁸	occupaverunt // interiora mea.	A
43-55	Moestum factum est cor meum // in dolore,	A
55-82	et contenebrati sunt // oculi mei.	A
83-113	vae mihi, // quia peccavi.	A

Secunda Pars

114-135	Sed tu Domine, // qui non derelinquis // sperantes in te,	A
135-156	consolare et adjuva me // propter nomen // sanctum tuum,	G
156-176	et miserere mei.	A

⁶Kerman, *The Masses*, 140.

⁷*Cantiones Sacrae 1589* (ed. Brown), xxi-xxii.

⁸Measures 18-21 are a blending of the first two imitative points.

Table 8.1b: English Translation of Text⁹ (sectional divisions are as in the Latin text)

Prima Pars

Sorrow and anxiety // have taken hold of my inmost being.

My heart is made sorrowful // in grief,

and mine eyes // are darkened.¹⁰

Woe is me, // for I have sinned.

Secunda Pars

But thou, O Lord, // who forsakest not those // who hope in thee,

comfort and help me // for thy holy name's sake,

and have mercy on me.

The main formal divisions between large sections occur at measures 43, 82, 113 (the end of the *prima pars*), 135 and 156.¹¹ The first two sections contain two imitative points each that dovetail with each other; this will be taken up below. The section lengths gradually diminish as the motet progresses. Following an opening segment of 42½ measures,¹² subsequent sections are 39, 31, 22½, 21 and 20 measures in length. This progressive shortening of sections recalls Schubert's "acceleration model,"¹³ in which musical activity becomes more condensed both within a point and overall as the work continues. This gradual concentration of musical activity has an impact on the individual

⁹From *Cantiones Sacrae 1589* (ed. Brown), xxiii.

¹⁰Brown has inverted this phrase with respect to the original Latin; i.e. "mine eyes" = "oculi mei."

¹¹Measure numbers are from *Cantiones Sacrae 1589* (ed. Brown).

¹²Brown adds an extra semibreve to measure 41 so that the cadential goal occurs on a downbeat. A similar notational procedure is necessary in the opening section of the *secunda pars*. See *Cantiones Sacrae 1589* (ed. Brown), 46, 57.

¹³Schubert, "A Lesson from Lassus," 6.

points' character: rather expansive, leisurely points dominate the *prima pars*, whereas more compressed, almost pithy points characterize the contrasting *secunda pars*. Thus, even though both *partes* are made up of three large sections, the *secunda pars* is barely half the length of the *prima pars*. These formal divisions correspond to the motet's textual punctuation, which Byrd supports musically through cadential articulation. Five of the cadences include all five voices and resolve on the final A. These cadences are particularly final in effect: they contain Meier's three melodic-cadential roles (cantizans, tenorizans and basizans), plus one or two supporting altizans motions to fill out the texture. Byrd highlights the cantizans, the cadence's structural upper voice, by placing it in the highest part in each of these cadences.

The other three cadences are unique: in measures 41-42, Byrd cadences to A in four voices only; the superius voice is silent. This absence of the uppermost voice insures that the motet doesn't come to a complete halt too soon. The arrival on A in measure 55 is even less final in effect; Byrd treats it as the "5" of an abandoned cadence to D (as noted on Table 8.1a). The formal unit ending in measure 156 is even more distinctive: it cadences to G. This is the only tonally open-ended cadence of the motet; it creates a need for continuation and a sense of acceleration into the work's closing point. As well, all of these cadences are less final in effect. The cadences in measures 42 and 156 contain cantizans, basizans, and evaded tenorizans ("2-3"). Moreover, unlike the other five cadences, the cantizans appears in an inner voice in these less-final cadences. Byrd instead highlights the evaded tenorizans gesture ("2-3") in the uppermost part. Likewise, in the cadence in measure 55, Byrd hides the cantizans in an inner part, and

leaves it incomplete. The open-ended effect of this cadence prepares the emphasis of D in the opening measures of the following point (measures 56-62). All three of these cadences conclude internal openings; their relative lack of finality reflects their “middleness,” formally speaking.

I will now consider the way in which Byrd ornaments each of the structural cadence points in *Tristitia*. The cantizans line is embellished by the requisite cadential suspension in all of the cadences discussed above. Byrd’s practice supports Morley’s requirement of a suspension to create the most final cadential effect.¹⁴ The cambiata ornament in one of the altizans roles that Byrd generally reserves for his most final cadences occurs three times. This melodic gesture is in the contratenor voice all three times that it appears (the cadences that close the *prima* and *secunda pars*, and at the cadence to A in measure 135, midway through the *secunda pars*). This last-mentioned cadence ends an internal opening, and is therefore an unusual formal location for the cadential cambiata figure. One could argue that Byrd’s motivation is based on the text: the firm cadence imparts to the phrase, “sperantes in te” (“[who] hope in thee”) a certain conclusiveness and forcefulness. However, one could argue for a purely musical motivation: the decisive return to A at this juncture sets in relief the emphasis of C and G that dominates the following formal unit.

The variety of presentation types at openings is considerable in this motet: Byrd uses hybrid presentation types at a number of openings, and begins the others with free

¹⁴Morley, *Plaine and Easie*, 73.

material (i.e., no harmonic motives). This mix of hybrids and free beginnings is shown in Table 8.2, below:

Table 8.2: Opening Presentation Types in *Tristitia et anxietas*

Measure	Text	Figure	Presentation Type
1-3	Tristitia	5.6	homophonic double point plus parallel doubling
23-25	occupaverunt	5.9	semi-imitative
43-47	Moestum...	n/a	free homophonic
55-57	et contenebrati	n/a	free imitative
82-84	Vae mihi	n/a	free imitative
114-28	Sed tu Domine	n/a	free imitative
135-36	Consolare	5.9	semi-imitative
156-58	et miserere	5.8	imitative duo plus parallel doubling

The absence in this motet of the simpler two-voice types (Figures 5.1, 5.2 and 5.3) that most often dominate openings is striking. Byrd often introduces an imitative pair to begin a point, but does not develop it further (“et contenebrati” and “Vae mihi” both fit this description). These points begin with free imitation; Byrd reserves their harmonic motives for later on in the point. Also of note are the first and last points, which begin with a three-voice harmonic motive including parallel doubling. The second and

penultimate points are even more complex, beginning with semi-imitative presentation. All of the intervening points (measures 43, 55, 82 and 114) begin with free material. Thus, Byrd orders his presentation types to create an arch form.

II. Detailed Analysis of Each Imitative Point

I will now move on to a detailed account of each imitative point's salient features. For each point, I will present a reductive tonal plan; these appear as Figures 8.1 through 8.8 (see Volume 2, page 116 for a general commentary on symbols used in these charts). These reductive analyses include starting pitches of subject entries and cadence points. Subjects, cadences, and their interaction help the analyst to divide an imitative point into distinct phases of musical activity. These phases feature repetition and variation of harmonic motives. The presence or absence of certain subjects in a double or triple point helps to define phases as well (final phases are characterized by the absence of a double point's first subject, and the saturation of the contrapuntal fabric with the second subject, for example). Subject transposition levels also are a factor in segmenting an imitative point into phases: they tend to group around specific pitches, either confirming the final or tonally remote from it. Finally, cadential goals (whether the final or a different pitch) and their interaction with subject material play a role in this subdivision into phases. Byrd's musical choices in all of these areas help to define central pitches at the beginning and end. Departure from these pitches, moreover, can be seen as a characteristic feature of middles in his style.

For each section, I have designated the most frequently occurring melodic shape of Byrd's subject material as its "prime form." This form is not necessarily the first one to appear in the music: Byrd often does not begin with the prime form of a subject, but instead, evolves toward it as an imitative point develops. Evolution of subject material signifies middles in Byrd's imitative points, and, as with the other musical features discussed above, helps the analyst to divide the point into phases. Thus, as I will demonstrate below, melodic and contrapuntal variation both play important roles in defining form at the level of the point in this motet.

1. The *Prima Pars*

The opening point ("Tristitia et anxietas") divides neatly into three phases, as shown in Figure 8.1. The first phase (measures 1-11) presents the main subject material in two related homophonic three-voice blocks (measures 1-3 and 4-6), each emphasizing the primacy of the triad on E. The main recurring form of the subject does not occur at the beginning. Byrd begins with a variant form of the subject (labelled as B1 and G#1 in Figure 8.1) and reserves the "prime form" for measures 4-6. All versions of the opening harmonic motives are circled on Figure 8.1. Subsequently, two "thickened" and varied restatements of this opening three-voice combination occur. The first variant presents the three-voice block of measures 1-3, with the first note of each subject altered by a perfect fourth. In addition, Byrd adds a fourth voice: the superius entry on E in measure 5 adds an imitative element to the original homophonic block (this new combination is now semi-imitative presentation plus parallel doubling, as schematized in Figure 5.24). The

final variant of the passage's harmonic motive more closely resembles the opening measures. Byrd presents the upper two voices of measures 1-3 with the supporting bass of measures 4-6, and adds a fourth voice doubling the subject. I have circled this variant on Figure 8.1, and placed the entry on A in the medius voice in parentheses. This final gesture leads to a simple Phrygian cadence to A. The medius supplies the descending semitone "2-1" over an unornamented "7-8" in the bassus.

Measure 11 marks the beginning of this point's second phase. This phase, in contrast with the opening 10 measures, is imitative in texture, and uses the "tristitia" subject from the upper two parts of measures 4-6 as its sole repeating element. Byrd gradually increases the number of subject entries as the passage continues. He moves from single entries on E and B (measures 11 and 14) to an imitative pair on B and E (measures 14-15, circled on Figure 8.1, page 118). This imitative pair forms a brief harmonic motive, which Byrd immediately varies in measures 16-18. Byrd adds a third entry on E to the original E-B imitative pair. This extra voice creates an invertible canon. I have placed a bracket under the canon on Figure 8.1b, and circled the two statements of the harmonic motive contained within it.

The first six subject entries use the melodic form of the subject that was first presented in measures 4-6, altered by rhythmic diminution (this is why I designated this subject as the prime form, though its primacy can only be determined in retrospect). Along with the faster surface rhythm, Byrd increases the number of cadences to distinguish this phase from the preceding one. Frequent cadences to A and its upper fifth E dominate the passage. At the end of this phase, Byrd introduces subject material from

the following point (“occupaverunt”), creating an effect of dovetailing. In measures 18-21, three entries of this new subject combine with a new variant of “tristitia” (beginning with a leap of a third instead of a step; this is labelled as variant 2 on Figure 8.1b). This new combination of subject material leads to a cadence on A (measure 21) that marks the end of the point.

The first 21 measures therefore feature a gradual increase in rhythmic complexity. Byrd moves from homorhythmic declamation in the opening measures to free imitation when the section concludes. This initial emphasis of homophony makes the opening point unique from most of the following points in the *prima pars* (other than “Moestum factum est,” which also begins with homophonic texture). Its stark, declamatory focus on a single word (“tristitia”) in the initial 10 measures produces an opening gesture of great affective force. The subsequent blending of imitative polyphony and free material in measures 11-21 has continuation function. This passage retains the primary subject material of the opening measures, but displays an increase in textural complexity.

The next passage is the first of three large imitative double points that dominate the remainder of the motet’s *prima pars*. This point, presented as Figure 8.2a, divides into two phases (measures 18-28 and 29-42), both of which segment into three “sub-phases.” These sub-phases begin with an emphasis of the cantus-firmus-like Subject A (“occupaverunt”), followed by a blending of this subject with the rhythmically florid Subject B (“interiora mea”), finally ending with a third sub-phase in which Subject A disappears and Subject B predominates. The role of the cantus-firmus-like subject as “occupaverunt” is to provide a middleground structure for the pitch succession of the

point. Its limited number of transpositions (the final A and its upper and lower fifths, E and D) creates emphasis on important pitches, thus directing the long-range tonal motion of the passage.

As discussed in Chapter 7, the blending of Subject A and subject B produces triple counterpoint. The “interiora mea” imitative duo in measures 23-24 combines with the bass entry of “occupaverunt” in measure 25, forming the harmonic motive of the passage (circled on Figure 8.2). This is not the first appearance of this particular three-voice harmonic motive. It had been foreshadowed by the cadence to E in measures 23-24, in which the same interval pattern as in measure 25 arose through the combination of an “occupaverunt” entry with two free, cadential voices. Thus, the harmonic motive of an imitative point need not arise through combining subject material.

This three-voice harmonic motive subsequently dominates this point. Byrd’s ensuing variation of it by ic 12 helps to shift emphasis among the three primary pitches of the point; Byrd first develops an A-E stable region, and later a competing A-D region. The standard melodic transpositions that produce ic 12 (one voice moving an octave and the other moving a fifth in the opposite direction)¹⁵ readily lend themselves to this alternation between central pitches a fifth apart. The first phase of the imitative point (measures 18-28) emphasizes the division of the A octave at the upper fifth: cadences are always to A or E. “Occupaverunt” entries (Subject A) on A and E (with F# added) support this emphasis (the entry on D in measure 20 is a “4-5” supporting altizans motion

¹⁵Illustrated in Zarlino, *The Art of Counterpoint*, 160-61.

in the first cadence to A). “Interiora mea” (Subject B) entries beginning on G and C contribute to this tonal shape as well. Though these transpositions seem tonally remote when judged by their starting pitches, they conclude on important central pitches: complete entries on G end on E, and complete entries on C lead to the central A (these entries are marked in bold type on Figure 8.2a).

The following phase (measures 29-42) shifts emphasis to the final A and its lower fifth D. This is evident both from the phase’s cadential structure and Byrd’s choice of transpositions for Subject A (“occupaverunt”). Statements of the three-subject block from measures 24-25 form each of the phase’s first four cadences in measures 29, 32, 34 and 37, respectively.¹⁶ (I have circled the groups of entries that form each of these harmonic motives on Figure 8.2. Notably, the subject entries that create the harmonic motive in measure 29 begin in measure 27, thus creating a smooth musical joint between the point’s two phases.) The culminating imitation on Subject B (“interiora mea”) in measures 38-41 is a simplification of the canon from measures 26-28. This canon consisted of a cluster of five “interiora mea” entries, two of which formed the original harmonic motive with the subsequent “occupaverunt” entry on A.) As the third of five entries from the original combination is missing, we have instead a pair of imitative duos (the first pair beginning on C, the second pair beginning on the final A, as circled on Figure 8.2). In these final measures of the point, Byrd carefully chooses subject

¹⁶As an editorial aside, I would shift the extra semibreve in the passage to measure 27 (rather than measure 41, as Brown has done) so that each of these cadential goals will occur on the downbeat.

transpositions that confirm the final: the complete entries on C lead to the final A, and the incomplete entries on A that follow retain this pitch in the listener's ear (see Example 8.1). Thus, the final four subject entries all point tonally toward the proper cadence on A, concluding the point in measure 42.

This entire imitative point displays two departures from the central A to a companion pitch a perfect fifth away from it (measures 23-26 emphasize E, whereas measures 31-38 emphasize D); thus, a parallel structure is achieved. Byrd confirms this structure by the particular pattern of entries that begins each phase. As shown in Figure 8.2b, the pattern of subject entries and the interaction of these entries with a cadence in measures 23-26 is nearly duplicated in measures 31-34. Similarly, subject transposition levels in measures 35-38 ("interiora mea" on G and C, "occupaverunt" on A and D) recall the parallel passage of measures 26-29. All of these factors help to create the bipartite structure of this point.

The motet's third point resembles the first two in move from homophony through free imitation to canon. A free homophonic beginning ("moestum factum") ends with a Phrygian cadence to E (this passage is marked Phase 1 on Figure 8.3). This brief gesture leads to Phase 2, a loosely canonic set of entries on "in dolore." This phase likewise ends with a Phrygian cadence, this time on A. Both phases are further subdivided by a simple cadence (without suspension), each to a remote tonal goal. These goals are marked Fs and Gs, respectively, on Figure 8.3, the "s" denoting simple cadence. These intermediate goals again demonstrate Byrd's use of tonal departure as a sign of "middleness."

The “in dolore” passage begins with what Andrews would describe as “rhythmic imitation.”¹⁷ Byrd retains the rhythmic shape of “in dolore” throughout, but alters its melodic profile continually. Though this passage contains many subject entries, there are no clear harmonic motives at first. Byrd finally adds a recurring melodic tail to the subject, and states this new extended form of “in dolore” in canon. (See Example 8.2. I have also traced the path of this canon with arrows on Figure 8.3.) This canon creates the first harmonic motive of the passage, the 3-4-5-6-5 interval pattern between the tenor entry of measure 51 and the medius entry of measure 52. The interval pattern subsequently returns between the medius and superius entries, transposed up a fifth. Following a melodically altered false entry in the contratenor (marked on Example 8.2), Byrd moves rapidly to the concluding cadence, re-establishing the central A. Thus, Byrd balances the tonal departure of the point’s middle with a return of the final at the end.

Because of the inconclusive way in which “in dolore” arrives at the final A (it gives the impression of an abandoned cadence to D, as shown in Example 8.3), it dovetails with the “et contenebrati sunt-oculi mei” double point that follows. This larger grouping of two successive imitative points recalls the way in which Byrd amalgamated the ending of “tristitia et anxietas” with the beginning of “occupaverunt-interiora mea.” Figure 8.4 diagrams the subject entries and cadence points of this new “et contenebrati sunt-oculi mei” double point. These measures illustrate Byrd’s tendency gradually to saturate the contrapuntal fabric with Subject B as a point proceeds to its final phase.

¹⁷ Andrews, *Byrd’s Vocal Polyphony*, 248.

Kerman discusses Byrd's use of this procedure in the opening point of *Domine praestolamur* (1589/2), but his description is equally apt in this case as well:

The second subject...is not merely a separable element with contrapuntal potential of its own, but an element that takes powerful control of the phrase, both at its center and at its conclusion.¹⁸

Kerman goes on to describe how this emphasis shifts the dramatic weight toward the second segment of text.¹⁹ In this imitative point, the dramatic shift de-emphasizes "et contenebrati sunt" (are darkened) in favour of "oculi mei" (my eyes). In the opening phase (measures 55-67), this "oculi mei" second subject is a three-note incipit with variable continuation, whose flexible melodic shape permits its use in combination with the extended, stately first subject ("et contenebrati sunt"). Even with this brief incipit, Byrd takes a few measures to settle on a consistent melodic shape. Its prime form (first appearing in the tenor, measure 57) consists of two descending steps. Its first variant spans only a descending second (the initial note repeats). The "oculi mei" incipit eventually confines itself to its prime form following measure 64; the variant form with the repeated starting note has its last appearance in the medius, measure 63 (marked on Figure 8.4 as G1). The subject's variable continuation, however, coalesces into a single recurring form only in Phase 2.

The appearance of complete Subject B entries is a distinguishing feature of the point's second phase (measures 68-82). The first appearance of this complete form (measure 71, bassus, marked in bold type on Figure 8.4b) coincides with the first long

¹⁸Kerman, "Byrd, Tallis and the Art of Imitation," 533.

¹⁹Kerman, "Byrd, Tallis and the Art of Imitation," 533.

stretch in which Subject A is absent. Following the final statement of Subject A in measure 73, Byrd constructs an extended canon on Subject B, beginning in measure 74. Since complete entries cover a span of a sixth as they descend from their starting pitch, the cluster of entries on C (measures 76-79) all lead to a virtually omnipresent E. This E, the upper fifth of the cadential goal A, acts as an intermittent pedal tone from measure 77 onward, as shown by the dotted arrow on Example 8.4. Thus, the concluding canonic passage features a mix of foreground motivic activity and harmonic stasis. Byrd creates a sense of closure by gradually eliminating Subject A in favour of Subject B. His move toward motivic regularity is accompanied by a simplification of the point's tonal shape: all cadences are to the final A after measure 64. The culmination of this simplification, as we have seen in the previous three points, is the increasing prominence of canon. Brief canons in measures 68-69 and 71-73 (marked on Figure 8.4b) emphasize C and F, respectively, as starting notes. The second canon contains the first appearance of the complete "oculi mei" subject (beginning on F, descending to the final A) alluded to above. Finally, Byrd builds to the point's conclusion with a 13-voice canon in measures 74-81. This passage balances dense canonic action with a simple tonal plan. As virtually all of the complete "oculi mei" entries in these measures begin on C (thus descending to E), they emphasize the final's upper fifth E as a penultimate goal to lead to the concluding cadence on A (see Example 8.4).

The following double point, "vae mihi-quia peccavi," is the most complex passage in the entire motet (see Figure 8.5). As in the earlier "occupaverunt-interiora mea" point, Byrd pairs a cantus-firmus-like Subject A ("vae mihi") with a florid and

melodically-varied Subject B (“quia peccavi”). Though “vae mihi” generally retains its melodic shape (the final syncopated entry in measure 102 is the sole anomaly), “quia peccavi” exists in a bewildering array of melodic forms. The motivic head alone (“quia pec-”) has nine unique melodic forms, seven of which Byrd repeats. These head motives join in a variety of ways to one of two melodic “tails,”²⁰ either a cantizans cadential motion or a tenorizans cadential motion, as seen in Example 8.5. In measures 86-88, the contratenor voice presents Subject B for the first time in its complete and most frequently recurring form: an ascending third-descending fourth interval sequence as head motive, then an upper neighbour motion around the third note of the subject as a melodic setting for “peccavi.” The concluding notes are a tenorizans “2-1” motion in a proper cadence, the “quia peccavi” subject’s most frequently occurring ending. A complete list of “quia peccavi” variants in their different melodic forms, transposition levels, along with each variant’s frequency of appearance, is presented as Table 8.3 on the following page:

²⁰This separate existence of a motivic “head” and “tail” invokes le Huray; see “Some Thoughts,” 12.

Table 8.3: "Quia Peccavi" Entries

Interval Pattern of Head Motive	Label	Occurrences on: A B C D E F G	Complete Subjects
up 3 rd , down 4 th	prime	3 0 4 1 0 2 6	G 5, C 2, D 1
up 4 th , down 3 rd	1	1 0 0 1 0 0 0	
up 3 rd , down 3 rd	2	1 0 0 1 0 0 0	
up 3 rd , down 2 nd	3	3 1 0 2 0 0 1	
up 2 nd , down 4 th	4	1 0 0 0 2 0 0	A 1, E 1
up 4 th , down 4 th	5	1 0 0 0 0 0 0	A 1
up 2 nd , down 3 rd	6	0 1 0 0 0 0 0	
up 3 rd , down 5 th	7	0 0 0 0 5 0 1	E 1
up 4 th , down 5 th	8	1 0 0 0 0 0 0	

There are 39 statements of "quia peccavi" in all, a daunting number through which to sort. However, if we isolate the 11 *complete* subject entries (i.e. the entries to which Byrd adds the tenorizans cadence), the picture becomes more clear. The main recurring form of the motive ends a step above its starting pitch; thus G transpositions cadence to A, and C transpositions cadence to D, the two central cadence pitches of this imitative point. The D transposition (measure 100) leads to a third important pitch (it cadences to E), but this E is a temporary goal: a cadential return to the final A follows one semibreve later. As for the complete subjects with different motivic heads, variant 5

cadences to A,²¹ variant 7 cadences to E, and the two complete statements of variant 4 (starting with A and E) end on G and D, respectively (the latter transposition is part of a cadence, the former is not). Thus we see that even Byrd's varied forms of Subject B by and large contribute positively to the A, D and E-centricity of the point, since their ends settle on A, D and E as concluding pitches regardless of their starting pitches.

How might Byrd have designed this complex passage? I would speculate that he conceived of a cadential framework in semibreves first, then designed complete entries of Subjects A and B ("vae mihi" and "quia peccavi") around these cadence points. The initial ascending step of Subject A contributes a "2-3" evaded tenorizans motion to the cadence on six occasions. He then completed the cadential package by adding an independent cantizans voice. This cadential block, first seen in measures 87-88, is the harmonic motive of the passage (circled on Figure 8.5a, see also the accompanying score, presented as Example 8.6). Finally, to provide motivically coherent material in the voices that were not part of the cadential gesture, Byrd composed additional "quia peccavi" head motives, identical in rhythm and melodic contour to the "real" entries, but different in interval pattern. Byrd then placed these "fake" entries around the complete statements of Subject B, creating "rhythmic imitation," as Andrews might say.²² Entries group in three (as in measures 84, 87 and 89) or four (measure 93, 99, 103) or even seven (measure 106),²³ but continual melodic variation within these clusters prevents any

²¹The variant forms' interval patterns appear on Table 8.2.

²²Andrews, *Byrd's Vocal Polyphony*, 248.

²³This combination subdivides into a variant of measure 87 (transposed canon) followed by an invertible canon with parallel doubling as in measure 99.

harmonic motives from arising out of the texture. Byrd placed these extra entries primarily to increase the density of activity. Notably, even the “fake” entries group in progressively larger units as the point continues (from groups of three entries at the beginning to a group of seven entries at the end). This largest group of entries in measures 106-111 is a canon that leads to the final cadences (on E and A) of the *prima pars* (see Example 8.7).

This imitative point is the central passage of the motet, and Byrd’s crowning achievement in creating a balance between musical variety and unity. A comparison with “occupaverunt-interiora mea” (measures 21-42) demonstrates the difference in procedure. In the earlier double point, Byrd creates intricate combinations of subject material, but retains the shape of both subjects fairly regularly (though Byrd, here as elsewhere in the motet, treats the second subject more freely than the first). In the “vae mihi-quia peccavi” double point, the counterpoint is equally dense (perhaps even more so, given the greater brevity of “quia peccavi” compared to “interiora mea”), to which Byrd adds the further complication of continual melodic variation. This melodic flexibility (reminiscent of Byrd’s constant melodic alterations to the previous “oculi mei” subject) comes to be a main feature of the “vae mihi-quia peccavi” imitative point. The cantus-firmus-like first subject becomes nearly irrelevant to the musical shape of this point once the second subject begins to dominate. Using primarily this second subject, Byrd creates a luxuriant web of counterpoint in which standard cadential gestures are artfully hidden in a dense forest of melodically varied subject entries.

2. The *Secunda Pars*

The *secunda pars* of the motet contrasts greatly with the *prima pars*. Byrd achieves this contrast in part by thinning out the texture on occasion. Long passages in three and four voices dominate the *secunda pars* (especially measures 114-24, 135-39 and 141-45). With this thinner texture comes less in the way of recurring material. Other than the closing imitative point (measures 156-76) and the three “consolare” semi-imitative combinations (measures 135-36, 140-41 and 146-48), the musical material is relatively free in design. Byrd’s cadential goals differ as well: frequent cadences to C and G supplement cadences to the central A and its upper fifth, E. This cadential mix differs from the pervasive emphasis of A, E and D in the *prima pars*. Thus, Byrd uses texture and cadential goals to set apart the *secunda pars* from the *prima pars*, though the ultimate cadential goal remains the final A, as before. The *Secunda Pars* begins with three subjects (“sed tu Domine,” “qui non derelinquis” and “sperantes in te”), which circulate in the opening 25 measures. These three subjects never coalesce into harmonic motives. Instead, the point splits into three phases that essentially isolate and develop each of the three subjects in turn. (These phases are presented as Figure 8.6a and b.)

Phase 1 of this formal unit, measures 114-23, begins with an imitative pair on Subject A, “sed tu Domine.” Three single entries then appear, the final one introducing the imitative point’s second phase in measure 124. This subject is in cantus firmus values and moves by ascending step, but Byrd only once takes advantage of the cadence opportunities presented by this subject. He uses its ascending step B-C as an evaded tenorizans “2-3” in the simple cadence to A that concludes the phase (measure 123).

Scattered entries of Subject C appear in this phase, but do not combine to form harmonic motives. The sparseness of these measures is evident from Figure 8.6: only a handful of subject entries and a single cadence occur in a 10-measure span. The change in motivic density from the preceding imitative point (measures 82-113) is immediately evident.

The second phase marks the disappearance of Subject A. Instead, Byrd develops a group of related melodic motives around the text, “qui non derelinquis.” I consider these motives to be varied manifestations of Subject B. The subject never settles on a consistent form, calling its status as a subject into question. The most common head motive for this melodic gesture is an ascending sixth span. Byrd divides this span into two leaps and/or steps of varying sizes and orders of appearance. An ascending third followed by a fourth, and the same intervals in reverse order appear twice each; the remaining subject statement has an ascending fifth followed by a step. Two units in three parts suggest in order a transposed canon and an invertible canon, each at the minim (these are circled on Figure 8.6b). However, melodic variation prevents a harmonic motive from forming. As in Phase 1, there is a single cadence, this time to the remote goal, C. This goal again makes manifest Byrd’s interest in tonal departure from the central A as a signal of “middleness.”

In Phase 3, Byrd has two main aims: to develop the third subject, “sperantes in te,” and to return tonally to the final, A. The “sperantes” subject exists in two versions, beginning either with an ascending third (its first and most common form) or an ascending fourth. Subject entries form three imitative clusters. The first group confirms the cadence to C in measure 129 with a series of entries on C and F; this group forms a

transposed canon by alternating fourths and fifths, as marked on Figure 8.6b. The second group remains in the C region, but hints at departure with entries on G and D. This group is more loosely structured than the preceding one, forming a rhythmic canon. If the melodic shape of this canon's component voices were consistent, we would have an invertible canon with parallel doubling. However, as in Phase B, melodic variation precludes any harmonic motives from forming. The final group of entries on D and A, forms an invertible canon in three voices. This use of canon as culmination is typical of Byrd's procedure in this piece; here, the canon creates momentum toward the cadence to A that closes the section. The move from C (and its lower fifth, F) to A is by ascending fifth, moving through an imitative pair on G (measure 131) to a new imitative pair on D (measures 132-33) and finally to A, confirming the cadential goal in measure 133. This return balances the departure to C of the point's second phase.

The following imitative point (see Figure 8.7) alternates a semi-homophonic "consolare" with a freely imitative continuation. Byrd states this material three times (compare measures 135, 140 and 146, presented as Examples 8.8a, b and c), each statement more intricate than the preceding one. I have circled the harmonic motive and its two variant forms (labelled Variant A and Variant B) on Figure 8.7. For the two variants, I have put in parentheses the entries that were added to the original combination. In the first variant (measures 140-41), Byrd doubles the guide of the original imitative pair at the lower third (this is semi-imitative presentation plus parallel, or Figure 5.24). The second variant (measures 146-48) is still more dense, texturally: Byrd expands the duo into a transposed canon (periodic entries on D in superius, medius and tenor,

respectively). Moreover, Byrd adds a pair of melodically varied entries of Subject B. Thus, we have what appears to be an invertible canon on Subject 2 as accompaniment to the transposed canon plus parallel doubling on Subject A.

Byrd divides the point into three phases that are roughly parallel in motivic content. This parallel structure, combined with the increased density of motivic material upon repetition, creates an effect of gradual intensification. A fourth phase introduces a loosely canonic passage on new subject material, “propter nomen sanctum tuum” (circled on Figure 8.7, measures 152-55). This passage leads to the section’s final cadence on G. This four-phase structure is grouped into two larger, tonally parallel units, both of which explore rather remote regions for a piece with A as its final. In measures 135-46, Byrd alternates proper cadences on C and G. The same pair of cadences then recurs in measures 147-56²⁴ as the point reaches its conclusion.

The ending of this formal unit is distinctive, as it is the only one in the motet that does not cadence on the final. Byrd instead transfers the task of tonal return to the closing imitative point. Thus, the cadence on G has a dynamic effect on the overall shape of the *secunda pars*, as it forces the elaborate final point to effect the tonal return. We have seen a pairing of adjacent imitative points into a larger formal unit before in this motet: the opening two points (“tristitia” and “occupaverunt,” measures 1-21 and 21-42) blend together as well. However, in this former case, we do not have a lengthy excursion from the central A that requires resolution. Byrd has simply elided the expected cadence

²⁴The Phrygian cadence to B (“2-1” plus “7-4”) in measure 142 is of lesser weight than the proper cadences around it, and thus does not greatly disturb this overall C-G motion.

to A with which the first point should have ended, and dovetailed the melodic material of this point with the second one. However, the passage under current discussion (“consolare-sanctum tuum”) has an urgent need for resolution. Byrd spends nearly 20 measures away from the final in this point, cadencing on the remote goals C and G. Therefore, the return and re-emphasis of A in the closing section to balance the preceding passage’s tonal excursion is a matter of musical obligation rather than artistic choice.

The final imitative point (see Figure 8.8) returns to the imitative texture that dominated most of the *prima pars*. An opening imitative pair (two entries on G) with parallel doubling of the guide at the upper third (on B) leads into an extended single point. Subjects B and C act as accompaniment: they are a cantizans-tenorizans cadential pair that twice forms a harmonic motive with Subject A (measures 158-60 and 162-63, circled on Figure 8.8). This combination of subjects that forms the harmonic motive of the passage first occurs in measures 158-60 and immediately recurs in measures 161-63, as shown in Examples 8.9a and 8.9b. Kerman, in a detailed analysis, has traced the recurrence of this “cell” in this point’s subsequent measures.²⁵ However, he did not discuss how Byrd uses various transpositions of the subjects that form the harmonic motive to effect a return to the central A. I will discuss this aspect of the closing point, the relationship of subject transpositions to the passage’s overall tonal return.

Cadences in this point are generally to A and its upper fifth E (but for the weaker simple cadence to G in measure 165), as might be expected in the closing measures of a

²⁵Kerman, *The Masses*, 140-42.

motet with A as its final. However, Byrd's choice of transposition levels for his subject entries undermines this A-E centrality. Entries on G (measures 152 and 164) and C (measures 161 and 162) create a competing C-G fifth, a way of preserving the C-G emphasis of the preceding section. Complete entries on C and G end on their starting notes; these entries are in bold type on Figure 8.8. Unlike the preceding formal units of the motet, which were tonally circular (beginning and ending on the final A), this imitative point gives the impression of starting in the middle, since it begins on the remote G where the preceding point had left off.

Byrd's resolution of this tonal conflict is in two stages. At first, he continues with subject entries on G, but leaves them incomplete. Since these incomplete entries do not return to their starting G as complete subject entries would, Byrd is able to depart from the emphatic G and C that had dominated since measure 133. Then, he moves back to A and beyond by descending fifths. A pair of entries on G and D (measures 165-66, bracketed on Figure 8.8) foreshadows the closing variably constructed canon, Type 1 (Figure 5.14). This canon has successive entries on D, A, E and B (see Example 8.10). The registral shift from superius to bassus stratifies the canon into a pair of imitative duos (the D-A and E-B pairs, both bracketed on Figure 8.8, measures 172-73). The motion of this canon by successive ascending fifths (or its inversion, the descending fourth) leads to E, the uppermost note of the contratenor entry in measure 174. Byrd immediately repeats this important pitch in the subsequent medius false entry, and then transfers it to the bassus, where it becomes the "5" of the basizans role in the concluding proper cadence to the final A.

Conclusion

My concluding remarks are specific to *Tristitia et anxietas*, but have wider application to the other motets in the 1589 *Cantiones* as well. What I have described in the foregoing examination of the imitative points of *Tristitia* are Byrd's strategies for establishing central pitches in the middleground. These central pitches are determined by first notes of melodic subjects and by cadence points. Byrd chooses transposition levels so that either the opening notes or the concluding notes of the subject can participate in a cadence. When subjects are in cantus firmus values (breves and semibreves), as with "occupaverunt" and "vae mihi," their motions can have a structural role in a cadence. Thus, Byrd links opening subject material with cadential articulation as a means of emphasizing important pitches within a composition.

Frequently, subject transpositions that seem tonally remote judging from their *starting* pitches often confirm important pitch centres when one looks at their *concluding* pitches. This is particularly evident in the concluding measures of the "oculi mei" point: entries beginning on F and C *seem* tonally distant from A, but they end on the final A and its upper fifth, E, respectively. The reverse is often true as well: apparently "normal" transposition levels can generate cadences to unusual degrees. For instance, the transposition of "consolare" that begins on the A final in measure 142 participates in a rather odd Phrygian cadence to B (as noted on Figure 8.7). This unusual cadence, like the simple cadences to F and G in measures 45 and 52, is used by Byrd to create tonal remoteness; they signify procedures typical of middles, formally speaking.

Byrd never chooses his subject transpositions wilfully or randomly. Patterns of subject entries often participate in cadences and also frequently form multi-voice combinations or harmonic motives. These harmonic motives can recur as a structural element of an imitative point. The group of entries whose confluence creates the harmonic motive of an imitative point often can be categorized as one of the 24 presentation types listed in Chapter 5. Their recurrence is one of the means by which Byrd generates formal sub-units (what I have referred to as phases in this analysis) within a point. These presentation types often have particular formal roles to play in a motet, since form and presentation are closely linked in Byrd's 1589 *Cantiones* (as discussed in Chapter 6). From the information shown in Table 8.2, it becomes clear that Byrd uses a limited assortment of the 24 possible presentation types to begin sections of *Tristitia*. However, later on in an imitative point, Byrd's subject entries cluster in an elaborate array of combinations and re-combinations. The constant reworking of subject material guarantees a measure of unity in a point, though Byrd's variation procedures (textural and melodic variation, transposition and invertible counterpoint) shed new light on these subjects, and the harmonic motives they create, each time they recur.

These complex combinations of subject entries can be pulled apart into smaller sub-units to show their derivation from simpler presentation types that had appeared earlier in an imitative point. For instance, the seven-voice canon from the "vae mihi-quia peccavi" point (measures 106-09) arose from the combination of a previously stated three-voice transposed canon and a four-voice invertible canon plus parallel doubling. Less often, the more dense presentation may occur first, followed by a thinner-textured,

simplified presentation of the same subject material. The opening “tristitia” subject, for example, begins with a three-voice, two-subject homophonic block with the upper part doubled in parallel thirds (cf. Figure 5.6). After an initial increase in density of recurring material, Byrd reduces this subject to a single line in measure 11, against which he places free counterpoint to continue the increase in textural complexity begun in measures 1-10. These clusters of entries may also recur within an imitative point, usually varied, to generate a formal shape (for example, Byrd’s arrangement of “consolare” in three parallel units, discussed above). This varied repetition of small units creates distinct phases of activity within an imitative point. These phases consist of an initial presentation of a harmonic motive followed by standard variation procedures (increase in textural density, transposition and invertible counterpoint). Thus, through the phases created by the presentation and subsequent variation of the harmonic motive, Byrd gives each point a unique musical shape.

These structural features discussed above are not the entire story of the motet. There is little mention in the preceding analysis of free melodic material, for example. Neither does my analytic method account for this motet’s melodic or rhythmic style, nor its overall form, nor its text, nor extramusical considerations. What this analysis *does* seek to do is to examine how subjects combine to form larger structural units, and how these units interact with cadences to create a distinct tonal shape at the level of the point.

Imogene Horsley, writing in 1959, regretted that Renaissance analysis was not yet able to describe the total polyphonic construction, the intricate combination of lines, through which the essence of Renaissance style and the skill of the composer might be

perceived.²⁶ This analysis answers some of Horsley's objections. Building on the work of Andrews, Kerman, Schubert and others, I have sought to provide a framework first to identify and categorize various methods of combining melodic subjects into recurring melodic-harmonic units, or harmonic motives. Then, I have described an assortment of variation techniques through which Byrd develops a longer span of music out of these subject combinations. Finally, I have shown how these two musical processes, presentation and variation, play out in each point of *Tristitia et anxietas*. The emphasis on the combination of subjects, or harmonic motive, and the means by which Byrd creates form through its repetition, is my solution to deal with the various *lacunae* in Renaissance analysis that Horsley noted forty years ago.

²⁶Horsley, review of Boetticher, *Orlando di Lasso*, 77.

Appendix

Complete List of Subjects from Byrd's 1589 *Cantiones Sacrae* that include Cantus-Firmus-Like Motions

#	Measure	Text	Comments
1	1-11	defecit	melodic inversion
1	35-49	(infirm)ata, (pauper)ate	double point
1	107-112	(conso)latus sum	rhythmicized CF
2	1-16	Domine praestolamur	dotted rhythm
2	10-12	tuum	variant of above
2	22-36	venias	rhythmicized CF
2	36-64	et...jugum, nostrae	form a double point
2	77-81	veni Domine	syncopated (Do)mine
2	90-113	relaxa	part of double point
3	1-7	O Domine	rhythmicized CF
3	41-43	Damnare	note 1 after half rest

#	Measure	Text	Comments
4	1-10	Tristitia	dotted rhythm
4	18-39	occupaverunt	part of double point
4	47-55	in dolore	“in do” syncopated
4	82-102	vae mihi	part of double point
4	114-126	sed tu Domine	never in combination
5	1-21	memento Domine	begins with breve
5	26-43	quam possedisti	rhythmicized CF
5	48-55	libera eos	homorhythmic block
6	1-8	vide Domine	non-imitative; free inner parts
6	14-17	maligno	2-voice non-imitative block
6	31-35	electa	end of “civitas”
6	51-61	in amaritudinem	CF “head,” free “tail”
6	93-97	pax sanctissima	rhythmicized CF

#	Measure	Text	Comments
7	3-4	Deus venerunt	canon with free CF bass
7	33-48	in pomorum	rhythmicized CF
7	52-66	posuerunt	first note dotted
7	70-81	escas	part of double point
7	168-192	et non erat; qui sepeliret	words vary; escape tone embellishes
7	194-221	facti sumus	2 forms; both dotted
8	1-11	Domine	similar to "defecit"
8	15-22	daturum, eorum	first note: minim
8	48-57	quod posuisti	"posu" adds passing tone
8	63-68	et erue nos	"eru" dotted
9	1-8	vigilate	upper voice of double point
9	69-73	dormientes	leads to cadence
9	92-94	omnibus	homorhythmic block

#	Measure	Text	Comments
11	1-7	aspice Domine	pre-imitates CF part
11	7-19	de sede sancta	rhythmicized CF
11	20-27	et cogita	rhythmicized CF
11	50-69	et vide	part of triple point
12	1-16	ne irascaris...	generally homorhythmic
12	32-42	ecce	variable intervals
12	75-88	civitas sancti	"civi" is dotted
12	106-113	Sion deserta	"de" after minim rest
13	22-34	amicti stolis...	"stolis": 2 minims
13	71-76	benedictio	rhythmicized CF
14	1-10	tribulationes	homorhythmic block
14	3-15	civitatum	"civi" syncopated
14	16-22	quas passae sunt	close canon
14	34-38	ad te sunt oculi	rhythmicized canon

#	Measure	Text	Comments
14	49-62	timor	1 note; double point
14	68-81	occidit super	rhythmicized CF
14	88-102	nolunt recipere	homorhythmic block
14	93-100	ipsi montes	homorhythmic block
14	105-114	Domine miserere	homorhythmic block
14	117-127	nos enim	double point, enim dotted
14	134-139	aperi oculos	rhythmicized CF
14	142-160	et vide	first note minim rest
15	1-11	Domine	dotted "Domi"
15	11-22	dolorum	first note minim rest
16	25-31	noster veniet	"noster" syncopated
16	32-44	suorum, tuorum	text varies, cadence tail
16	70-82	suorum, tuorum	formal repeat of above

Bibliography

- Aldrich, Putnam. "An Approach to the Analysis of Renaissance Music." *Music Review* 30 (1969): 1-21.
- Andrews, Harold K. "Transposition of Byrd's Vocal Polyphony." *Music and Letters* 43 (1962): 25-37.
- _____. *The Technique of Byrd's Vocal Polyphony*. London: Oxford University Press, 1966.
- Bailey, Candace. "Concepts of Key in Seventeenth-Century English Keyboard Music." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 247-74. New York and London: Garland Publishing, 1998.
- Bent, Margaret. "Accidentals, Counterpoint and Notation in Aaron's *Aggiunta* to the *Toscanello in Musica*." *Journal of Musicology* 12 (1994): 306-44.
- _____. "The Grammar of Early Music: Preconditions for Analysis." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 15-60. New York and London: Garland Publishing, 1998.
- _____. "Diatonic ficta." *Early Music History* 4 (1984): 1-48.
- Berger, Karol. *Musica Ficta: Theories of Accidental Inflection in Vocal Polyphony from Marchetto da Padua to Gioseffo Zarlino*. Cambridge: Cambridge University Press, 1987.
- Blackburn, Bonnie J. "On Compositional Process in the Fifteenth Century." *Journal of the American Musicological Society* 40 (1987): 210-84.
- Boetticher, Wolfgang. *Orlando di Lasso und seine Zeit, 1532-1594. Repertoire-Untersuchung zur Musik der Spätrenaissance. Band I: Monographie*. Kassel & Basel: Bärenreiter-Verlag, 1958. Reviewed by Imogene Horsley, *Journal of the American Musicological Society* 12 (1959): 75-78.
- Boyd, George. "The Development of Paraphrase Technique and Other Issues in the Fifteenth Century." *Indiana Theory Review* 9 (1988): 23-62.
- Brown, Howard Mayer. "Emulation, Competition, and Homage: Imitation and Theories of Imitation in the Renaissance." *Journal of the American Musicological Society* 35 (1982): 1-48.

- _____. *Music in the Renaissance*. Englewood Cliffs, New Jersey: Prentice-Hall, 1976.
- Burns, Lori. "J. S. Bach's Mixolydian Chorale Harmonizations." *Music Theory Spectrum* 15 (1993): 144-72.
- Caplin, William Earl. *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart and Beethoven*. New York and Oxford: Oxford University Press, 1998.
- Crocker, Richard L. "Discant, Counterpoint and Harmony." *Journal of the American Musicological Society* 15 (1962): 1-21.
- Dineen, P. Murray. "The Contrapuntal Combination: Schoenberg's Old Hat." In *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein, 435-48. Chicago: University of Chicago Press, 1993.
- Fellowes, Edmund. *William Byrd*. Second edition. London: Oxford University Press, 1948.
- Fromson, Michele. "Cadential Structure in the Mid-Sixteenth Century: The Analytic Approaches of Bernhard Meier and Karol Berger Compared." *Theory and Practice* 16 (1991): 179-214.
- Fuller, Sarah. "Line, *Contrapunctus* and Structure in a Machaut Song." *Music Analysis* 6 (1987): 37-58.
- _____. "Exploring Tonal Structure in French Polyphonic Song of the Fourteenth Century." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 61-86. New York and London: Garland Publishing, 1998.
- _____. "Guillaume de Machaut: *De toutes flours*." In *Music Before 1600, Models of Musical Analysis*. ed. Mark Everist, 41-65. London: Blackwell, 1992.
- Glarean, Heinrich. *Dodecachordon*. Translation, transcription and commentary by Clement A. Miller. American Institute of Musicology, 1965.
- Godt, Irving. "Renaissance Paraphrase Technique: A Descriptive Tool." *Music Theory Spectrum* 2 (1980): 110-18.
- Gray, Walter. "Motivic Structure in the Polyphony of William Byrd." *Music Review* 29 (1968): 223-33.

- Gray, Walter. "Some Aspects of Word Treatment in the Music of William Byrd." *Musical Quarterly* 55 (1969): 45-64.
- Haar, James. "Orlande de Lassus: *Si bona suscepimus*." In *Music Before 1600, Models of Musical Analysis*, ed. Mark Everist. London, Blackwell 1992: 154-74.
- Harley, John. *William Byrd: Gentleman of the Chapel Royal*. Aldershot: Scolar Press, 1997.
- Harrison, Daniel. "Some Group Properties of Triple Counterpoint and Their Influence on Compositions by J.S. Bach." *Journal of Music Theory* 32 (1988): 23-50.
- Hermelink, Siegfried. "Zur Geschichte der Kadenz in 16. Jahrhundert." In *Bericht Über den Siebenten Internationalen Musikwissenschaftlichen Kongress Köln 1958*, ed. Gerald Abraham et al., 133-36. Kassel: Bärenreiter, 1959.
- _____. *Dispositiones Modorum. Die Tonarten in der Musik Palestrinas und seiner Zeitgenossen*. Munich: Tutzing, 1960.
- Horsley, Imogene. "Fugue and Mode in 16th-Century Vocal Polyphony." In *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan Larue, 406-22. New York: Norton, 1966.
- Irving, John. "Thomas Tompkins's Copy of Morley's *A Plain and Easy Introduction to Practical Music*." *Music & Letters* 71 (1990): 483-93.
- Jeppesen, Knud. *The Style of Palestrina and the Dissonance*. London: Oxford University Press, 1946.
- _____. *Counterpoint*. Translated, with an introduction by Glen Haydon. London: Williams and Norgate, 1950.
- Johnson, Timothy A. "Solmization in English Treatises Around the Turn of the Seventeenth Century: A Break from Modal Theory." *Theoria* 5 (1990-1): 42-60.
- Judd, Cristle Collins. "Introduction: Analyzing Early Music." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 3-14. New York and London: Garland Publishing, 1998.
- _____. "Josquin's Gospel Motets and Chant-Based Tonality." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 109-54. New York and London: Garland Publishing, 1998.

- _____. "Josquin des Prez: *Salve regina (a 5)*." In *Music Before 1600, Models of Musical Analysis*, ed. Mark Everist, 114-53. London, Blackwell 1992.
- _____. "Some Problems of Pre-Baroque Analysis: An Examination of Josquin's *Ave Maria...Virgo Serena*." *Music Analysis* 4 (1985): 201-39.
- _____. "Modal Types and Ut, Re, Mi Tonality: Tonal Coherence in Sacred Vocal Polyphony from about 1500." *Journal of the American Musicological Society* 45 (1992): 428-67.
- Kerman, Joseph. "On William Byrd's *Emendemus in melius*." *Musical Quarterly* 49 (1963): 17-37. Revised version in *Hearing the Motet: Essays on the Motet of the Middle Ages and Renaissance*, ed. Dolores Pesce, 329-47. Oxford and New York: Oxford University Press, 1997.
- _____. "Byrd, Tallis and the Art of Imitation." In *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan Larue, 519-37. New York: Norton, 1966.
- _____. "Old and New in Byrd's *Cantiones Sacrae*." In *Essays on Opera and English Music in Honour of Jack Westrup*, ed. F. W. Sternfeld, 25-43. Oxford: Blackwell, 1975.
- _____. "Write all these down: Notes on a Byrd Song." In *Byrd Studies*, ed. Alan Brown and Richard Turbet, 112-28. Cambridge: Cambridge University Press, 1992.
- _____. *The Masses and Motets of William Byrd*. Berkeley: University of California Press, 1981.
- Lake, William. "Orlando di Lasso's Prologue to *Prophetiae Sibyllarum*: A Comparison of Analytical Approaches." *In Theory Only* 11 (1991): 1-20.
- Levy, Jim, and Akane Mori. "The Diatonic Basis of Fugue in Zarlino." *In Theory Only* 9 (1986): 33-46.
- Le Huray, Peter. "Some Thoughts about Cantus Firmus Composition; and a Plea for Byrd's *Christus Resurgens*." In *Byrd Studies*, ed. Alan Brown and Richard Turbet, 1-23. Cambridge: Cambridge University Press, 1992.
- Meier, Bernhard. *The Modes of Classical Vocal Polyphony*. Translated by Ellen S. Beebe. New York: Broude Brothers, Ltd., 1988.

- Monson, Craig. "Byrd, the Catholics and the Motet: The Hearing Reopened." In *Hearing the Motet: Essays on the Motet of the Middle Ages and Renaissance*, ed. Dolores Pesce, 348-74. Oxford and New York: Oxford University Press, 1997.
- Morley, Thomas. *A Plaine and Easie Introduction to practicall Musicke*. London, 1597. Facsimile, Amsterdam and New York: Da Capo Press, 1969.
- _____. *A Plain & Easy Introduction to Practical Music*. Ed. Alec Harman. New York: Norton, 1952.
- Neighbour, Oliver. *The Consort and Keyboard Music of William Byrd*. Berkeley: University of California Press, 1978.
- Novack, Saul. "The History of the Phrygian Mode in the History of Tonality." *Miscellanea Musicologica* 9 (1977): 82-127.
- _____. "The Analysis of Pre-Baroque Music." In *Aspects of Schenkerian Theory*, ed. David Beach, 113-33. New Haven: Yale University Press, 1983.
- _____. "Fusion of Design and Tonal Order in Mass and Motet." *Music Forum* 2 (1970): 187-263.
- Owens, Jessie Ann. "Concepts of Pitch in English Music Theory, c. 1560-1640." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 183-246. New York and London: Garland Publishing, 1998.
- _____. "The Milan Partbooks: Evidence of Cipriano de Rore's Compositional Process." *Journal of the American Musicological Society* 37 (1984): 270-98.
- _____. *Composers at Work: The Craft of Musical Composition, 1450-1600*. Oxford: Oxford University Press, 1997.
- Perkins, Leeman. "Mode and Structure in the Masses of Josquin." *Journal of the American Musicological Society* 23 (1973): 189-239.
- Pike, Lionel. *Hexachords in Late-Renaissance Music*. Aldershot: Ashgate Publishing, 1998.
- Powers, Harold. "From Psalmody to Tonality." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 275-340. New York and London: Garland Publishing, 1998.

- _____. "Tonal Types and Modal Categories in Renaissance Polyphony." *Journal of the American Musicological Society* 34 (1981): 428-70.
- _____. "Mode." *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie. London: Macmillan, 1980. Vol. 12: 376-450.
- _____. "Modal Representation in Polyphonic Offertories." *Early Music History* 2 (1982): 43-86.
- Quereau, Quentin. "Sixteenth Century Parody: An Approach to Analysis." *Journal of the American Musicological Society* 31 (1978): 407-41.
- Rahn, Jay. "Marchetto's Theory of Commixture and Interruptions." *Music Theory Spectrum* 9 (1987): 136-72.
- Rainbow, Bernarr. "Bathe and his Introduction to Musicke." *Musical Times* 123 (1982): 243-47.
- Randel, Don M. "Emerging Triadic Tonality in the Fifteenth Century." *Musical Quarterly* 57 (1971): 73-86.
- Reese, Gustave. *Music in the Renaissance*. London: Dent, 1954. 2nd ed. 1959.
- Reynolds, Christopher. "Musical Evidence of Compositional Planning in the Renaissance: Josquin's *Plus nulz regretz*." *Journal of the American Musicological Society* 40 (1987): 53-81.
- Rivera, Benito V. "Finding the *Soggetto* in Willaert's Free Imitative Counterpoint: A Step in Modal Analysis." In *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein, 73-102. Chicago: University of Chicago Press, 1993.
- _____. "Harmonic Theory in Musical Treatises of the Late Fifteenth and Early Sixteenth Centuries." *Music Theory Spectrum* 1 (1979): 80-95.
- _____. "The Two-Voice Framework and its Harmonization in Arcadelt's First Book of Madrigals." *Music Analysis* 6 (1987): 59-88.
- Rothfarb, Lee. "Tinctoris vs. Tinctoris: Theory and Practice of Dissonance in Counterpoint." *In Theory Only* 9 (1986): 3-32.
- Ruwet, Nicolas. "Methodes d'analyse en musicologie." *Revue belge de musicologie* 2 (1966): 65-90.

- Salzer, Felix. *Structural Hearing*. New York: Boni, 1952.
- Schenker, Heinrich. *Der Freie Satz*. Translated and edited by Ernst Oster. New York: Longman, 1979.
- Schubert, Peter N. "The Fourteen-Mode System of Illuminato Aiguino." *Journal of Music Theory* 35 (1991): 175-210.
- _____. *Modal Counterpoint: Renaissance Style*. London: Oxford University Press, 1999.
- _____. "Authentic Analysis." *Journal of Musicology* 12 (1994): 3-18.
- _____. "Mode and Counterpoint." In *Music Theory and the Exploration of the Past*, ed. Christopher Hatch and David W. Bernstein, 103-36. Chicago: University of Chicago Press, 1993.
- _____. "A Lesson from Lassus: Form in the Duos of 1577." *Music Theory Spectrum* 17 (1995): 1-26.
- Schulenberg, David. "The Keyboard Works of William Byrd: Some Questions of Attribution, Chronology and Style." *Musica Disciplina* 67 (1993): 99-121.
- _____. "Modes, Prolongations and Analysis." *Journal of Musicology* 4 (1985-86): 303-29.
- Stern, David. "William Byrd: Mass for Five Voices." In *Music Before 1600: Models of Musical Analysis*, ed. Mark Everist, 208-24. London: Blackwell, 1992.
- _____. "Tonal Organization in Modal Polyphony." *Theory and Practice* 6 (1981): 5-39.
- _____. "Schenkerian Theory and the Analysis of Renaissance Music." In *Schenker Studies*, ed. Hedi Siegel, 45-59. Cambridge: Cambridge University Press, 1990.
- _____. "A Quotation from Josquin in Schenker's *Free Composition*." *Theory and Practice* 7 (1982): 33-40.
- Turbet, Richard. *William Byrd: A Guide to Research*. New York: Garland Publishing, 1987.
- Wiering, Frans. "Internal and External Views of the Modes." In *Tonal Structures in Early Music*, ed. Cristle Collins Judd, 87-108. New York and London: Garland Publishing, 1998.

Wulstan, David. "Birdus tantum natus decorare magistrum." In *Byrd Studies*, ed. Alan Brown and Richard Turbet, 63-82. Cambridge: Cambridge University Press, 1992.

Zarlino, Gioseffo. *Le Istitutioni Harmoniche*, Vol. 3. Venice: n.p., 1558. Translated by Guy A. Marco and Claude V. Palisca as *The Art of Counterpoint*. New Haven and London: Yale University Press, 1968.

_____. *Le Istitutioni Harmoniche*, Vol. 4. Venice: n.p., 1558. Translated by Vered Cohen as *On the Modes*. New York and London: Yale University Press, 1983.

Scores/Editions

Byrd, William. *The Byrd Edition*, vol. 1: *Cantiones Sacrae 1575*. Ed. Craig Monson. London: Stainer & Bell, 1977.

_____. *The Byrd Edition*, vol. 2: *Cantiones Sacrae 1589*. Ed. Alan Brown. London: Stainer & Bell, 1988.

_____. *The Byrd Edition*, vol. 2: *Cantiones Sacrae 1589*. Ed. Edmund Fellowes. London: Stainer & Bell, 1937.

_____. *The Byrd Edition*, vol. 3: *Cantiones Sacrae 1591*. Ed. Alan Brown. London: Stainer & Bell, 1981.

_____. *The Byrd Edition*, vol. 5: *Gradualia I (1605) Part 1*. Ed. Philip Brett. London: Stainer & Bell, 1989.

_____. *The Byrd Edition*, vol. 6: *Gradualia I (1605) Part 2*. Ed. Philip Brett. London: Stainer & Bell, 1991.

_____. *The Byrd Edition*, vol. 7: *Gradualia II (1607)*. Ed. Philip Brett. London: Stainer & Bell, 1997.

_____. *The Byrd Edition*, vol. 10b: *The English Services II (The Great Service)*. Ed. Craig Monson. London: Stainer & Bell, 1982.

Volume Two: Figures and Musical Examples

Examples for Chapter 1

1.1	Zarlino's "simple cadences" to the unison and octave	1
1.2	Zarlino's cadences with a fifth leap in the bass	2
1.3	Zarlino's "improper cadences"	3
1.4	Zarlino's "extravagant cadences"	4
1.5	Morley's first examples of cadences in two parts	5
1.6	Morley's best way of closing against an ascending fourth	6
1.7	Morley's cadences without a suspension	7
1.8	Cadence with "Landini sixth" (<i>Tristitia</i> , measure 172)	8
1.9	Meier's cadence with altizans	9
1.10	Meier's "second basic form" of altizans	10
1.11	Meier's solutions for the Phrygian basizans	11
1.12	Meier's evaded cadences	12

Examples for Chapter 2

2.1	<i>Memento Domine</i> , mm. 5-9: comparison of subjects 1 and 2	13
2.2	<i>Memento Domine</i> , mm. 18-26: cadential emphasis of A and D	14
2.3	<i>Defecit in dolore</i> , mm. 1-4: two forms of neighbour motion	15
2.4	<i>Defecit in dolore</i> , mm. 11-17	
(a)	comparison of "defecit" with "vita mea"	16
(b)	new point begins at cadential goal, mm. 15-17	17

Examples for Chapter 3

3.1	Evaded cantizans (<i>Defecit in dolore</i> , mm. 10-11)	18
3.2	Evaded cantizans (<i>Aspice Domine</i> , mm. 16-19)	19
3.3	Abandoned cantizans (<i>Aspice Domine</i> , mm. 92-96)	20
3.4	Evaded tenorizans--> evaded basizans (<i>Tristitia</i> , mm. 23-26)	21

3.5	Four-note embellishing cambiata figure at a cadence	
(a)	<i>Defecit in dolore</i> , end of <i>Prima Pars</i>	22
(b)	<i>Domine praestolamur</i> , end of <i>Prima Pars</i>	23
(c)	<i>Domine praestolamur</i> , end of <i>Secunda Pars</i>	24
(d)	<i>Tristitia et anxietas</i> , end of <i>Prima Pars</i>	25

Examples for Chapter 4

4.1	Cadence as musical punctuation	
(a)	<i>Ne irascaris</i> , mm. 1-7	26
(b)	<i>Tribulationes civitatum</i> , mm. 1-4	27
4.2	Cadence as opening gesture (<i>O Domine adjuva me</i> , mm. 1-3)	28
4.3	Cadential potential of opening fulfilled, (<i>O Domine adjuva me</i> , mm. 7-8)	29
4.4	Evaded tenorizans motion (<i>Memento Domine</i> , mm. 5-8)	30
4.5	Opening notes of “Memento” subject in a cadence	
(a)	<i>Memento Domine</i> , mm. 8-10: tenorizans cadence to D	31
(b)	<i>Memento Domine</i> , mm. 14-16: tenorizans cadence to D	32
(c)	<i>Memento Domine</i> , mm. 18-21: simple cadence to A	33
(d)	<i>Memento Domine</i> , mm. 10-13: evaded basizans “5-4”	34
4.6	<i>Memento Domine</i> , mm. 10-13: abandoned tenorizans to D	35
4.7	Comparison, <i>Memento Domine</i> , mm. 7-8 and 16-17	36
4.8	“Quam possedisti” duos (<i>Memento Domine</i> , mm. 26-30)	37
4.9	“Ab initio” (<i>Memento Domine</i> , mm. 43-47)	38
4.10	“Libera eos” (<i>Memento Domine</i> , mm. 48-49, 53-55)	39
4.11	“Libera eos-tribulationibus” pair (<i>Memento Domine</i> , mm. 59-63)	40
4.12	<i>Memento Domine</i> : reductive graph of background tonal plan	41

Examples for Chapter 5

5.1	Imitative presentation, one subject: <i>O quam gloriosum</i> , mm. 1-3	42
5.2	Imitative presentation, two subjects: <i>Memento Domine</i> , mm. 1-7	43
5.3	Non-imitative presentation, two subjects	
	(a) <i>Vigilate</i> , mm. 1-3	44
	(b) <i>O Domine adjuva me</i> , mm. 1-3	45
5.4	Transposed canon, three voices	
	(a) <i>In resurrectione tua</i> , mm. 26-28	46
	(b) <i>Vigilate</i> , mm. 57-60	47
5.5	Invertible canon: <i>Vide Domine</i> , mm. 46-48	48
5.6	Non-imitative module plus parallel doubling: <i>Tristitia</i> , mm. 1-3	49
5.7	Homophonic presentation types	
	(a) Three-subject cadential block (<i>Aspice Domine</i> , mm. 60-62)	50
	(b) Two subjects plus “textural padding” (<i>Vide Domine</i> , mm.1-4)	51
	(c) Homophonic triple point (<i>Tribulationes civitatum</i> , mm. 1-4)	52
	(d) “Carnes sanctorum” triple point (<i>Deus venerunt gentes</i> , mm.84-86)	53
	(e) Triple point as complete thematic unit (<i>Ne irascaris</i> , mm. 1-7)	54
5.8	Imitative duo plus parallel doubling	
	(a) <i>Tristitia et anxietas</i> , mm. 156-58; leading voice doubled in thirds	55
	(b) <i>Tristitia et anxietas</i> , mm. 79-81; following voice doubled in thirds	56
5.9	Semi-imitative presentation (<i>Tristitia et anxietas</i> , mm. 135-36)	57
5.11	Triple point plus parallel doubling	
	(a) <i>Vide Domine</i> , mm. 80-84	58
	(b) <i>Ne irascaris</i> , mm. 106-10	59
5.14	Variably constructed canon, Type 1 (<i>Defecit in dolore</i> , mm. 70-74)	60
5.19	Transposed canon plus parallel doubling (<i>In resurrectione</i> , mm. 26-28)	61
5.20	Invertible canon plus parallel doubling: (<i>Vigilate</i> , mm. 101-103)	62
5.21	Accompanied transposed canon (<i>Aspice Domine</i> , mm. 43-48)	63

5.22	Accompanied invertible canon	
	(a) <i>Tribulationes civitatum</i> , mm. 20-21	64
	(b) <i>Tribulationes civitatum</i> , mm. 15-18	65
5.24	Semi-imitative presentation plus parallel doubling (<i>Tristitia</i> , mm. 5-9)	66

Examples for Chapter 6

6.1	Quadruple point from <i>Deus venerunt gentes</i> (beginning of <i>Quarta Pars</i>)	67
6.2	Transposed canon (<i>Laetentur coeli</i> , mm. 48-53)	68
6.3	Invertible canon (<i>Aspice Domine</i> , mm. 72-75)	69
6.4	Invertible canon (<i>Defecit in dolore</i> , mm. 70-75)	70
6.5	Variably-constructed canon, Type 1 (<i>Laetentur coeli</i> , mm. 1-7)	71
6.6	Transposed canon in three voices (<i>Vigilate</i> , mm. 31-33)	72
6.7	Alternating fourths and fifths (<i>O quam gloriosum</i> , mm. 22-24)	73
6.8	Invertible canon in three voices (<i>Vigilate</i> , mm. 44-48)	74
6.9	Variably-constructed canon, Type 1	
	(a) <i>Laetentur coeli</i> , mm. 15-17	75
	(b) As part of a longer canon (<i>Ne irascaris</i> , mm. 114-19)	76
6.10	Variably-constructed canon, Type 3 (<i>Ne irascaris</i> , mm. 124-26)	77
6.11	Imitation plus parallel doubling (<i>In resurrectione tua</i> , mm. 23-25)	78
6.12	Semi-imitative presentation	
	(a) <i>Tristitia et anxietas</i> , mm. 135-36	79
	(b) <i>O quam gloriosum</i> , mm. 50-51	80
6.13	Overlapping duos (<i>O quam gloriosum</i> , mm. 91-93)	81
6.14	Semi-imitative presentation plus parallel (<i>Tristitia et anxietas</i> , mm. 5-8)	82
6.15	Transposed canon plus parallel	
	(a) <i>Domine tu jurasti</i> , mm. 57-58	83
	(b) <i>In resurrectione tua</i> , mm. 26-28	84
	(c) <i>Vigilate</i> , mm. 101-102	85

6.16	Invertible canon plus parallel doubling (<i>Deus venerunt</i> , mm. 91-94)	86
6.17	Accompanied transposed canon (<i>Aspice Domine</i> , mm. 43-48)	87
6.18	Accompanied invertible canon (<i>Tribulationes civitatum</i> , mm. 20-22)	88

Examples for Chapter 7

7.1	“Exultet” parallel doubling (<i>Laetentur coeli</i> , mm. 8-13)	89
7.2	“Thinning out” of harmonic motive (<i>O Domine adjuva me</i> , mm. 18-20)	90
7.3	Transposition by octave	
	(a) <i>Vigilate</i> , mm. 1-7	91
	(b) <i>Laetentur coeli</i> , mm. 1-7	92
	(c) <i>Ne irascaris</i> , mm. 75-81	93
7.4	Transposition by fifth (<i>Defecit in dolore</i> , mm. 70-73)	94
7.5	Transposed canon at the octave (<i>Laetentur coeli</i> , mm. 18-20)	95
7.6	Transposed canon at the fifth (<i>In resurrectione tua</i> , mm. 26-28)	96
7.7	Transposed canon at the fourth (<i>Laetentur coeli</i> , mm. 1-7)	97
7.8	Canon by alternating fourths and fifths (<i>O quam gloriosum</i> , mm. 22-25)	98
7.9	“Tanquam aquam” complex canons	
	(a) <i>Deus venerunt gentes</i> , mm. 144-46	99
	(b) <i>Deus venerunt gentes</i> , mm. 146-48	100
	(c) <i>Deus venerunt gentes</i> , mm. 148-50	101
7.10	Variation by melodic inversion	
	(a) <i>Defecit in dolore</i> , opening point	102
	(b) <i>Domine praestolamur</i> , mm. 70-72	103
	(c) <i>Tribulationes civitatum</i> , mm. 24-26	104
	(d) <i>O quam gloriosum</i> , mm. 111-14, 119-22	105
7.11	Incidental use of ic 9 (<i>Deus venerunt gentes</i> , mm. 47-50)	106
7.12	Opening module varied by ic 8 (<i>O Domine adjuva me</i> , mm. 1-5)	107
7.13	Opening module varied by ic 12 (<i>Tristitia et anxietas</i> , mm. 23-26)	108

7.14	(and Figure 7.1) Entries and cadences from <i>Deus venerunt gentes</i>	
	(a) measures 218-24	109
	(b) measures 225-31	110
	(c) measures 234-40	111
7.15	Cadence with simultaneous cross-relation (<i>Aspice Domine</i>)	
	(a) original statement, mm. 51-52	112
	(b) restatement, mm. 61-62 and 67-68	113
	(c) varied restatement (ic 11), mm. 64-65	114
7.16	Concluding canons from <i>Deus venerunt gentes</i>	
	(a) Canon 1, mm. 259-61	115
	(b) Canon 2 and cadence, mm. 261-66	116

Figures and Examples for Chapter 8

Figures 8.1-8.8:	Reductive charts for <i>Tristitia et anxietas</i> : general commentary	116
8.1	“Tristitia et anxietas” (mm. 1-21)	117
8.2	“Occupaverunt-interiora mea” (mm. 18-42)	119
8.3	“Moestum...in dolore” (mm. 43-55)	121
8.4	“Et contenebrati sunt-oculi mei” (mm. 55-82)	122
8.5	“Vae mihi-quia peccavi” (mm. 82-113)	124
8.6	“Sed tu Domine” (mm. 114-35)	127
8.7	“Consolare-sanctum tuum” (mm. 135-56)	129
8.8	“Et miserere mei” (mm. 156-76)	131

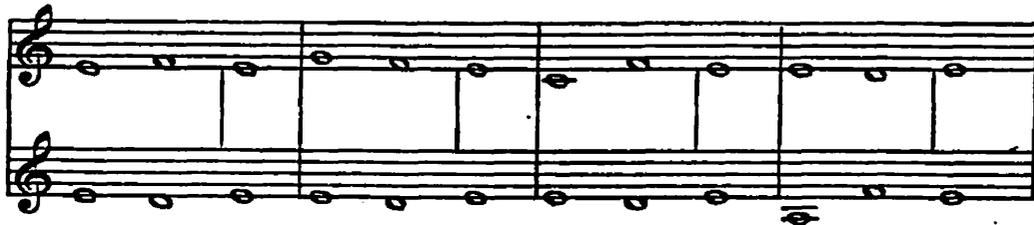
Examples: Selected passages from *Tristitia et anxietas*

8.1	“Interiora mea” preparing A cadence, mm. 38-42	133
8.2	“In dolore” canon (mm. 51-55)	134
8.3	A as “5,” abandoned cadence to D (mm. 53-58)	135
8.4	Excerpt from “oculi mei” canon (mm. 77-82)	136

8.5	“Quia peccavi” plus cantizans/tenorizans cadence (mm. 86-90)	137
8.6	Two examples of harmonic motive (mm. 86-90)	138
8.7	Rhythmic canon (mm. 106-13)	139
8.8	Three “consolare” combinations	
	(a) mm. 135-36	140
	(b) mm. 140-41	141
	(c) mm. 146-47	142
8.9	Harmonic motive of “et miserere mei”	
	(a) mm. 158-60	143
	(b) mm. 161-63	144
8.10	Variably-constructed canon, Type 1 (pair of duos), mm. 172-76	145

Examples for Chapter 1

Example 1.1: Zarlino's "simple cadences" to the unison and octave (Gioseffo Zarlino, *Le Istitutioni Harmoniche*, Vol. 3, Venice: n.p., 1558, translated by Guy A. Marco and Claude V. Palisca as *The Art of Counterpoint*, New Haven and London: Yale University press, 1968, pages 143 and 145)



Example 1.2: Zarlino's "simple cadences" with a descending fifth (or ascending fourth) leap in the bass (*The Art of Counterpoint*, 147)

The image displays two systems of musical notation, each consisting of two staves. The top staff of each system is labeled 'Upper' and the bottom staff is labeled 'Lower'. Both staves use a treble clef. The first system shows a sequence of notes in the upper part: G4, A4, B4, C5, B4, A4, G4. The lower part begins with a descending fifth leap from G4 to C4, followed by a series of eighth notes: C4, D4, E4, F4, G4, A4, B4, C5. The second system shows the upper part continuing with G4, A4, B4, C5, B4, A4, G4. The lower part continues with the eighth-note sequence: C4, D4, E4, F4, G4, A4, B4, C5. Vertical bar lines separate the measures in both systems.

Example 1.3: Zarlino's "improper cadences," or "cadences musicians use occasionally"¹ (*The Art of Counterpoint*, 148)

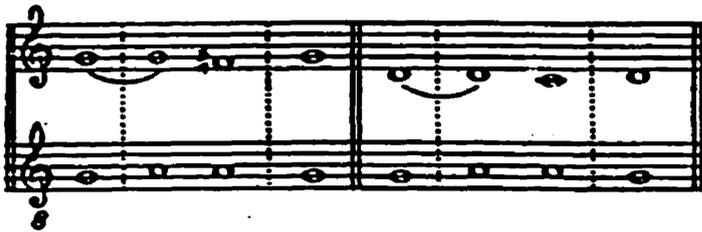
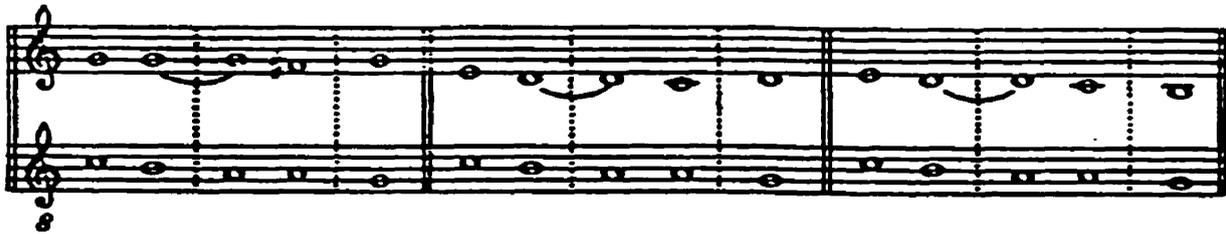
The image displays four systems of musical notation, each consisting of two staves. The top staff of each system is labeled 'Upper' and the bottom staff is labeled 'Lower'. The notation is in a simple, early style, likely from the 16th century. The first system shows a simple harmonic progression. The second system, starting at measure 4, introduces more complex rhythmic patterns and intervals. The third system, starting at measure 6, continues with similar complexity. The fourth system, starting at measure 8, concludes the example with a final cadence. The notation uses various note values, including minims, crotchets, and quavers, and rests.

¹Zarlino's heading on his Example 106, page 148.

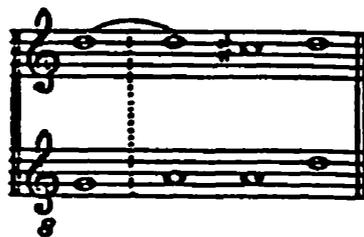
Example 1.4: Zarlino's "extravagant cadences" (*The Art of Counterpoint*, 149)

The image displays four systems of musical notation, each consisting of an upper staff (treble clef) and a lower staff (bass clef). The first system is labeled "Upper" and "Lower". Handwritten annotations in the first system include "2-5" above the upper staff, "7-8" above the lower staff, and "2" above the final note of the upper staff. The second system has annotations "5-5" above the upper staff, "7-8" above the lower staff, and "8" below the first note of the lower staff. The third system has annotations "7-5" above the upper staff, "5-3" above the upper staff, "7-8" above the lower staff, and "7-8" above the lower staff. The fourth system is marked with a "13" at the beginning of the upper staff. The notation includes various note values, rests, and bar lines, illustrating specific cadential techniques.

Example 1.5: Morley's first examples of cadences in two parts (Thomas Morley, *A Plain & Easy Introduction to Practical Music*, ed. Alec Harman, New York, Norton, 1952, page 146)

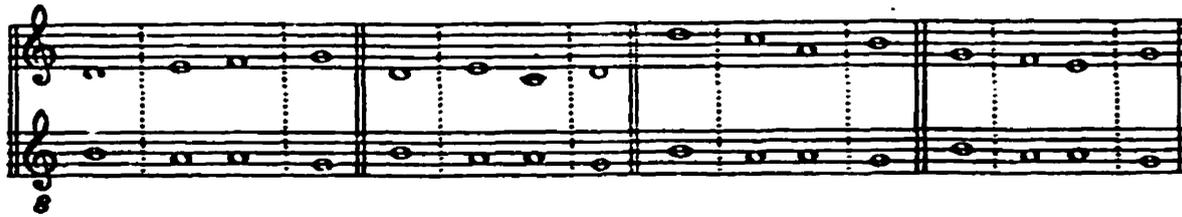


Example 1.6: Morley's "best way of closing" against an ascending fourth in the plainsong
(*Plain and Easy Introduction*, 146)



Example 1.7: Morley's cadences without a suspension (cf. Zarlino's "simple cadence"),

Plain and Easy Introduction, 147



Example 1.8: Cadence with "Landini sixth" (*Tristitia et anxietas*, measure 172), *The Byrd Edition*, vol. 2: *Cantiones Sacrae* 1589, ed. Alan Brown, London: Stainer & Bell, 1998.

Reproduced by permission of Stainer & Bell, Ltd, London, England.

175

S
- l et mi - se - re - re me - - - - i

M
et mi - se - re - re me - i, et mi - se - re - re me - l
ds(6)Ps

C
i, et mi - se - re - re me - - - i
7 6 5 8

T
- re - re me - i, et mi - se - re - re me - i

B
- - i, et mi - se - re - re me - - - - i

Example 1.9: Meier's cadence with altizans (Bernhard Meier, *The Modes of Classical Vocal Polyphony*, translated by Ellen S. Beebe, New York: Broude Brothers, Ltd., 1988, page 92)

The image displays a musical score for a cadence with altizans. It consists of two staves, a treble clef on top and a bass clef on the bottom. The notation includes various notes, rests, and accidentals. An arrow points from the text "clausula altizans" to the final notes of the treble staff. Below the staves, a bracket groups two labels: "left: older" and "right: more recent". An arrow points from the "right: more recent" label to the final notes of the bass staff. The word "type" is positioned to the right of the bracket.

clausula altizans

left: older
right: more recent } type

Example 1.10: Meier's "second basic form" of altizans (*The Modes*, 93)



CANTIZANS
TENORIZANS
BASIZANS



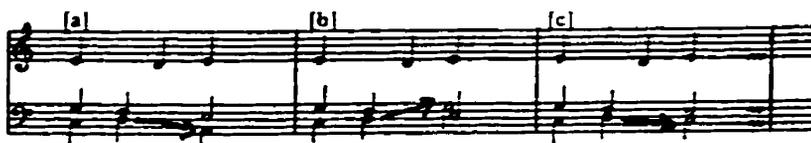
* WITH ALTIZANS
ADDED (→)

Example 1.11: Meier's solutions for the Phrygian basizans (*The Modes*, 97)

(a) descending fourth, or "7-4"

(b) ascending fourth, or "7-3"

(c) descending step, or "7-6"



Example 1.12: Meier's evaded cadences, labelled according to the voices that evade their goals (*The Modes*, 101)

evaded type: cl. basizans cl. basizans cl. cantiz. – tenoriz. cl. cantiz. – basiz.

evaded type: cl. tenorizans – basizans – altizans cl. basizans cl. tenorizans – basizans

Examples for Chapter Two

Example 2.1: *Memento Domine* (1589/5), measures 5-9: comparison of Subjects 1-2

5

SUBJECT 1

S Me - - men - to Do - mi - ne con -

M Me - -

C - men - to Do - mi - ne

SUBJECT 2

T - gre - ga - ti - o - nis tu - ae, con - gre - ga - ti - o - nis tu - ae.

B

Example 2.3: Defecit in dolore (1589/1), measures 1-4: two forms of opening neighbour motion

Musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are: SUPERIUS: De - fe - ; CONTRATENOR: De - fe - cit in do - lo - re vi - ta - me - ; TENOR: De - - - fe - cit in - ; BASSUS: De - fe - cit in do - lo - re. Handwritten annotations include '(A inv.)' above the SUPERIUS staff, 'A' above the CONTRATENOR staff, and 'A inv.' above the TENOR staff.

Example 2.4: Defecit in dolore, measures 10-17:

(a) comparison of "defecit" with "vita mea" subject

10

A

S de - fe - - cit in do - lo - re vi -

M - re vi - ta me - a, vi - ta me - a, vi - ta me -

C do - lo - re vi - ta me - a, vi - ta me - a,

T me - a, vi - ta me a, vi - ta me -

B fe - cit in do - lo - - re, vi - - - ta

15

- ta me - - a,

- a, vi - ta me - - - a.

vi - ta me - - - a.

- - - et an

= SUBJECT A

me - - - a.

(Example 2.4 continued)

(b) Superimposition of new imitative point on cadential goal (*Defecit in dolore*, measures 15-17)

15

S
- ta me - - a, et

M
- a, vi - ta me - - - a,

C
vi - ta me - - - a, et an -

T
- - a, et an - ni me - -

B
me - - - a, et an -

↑
CADENCE
TO A

Examples for Chapter Three

Example 3.1: "7-6" evaded cantizans from *Defecit in dolore*, measures 10-11

10

S de - fe - -

M - re vi - ta me - a,

C ^{"7-6"}
Susp do-lo-re vi-ta me - -

T me - a, vi

B ^{"2-1"}
fe - cit in - - do - lo - -

Example 3.2: "7-6" evaded cantizans in a "cadence with simultaneous cross-relation"²
 from *Aspice Domine* (1589/11), measures 16-19

S
 - cta tu - - a, de se - de san - cta tu -

M
 de se - de san - cta tu - - - - -

C
 - - - - a, de se - de san - cta tu - -

T
 tu - - - - - a, - - - - -

B
 se - de san - - cta tu - - a, de se - de san - cta

Handwritten annotations: "7-6", "(7-8)", "(2-1)", "(5-1)".

²The term is from Andrews, *Byrd's Vocal Polyphony*, 108.

**Example 3.3: Cadence with abandoned cantizans ("7-rest") from *Aspice Domine*,
measures 92-96**

95 "7 - REST"

S
- rum, coe - lo - rum ha - bi - ta - cu - lis,

M
- - - bi - - - ta - - - - cu - - -

C
coe - lo - - - rum, coe - lo - rum ha - bi -

T
- lo - rum, coe - lo - rum, coe - lo - rum ha - bi - ta - cu - lis, ha - bi -

B
- rum, coe - lo - rum, coe - lo - rum ha - bi - ta -

"2 - 3"

"5 - 1"

"5 - 1"

Example 3.4: Evaded tenorizans becomes evaded basizans, from *Tristitia et anxietas*

(1589/4), measures 23-26

Handwritten annotations in the score include:

- "2 — 3" above the Soprano staff.
- (2 — 1") above the Alto staff.
- (7 — 8") above the Contralto staff.
- (7 — 8") above the Tenor staff.
- "5 — 6" above the Bass staff.

A diagrammatic arrow points from the Soprano staff down to the Bass staff, indicating a cross-staff relationship between the two parts.

Lyrics for Soprano (S): oc - cu - pa - ve - runt,

Lyrics for Alto (M): - o - ra me - a, in - te - ri - o - ra me - a, in - te - ri -

Lyrics for Contralto (C): - ra me - a,

Lyrics for Tenor (T): - ve - runt in - te - ri - o - ra me - a, in -

Lyrics for Bass (B): oc - cu - pa - ve - runt

Measure number 25 is indicated above the Soprano staff.

Example 3.5: Four-note embellishing cambiata figure as foreground cadential signal

(a) *Defecit in dolore, end of Prima Pars*

65

S
- tus est, re - no - va - - - - tus est.

M
- - - - tus est, re - - no - va - - tus est.

C
re - no - va - tus est, re - no - va - tus est.

T
do - - - - lor me - us, re - no - va - - - - tus est.

B
- tus est, re - - - no - va - - tus est.

CAMBIATA

(Example 3.5 continued)

(b) *Domine praestolamur* (1589/2), end of *Prima Pars*

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are Latin, and the score includes a 'CAMBIATA' marking. The lyrics are as follows:

S: - ta - - - tis no - - - - - strae.
M: - pti - vi - ta - - - tis no - - - - - strae.
C: - - - strae, no - - - - - strae.
T: - - - strae, ca - pti - vi - ta - - - tis no - - - - - strae.
B: - ta - - - tis, ca - pti - vi - ta - - - tis no - - - - - strae.

The 'CAMBIATA' marking is written in a box above the Contralto staff, indicating a change in the musical style or tempo.

(Example 3.5 continued)

(c) *Domine Praestolamur*, end of *Secunda Pars*

135

S - ra po - pu-lum tu - - - - - um.

M - - um, et li - be - ra po - pu-lum tu - um.

C tu - um, po - - pu - lum tu - - - - - um. **CAMBIATA**

T - um, et li - be - ra po - pu-lum tu - - - - - um.

B - - - - - um, po - pu - lum tu - um.

(Example 3.5 continued)

(d) *Tristitia et anxietas*, end of *Prima Pars*

110

S
- - vi. qui - a pec - ca - - - vi.

M
qui - a pec - ca - - - vi, qui - - - a pec - ca - - vi.

C
- vi, qui - a pec - ca - - - vi, pec - ca - - - vi.
CAMBIATA

T
- ca - - vi, qui - a pec - ca - - vi, pec - ca - - vi.

B
- a pec - ca - - vi, qui - a pec - ca - - vi.

Examples for Chapter Four

Example 4.1: Cadence as musical punctuation to conclude an opening subject

(a) *Ne Irascaris* (1589/12), measures 1-7



Musical score for *Ne Irascaris* (1589/12), measures 1-7. The score is for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are: Ne i - ra - sca - ris Do - - mi - ne sa -



Detailed musical score for *Ne Irascaris* (1589/12), measures 1-7. The score is for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are: Ne i - ra - sca - ris Do - - mi - ne sa -

(Example 4.1 continued)

(b) *Tribulationes civitatum* (1589/14), measures 1-8

Musical score for the first system of *Tribulationes civitatum*, measures 1-8. The score is written for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are:

CONTRATENOR: Tri - bu - la - ti - o - nes ci - vi -
 TENOR: Tri - bu - la - ti - o - nes ci - vi - ta - tum
 BASSUS: Tri - bu - la - ti - o - nes ci - vi - ta - tum

Musical score for the second system of *Tribulationes civitatum*, measures 5-8. The score is written for five voices. The lyrics are:

CONTRATENOR: - ta - tum au - di - vi - mus, Tri -
 TENOR: au - di - vi - mus, au - di - vi - mus,
 BASSUS: au - di - vi - mus, au - di - vi - mus,

Handwritten annotations in the score include a "5" above the first measure of the second system, and "7-8" and "2-1" above the notes for "au - di - vi - mus" in the Contratenor and Tenor parts respectively. A "5-1" annotation is also present above the Bassus part.

Example 4.2: "Cadence" as opening gesture, from *O Domine adjuva me*, measures 1-3

Musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score shows the first three measures of the piece. A handwritten annotation "7-8" (simple cadence) is placed above the staff for the MEDIUS voice. The lyrics are: "O Do - mi - ne, O Do - mi - ne ad - ju - va me, O Do - mi - ne ad - O Do - mi -".

Example 4.3: Cadential potential of opening fulfilled, from *O Domine adjuva me*,
measures 7-8

Handwritten musical score for measures 7-8 of "O Domine adjuva me". The score is written for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are: "O Domine adjuva me, et sal-vus e-ro, Do-mi-ne ad-ju-va me, et sal-vus e-ro." A circled number "7" is written above the Soprano staff in measure 7. A circled number "8" is written above the Soprano staff in measure 8. Arrows point to the end of the Soprano and Bass staves in measure 8, indicating the end of the phrase.

Detailed musical score for measures 7-8 of "O Domine adjuva me". The score is written for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are: "sal-vus e-ro, e-ro, Do-mi-ne ad-ju-va me, et sal-ju-va me." Handwritten annotations include "2-1" above the Tenor staff in measure 7 and "SUSP. '7-8'" above the Bass staff in measure 8. A circled number "8" is written above the Bass staff in measure 8.

Example 4.4: Ascending semitone (A to B-flat) treated as an evaded tenorizans motion

(*Memento Domine*, measures 5-8)

The musical score consists of five staves labeled S, M, C, T, and B from top to bottom. The Soprano (S) part has a handwritten 's' above the first measure and a circled '2-3' above the final measure. The lyrics for S are 'Me - - men - to Do'. The Alto (M) part is mostly empty. The Contralto (C) part has lyrics '- men - to Do - mi - ne' and a circled '7-8' above the final measure. The Tenor (T) part has lyrics '- gre - ga - ti - o - nis tu - ae, con - gre - ga' and a circled '7-8' above the final measure. The Bass (B) part is mostly empty. The key signature has one flat (B-flat), and the time signature is common time (C).

Example 4.5: Opening notes of "Memento" subject in a cadence

(a) *Memento Domine*, measures 8-10: tenorizans cadence to D; cantizans and abandoned basizans added in contratenor and tenor voices

5

S Me - - men - to Do - mi - ne # 2 con -

M

C - men - to Do - mi - ne con - gre - ga - ti - o - nis tu Me # 5 -

T - gre - ga - ti - o - nis tu - ae, con - gre - ga - ti - o - nis tu - ae.

10

S - gre - ga - ti

M - men - to 1"

C - ae, me - men - 8"

T - REST" con - gre

(Example 4.5 continued)

(b) *Memento Domine*, measures 14-16: opening gesture of subject becomes tenorians cadence to D

15

S
me - - - men - to

M
- ga - ti - o - nis tu - ae, con
("7 - REST")

C
- ti - o - nis tu - - - - ae,
("2 - 3")

T
- - - mi - ne con - gre - ga - ti -
("5 - REST")

B
Do - - - mi - ne con - gre

(Example 4.5 continued)

(c) *Memento Domine*, measures 18-21: opening gesture of subject used as part of a simple cadence to A; cantizans and basizans added in medius and bassus voices

20

S
- ne con - gre - ga - ti - o - nis tu - ae,

M
"7-8"
- o - nis tu - ae, me - men - to Do - mi - ne con -

C
"2-1"
me - men - to Do - mi - ne

T
- - - ae, con - gre - ga

B
"5"
tu - - - ae, con - gre - ga - ti - o - nis tu - -

(Example 4.5 concluded)

(d) *Memento Domine*, measures 10-13: opening gesture of subject used as evaded
 basizans "5-4"

10

S
 - gre - ga - ti - o - nis tu - ae,

M
 - men - to Do - mi - ne con - gre -

C
 - ae, me - men - to Do - mi - ne con - gre - ga -

T
 con - gre - ga - ti - o - nis tu - ae, me - men - to Do -

B
 Me - men - to

Handwritten annotations:
 - Above M staff: "2" and "REST"
 - Above C staff: ("7 - 6")
 - Above B staff: * "5" and "4"

Example 4.6: Memento Domine, measures 10-13: final note of "Memento Domine"
 subject as abandoned tenorizations in a cadence to D

10

S
 - gre - ga - ti - o - nis tu - - - ae,

M
 - men - to Do - - mi - ne con - gre -

C
 - ae, me - men - - - to Do - mi - ne con - gre - ga -

T
 con - gre - ga - ti - o - nis tu - ae, me - men - to Do -

B
 Me - - - men - to

Handwritten annotations: * "2" above M staff; "REST" above M staff; ("7 — 6") above C staff; ("5 — 4") above B staff.

Example 4.7: Comparison of *Memento Domine*, measures 7-8 with its transposition in measures 16-17

5

S Me - - - - - men - to Do - mi - ne con -

M Me -

C - men - to Do - mi - ne con - gre - ga - ti - o - nis tu -

T - gre - ga - ti - o - nis tu - ae, con - gre - ga - ti - o - nis tu - ae.

B

Detailed description: This block shows the first system of a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The music is in a common time signature. A large rectangular box highlights measures 7 and 8. An arrow points from the bottom of this box down to the second system, indicating a transposition of the material.

15

me - - - - - men - to Do - mi -

- ga - ti - o - nis tu - ae, con - gre - ga - ti -

- ti - o - nis tu - - - - - ae,

- - - - - mi - ne con - gre - ga - ti - o - nis tu -

Do - - - - - mi - ne con - gre - ga - ti - o - nis

(#?)

Detailed description: This block shows the second system of the musical score, starting at measure 15. It contains the transposed version of the material from measures 7-8. A large rectangular box highlights measures 16 and 17. A handwritten note "(#?)" is written in the bass staff of measure 17. The lyrics are: "me - - - - - men - to Do - mi -", "- ga - ti - o - nis tu - ae, con - gre - ga - ti -", "- ti - o - nis tu - - - - - ae,", "- - - - - mi - ne con - gre - ga - ti - o - nis tu -", "Do - - - - - mi - ne con - gre - ga - ti - o - nis".

Example 4.8: "Quam possedisti" imitative duos, from *Memento Domine*, measures 26-30; combination #1 at the semibreve, combination #2 at the breve

30

S
quam pos-se-di-sti ab i-ni-ti-o,

M
ae. quam pos-se-di-sti ab

C
ae. quam pos-se-di-sti ab i-ni-

T
ae. quam pos-se-di-sti ab i-ni-ti-o, quam pos-se-di (etc)

B
quam pos-se-di-sti ab i-ni-ti-o, ab i-ni-ti-

COMB. 1

COMB. 2

Example 4.9: "Ab initio" subject and shift of emphasis from A-D to A-E (*Memento Domine*, measures 43-47)

Handwritten annotations in the score include:
- Soprano: **A-E** (with arrow)
- Alto: **E-A 5th** (with arrow)
- Contralto: **A-E** (with bracket)
- Tenor: **D-A** (with bracket)
- Bass: **A-E** (with bracket)

Handwritten annotations in the detailed score include:
- Soprano: **(A-E)**
- Alto: **(E-A 5th)**

Example 4.10: "Libera eos" homophonic blocks (*Memento Domine*, measures 48-49, above; measures 53-55, below)

50

Score for measures 48-49, showing homophonic blocks in Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B) parts. A circled '1' highlights the homophonic block in measures 48-49. The lyrics are: - ni - ti - o. Li - be - ra e - os ex o - mni - bus tri - bu - la - ti - o. - ni - ti - o. Li - be - ra e - os ex o - mni - bus tri - bu - la - ti - o.

55

Score for measures 53-55, showing homophonic blocks in Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B) parts. A circled '2' highlights the homophonic block in measures 53-55. The lyrics are: - o - - - ni - bus. Li - be - ra e - os ex - bu - la - ti - o - ni - bus li - be - ra e - la - ti - o - - - ni - bus li - be - ra e - os ex Li - be - ra e - os

Example 4.12: *Memento Domine*: reductive graph of background tonal plan

The image shows a handwritten musical score for a piano piece. It consists of two staves: a treble staff and a bass staff. The treble staff has a treble clef and a key signature of one flat. Above the treble staff, five circled numbers are written: 0, 6, 48, 53, and 91. The treble staff contains a series of notes with slurs, and the bass staff contains a series of notes. The notation is handwritten and includes bar lines.

Figures and Examples for Chapter Five³

Figure 5.1, top: Imitative presentation, one subject

Example 5.1, bottom: *O quam gloriosum*, measures 1-3

text 1 A

text 1 A

Stage 1----->Stage 2----->Stage 3----->

The musical score consists of five staves, each representing a different vocal part: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are written below the notes. A large bracket labeled 'A' spans across the top two staves (SUPERIUS and MEDIUS) for the first part of the phrase. A second bracket labeled 'A' spans across the CONTRATENOR staff for the second part of the phrase. At the bottom of the score, a diagram labeled 'STAGE: 1 → 2 → 3 →' with arrows indicates the progression of the imitative presentation through the three stages.

³I have only reproduced figures for which there is a musical example in the 1589 *Cantiones*; for the remaining figures, please consult Volume 1, Chapter 5. Note as well that I have labelled the musical examples with the same number as the corresponding figure for easy reference.

Figure 5.2, top: Imitative presentation, two subjects

Example 5.2, bottom: *Memento Domine*, measures 1-7

Text 1 A Text 2 B _____

Text 1 A (then B or free)

Stage 1-----> Stage 2-----> Stage 3----->

Musical score for *Memento Domine*, measures 1-7. The score is written for five vocal parts: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The TENOR part includes the lyrics: "Me - - men - to Do - mi - ne con -". Handwritten annotations include "Text 1 A" and "Text 2 B" with arrows indicating imitative presentation. A "STAGE 1" bracket spans measures 1-2, and a "2" bracket spans measures 3-4.

Detailed musical score for *Memento Domine*, measures 1-7. The score is written for five vocal parts: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The TENOR part includes the lyrics: "Me - - men - to Do - mi - ne". The BASSUS part includes the lyrics: "gre - go - ti - o - nis tu - ae. con -". Handwritten annotations include "(A)" and "(2)" with arrows indicating imitative presentation. A "(A)" bracket spans measures 1-2, and a "(2)" bracket spans measures 3-4.

(Example 5.3 continued)

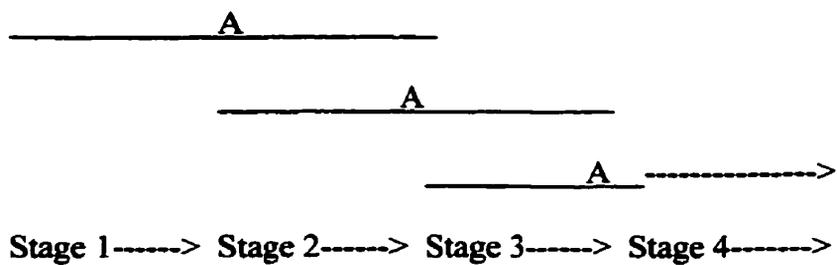
(b) *O Domine adjuva me*, measures 1-3

Musical score for the vocal parts of "O Domine adjuva me" (measures 1-3). The score is written for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are: "O Do - mi - ne, ad - ju - va me, O Do - mi - ne ad - O Do - mi -".

The score includes a vertical line separating the vocal parts from the accompaniment. The lyrics are written below the vocal staves. The Soprano part (SUPERIUS) has a melisma marked with a large 'A' above a bracket. The Alto part (MEDIUS) has a melisma marked with a large 'B' above a bracket. The Tenor part (TENOR) has a melisma marked with a large 'O' above a bracket. The Bass part (BASSUS) has a melisma marked with a large 'O' above a bracket.

Figure 5.4, top: Transposed canon, three voices

Example 5.4, bottom: (a) *In resurrectione tua* (1589/10), measures 26-28



(Example 5.4 continued)

(b) *Vigilate*, measures 12-15

15

S ne - sci - tis e - nim, e - nim, quan -

M - sci - tis e - - - nim, quan do do - mi -

C - nim, e - nim, quan do do - mi - nus do -

T - te: ne - sci - tis e - nim, - - nim,

B e - - - nim, quan - do do - mi - nus do - -

Handwritten annotations: **6 5 3** with arrows pointing to notes in the Alto and Tenor parts.

Figure 5.5, top: Invertible canon

Example 5.5, bottom: Vide Domine, measures 46-48

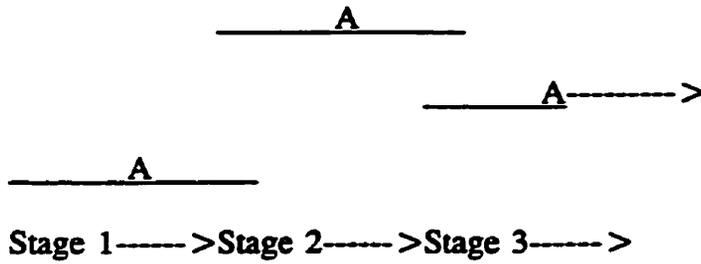


Figure 5.6, top: Non-imitative module plus parallel doubling

Example 5.6, bottom: *Tristitia et anxietas*, measures 1-3

text 1 _____ A (parallel) _____

text 1 _____ A (parallel) _____

text 1 _____ B _____

Musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score shows the first three measures of the piece *Tristitia et anxietas*. The lyrics "Tri - sti - ti - a," are written under the vocal lines. A bracket labeled "A" spans the first two measures for the upper voices, and a bracket labeled "B" spans the first two measures for the lower voices.

Figure 5.7, top: Homophonic triple point

Example 5.7, bottom: Homophonic presentation types

(a) Three-subject cadential block from *Aspice Domine*, measures 60-62

Text 1 A

Text 1 B

Text 1 C

60

S
- o - nem no - - - - - stram,

M
et vi - de tri

C
vi - de tri - bu - la - ti - o - - nem no - - - stram,

T
- - - - - ti - - - - -

B
- la - ti - o - nem no - - - - - stram, tri

(Example 5.7 continued)

(b) Two-subject homophonic presentation plus "textural padding" in medius, contratenor and tenor, from *Vide Domine*, measures 1-4

Musical score for *Vide Domine*, measures 1-4, featuring five voices: Superius, Medius, Contratenor, Tenor, and Bassus. The score shows a two-subject homophonic presentation with "textural padding" in the lower voices. Handwritten annotations include "A" above the Superius staff, "B" above the Tenor staff, and "SUPPORTING VOICES" with a bracket on the Medius, Contratenor, and Tenor staves.

Superius: Vi - - de Do - - mi - ne.

Medius: Vi - - de Do - - mi - ne.

Contratenor: Vi - - de Do - - mi - ne.

Tenor: Vi - - de **B** Do - mi - ne, vi -

Bassus: Vi - - de Do - - mi - ne.

(Example 5.7 continued)

(c) Homophonic triple point from *Tribulationes civitatum* (1589/14), measures 1-4

(note partial parallel doubling in measure 1, lower two voices)

Musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score shows a homophonic triple point in measures 1-4. The lyrics are "Tri - bu - la - ti - o - nes ci - vi - ta - tum". The Contratenor part has a large "A" above it, and the Tenor part has a large "B" above it. The Bassus part has a large "C" above it. The score is in a key with one flat and a 3/4 time signature.

(Example 5.7 continued)

(d) "Carnes sanctorum" triple point from *Deus venerunt gentes*, measures 84-86

85

A

S car - nes san - cto - rum tu -

M - li,

B

C - li, car - nes san - cto - rum tu - o -

C

T - li, car - nes san - cto - rum

B - li,

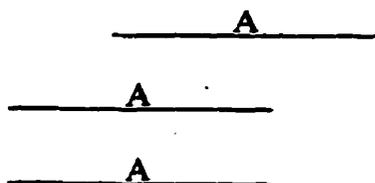
(Example 5.7 concluded)

(e) Homophonic triple point as thematic unit, from *Ne irascaris*, measures 1-7

The image displays a musical score for the piece "Ne irascaris" from measures 1-7. The score is arranged in two systems. The first system features five vocal parts: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics for these parts are: SUPERIUS (no lyrics), MEDIUS (no lyrics), CONTRATENOR: "Ne i - ra - sca **B** ris Do - - mi -", TENOR: "Ne i - ra - sca **C** ris Do - mi - ne", and BASSUS: "Ne i - ra - sca - ris Do - mi - ne sa -". The second system shows instrumental accompaniment with lyrics: "Ne", "Ne", "- ne", "sa -", and "tis,". Annotations include letters A, B, and C marking specific points in the music, and a circled 'C' marking a specific note in the Tenor part. A measure rest '5' is indicated at the beginning of the second system.

Figure 5.8, top: Imitative duo plus parallel doubling

Example 5.8, bottom: (a) *Tristitia et anxietas*, measures 156-58; leading voice doubled in thirds

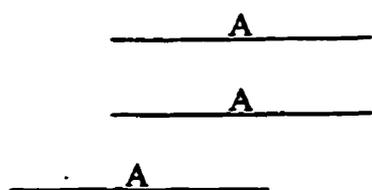


A musical score for five vocal parts: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is in 8/8 time. The Soprano part has a melodic line with a long note on 're' in the phrase 'et mi-se-re -'. The Alto part has a similar melodic line. The Contralto part has a melodic line with a long note on 're' in the phrase 'et mi-se-re - - re me -'. The Tenor part has a melodic line with a long note on 're' in the phrase 'et mi-se-re - - re me -'. The Bass part has a simple accompaniment line. The letter 'A' is written above the Soprano and Tenor parts, indicating a specific melodic motif or interval.

(Example 5.8 continued)

(b): *Tristitia et anxietas*, measures 79-81; following voice doubled in thirds (note registrally varied restatement, lower three voices, measures 80-81)

Figure 5.8b: Imitative Duo plus Parallel Doubling (type 2)



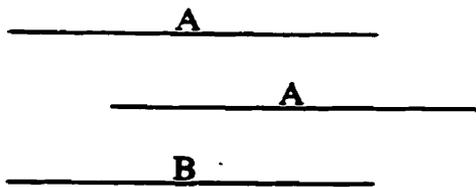
Musical score for five voices (Soprano, Alto, Contralto, Tenor, Bass) showing imitative and parallel doubling in thirds. The score is in G major and 4/4 time. The lyrics are: "o - cu - li me - i".

The score is divided into two systems. The first system (measures 79-81) shows the Soprano and Alto voices entering with the melody. The second system (measures 80-81) shows the Contralto, Tenor, and Bass voices entering with the melody. The Soprano and Alto voices are shown with a bracket labeled 'A' above them, indicating parallel doubling in thirds. The Contralto, Tenor, and Bass voices are shown with a bracket labeled 'A' above them, indicating parallel doubling in thirds. The Contralto part includes a handwritten annotation: "(VARIED REPEAT)".

Lyrics: o - cu - li me - i

Figure 5.9, top: Semi-imitative presentation

Example 5.9, bottom: *Tristitia et anxietas*, measures 135-36



135

The musical score is for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are in Latin. A boxed section highlights measures 35 and 36, with annotations 'A' and 'B' indicating specific musical features.

Soprano (S): spe - ran - tes in _____ te,

Alto (M): _____ in te, spe - ran - tes in te, con - so - la - re,

Contralto (C): _____ te, spe - ran - tes in te, con - so - la - re, con - so -

Tenor (T): spe - ran - tes in te, in te, con - so - la - re,

Bass (B): _____ te, spe - ran - tes in te,

Figure 5.11, top: Triple point plus parallel doubling

Example 5.11, bottom: (a) *Vide Domine*, measures 80-84: triple point plus parallel doubling (note "textural padding" in the contratenor in measures 81-83, and in the tenor, measure 84ff.)

Text 1 A parallel

Text 1 A parallel

Text 1 B

Text 1 C

80

S
am. Da no - bis Do - mi - ne, da no -

M
am. Da no - bis Do - mi - ne, da no -

C
am. Da no - bis Do - mi - ne, da no - bis

T
- ta - tem tu - am. Da no - bis Do - mi - ne, da no - bis Do -

B
tu - - - am. Da no - bis Do - mi - ne, da no -

Annotations: A, B, C, and arrows pointing to specific musical features.

(Example 5.11 continued)

(b) *Ne irascaris*, measures 106-110

110

S Si - on de - ser - ta, de - ser - ta fa - cta est.

M Si - on de - ser - ta, de - ser - ta fa - cta est.

C Si - on de - ser - ta, de - ser - ta fa - cta est.

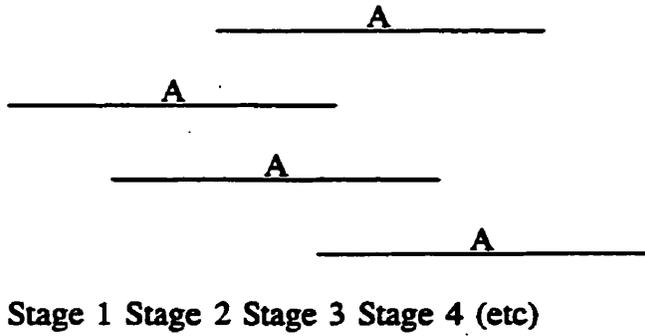
T Si - on de - ser - ta, de - ser - ta fa - cta est.

B

111

Figure 5.14, top: Variably-constructed canon, type 1

Example 5.14, bottom: Four-voice canon from *Defecit in dolore*, measures 70-74 (note free voice in medius providing textural support)



Secunda Pars
70

S
Sed tu Do - mi - - - -

M
TEXTURAL SUPPORT
Sed tu Do - - - mi - - - ne,

C
Sed tu Do - - - mi - ne, sed tu Do - - - -

T
Sed tu Do - - - mi - ne,

B
Sed tu Do - mi -

STAGE 1 → 2 → 3 → 4

Detailed description: This is a musical score for four voices: Soprano (S), Medius (M), Contralto (C), Tenor (T), and Bass (B). The score is for measures 70-74 of the 'Secunda Pars'. The lyrics are 'Sed tu Do - mi - - - -' for Soprano, 'Sed tu Do - - - mi - - - ne,' for Medius, 'Sed tu Do - - - mi - ne, sed tu Do - - - -' for Contralto, 'Sed tu Do - - - mi - ne,' for Tenor, and 'Sed tu Do - mi -' for Bass. Handwritten annotations include 'A' with arrows above the Soprano, Contralto, and Tenor staves, indicating the start of a phrase. The Medius staff is labeled 'TEXTURAL SUPPORT'. At the bottom, a sequence of arrows labeled 'STAGE 1', '2', '3', and '4' points to the corresponding measures in the Bass staff.

Figure 5.19, top: Transposed canon plus parallel doubling

Example 5.19, bottom: Partial parallel doubling added to transposed canon, *In resurrectione tua*, measures 26-28 (cf. Example 5.4)

The image displays a musical score for the piece "In resurrectione tua". The score is presented in two parts: a schematic diagram at the top and a full musical score at the bottom.

Schematic Diagram (Top):

- A horizontal line with the letter "A" centered above it.
- A second horizontal line below the first, with the text "A parallel" centered above it.
- A third horizontal line below the second, with the letter "A" centered above it.
- A fourth horizontal line below the third, with the letter "A" centered above it.

Musical Score (Bottom):

The musical score consists of five staves. The first four staves are vocal parts, and the fifth is a basso continuo line. The lyrics are written below the staves. The score illustrates the concept of "partial parallel doubling" by highlighting specific melodic phrases with brackets and the letter "A".

Lyrics for the vocal parts:

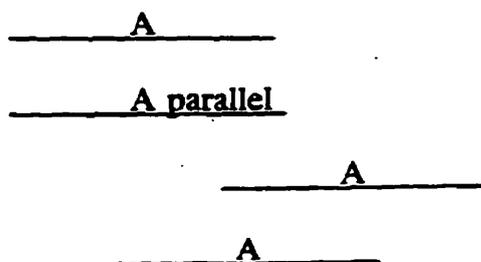
- Staff 1: - ra, Al - le - lu - - - ya,
- Staff 2: - - - ra. Al - le - lu - ya, Al - le - lu -
- Staff 3: - ra. Al - le - lu - - - ya, Al - le -
- Staff 4: - ra, ter - ra. Al - le - lu - - - ya, Al -
- Staff 5: ter - ra. Al - le - lu - -

The "A" markings in the score indicate the following phrases:

- Staff 1: The phrase "Al - le - lu - - - ya,"
- Staff 2: The phrase "Al - le - lu - ya,"
- Staff 3: The phrase "Al - le - lu - - - ya, Al - le -"
- Staff 4: The phrase "Al - le - lu - - - ya, Al -"

Figure 5.20, top: Invertible canon plus parallel doubling

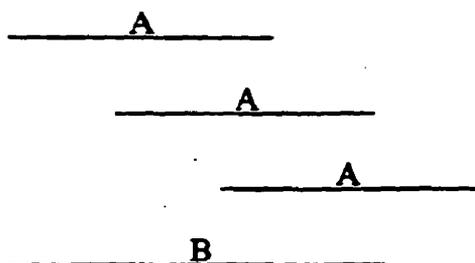
Example 5.20, bottom: *Vigilate*, measures 101-103 (note false entry at the minim, contratenor)⁴



⁴If one takes the imitation at the time-interval of a minim as the true canon, we have a transposed canon at the octave (superius-contratenor-bassus) with parallel doubling at the lower third in the medius.

Figure 5.21, top: Accompanied transposed canon

Example 5.21, bottom: *Aspice Domine*, measures 43-47



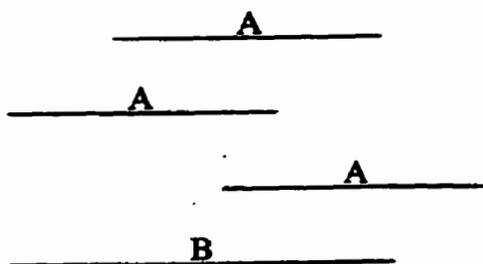
Musical score for *Aspice Domine*, measures 43-47. The score is in five parts: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are: "A - pe - ri o - cu - los me - os, - di. A - pe - ri o".

Annotations include:

- MELODIC ALTERATION** in the Alto part.
- MOTIVE** in the Tenor part.
- Arrows labeled **A** and **B** indicating transposed motifs.

Figure 5.22, top: Accompanied invertible canon

Example 5.22, bottom: (a) *Tribulationes civitatum*, measures 20-21



20

S *FALSE ENTRY*
- mus, quas pas -

M
- mus, quas pas - sae sunt,

C
- mus, quas pas - sae sunt,

T
- mus, quas pas - sae sunt,

B
- mus, quas pas - sae sunt,

The musical score shows five staves (Soprano, Alto, Contralto, Tenor, Bass) with lyrics. The Soprano part has a handwritten annotation "FALSE ENTRY" above the final measure. The other parts (Alto, Contralto, Tenor, Bass) have circled notes in the first measure of the phrase "quas pas - sae sunt," with arrows pointing to the Soprano's "quas" note, indicating the canon's entry point.

(Example 5.22 continued)

(b) *Tribulationes civitatum*, measures 15-18 (more complex initial presentation of above)

15

S
- mus, au - di - vi - - mus, quas pas - sae sunt,

M
- vi - mus, quas pas - sae sunt, et de -

C
au - di - - vi - mus, quas pas - sae sunt,

T
- tum au - di - - vi - mus, quas pas - sae sunt,

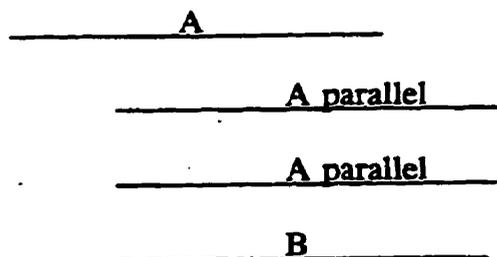
B
quas pas - sae sunt.

Annotations: A, B

Detailed description: The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is for measures 15-18. The lyrics are in Latin. The Soprano part starts with measure 15 and has a circled note in measure 16. The Alto part has a circled note in measure 16. The Contralto part has a circled note in measure 16. The Tenor part has a circled note in measure 16. The Bass part has a circled note in measure 16. There are annotations A and B above the staves. Annotation A is above the Soprano and Alto parts in measures 16-18. Annotation B is above the Alto and Contralto parts in measures 16-18. There are also arrows pointing from the circled notes to the annotations.

Figure 5.24, top: Semi-imitative presentation plus parallel doubling

Example 5.24, bottom: *Tristitia et anxietas*, measures 5-9 (note textural support in contratenor)



Musical score for five voices: Soprano (S), Mezzo (M), Contratenor (C), Tenor (T), and Bass (B). The score shows measures 5-9. The lyrics are "Tri - sti - ti - a, tri - sti - ti - a,". The Contratenor part is marked "TEXTURAL SUPPORT". Brackets labeled "A" and "B" indicate specific melodic lines.

Examples for Chapter Six

Example 6.1: Quadruple point from *Deus venerunt gentes* (beginning of *Quarta Pars*)

Quarta Pars 195

S
M
C
T
B

Op -
Op - pro - bri -
Fa - cti su - mus op - pro - bri - um,
Fa - cti su - mus op - pro - bri - um,
- pro - bri - um, fa - cti su - mus op -
Fa - cti su - mus op - pro - bri -
- um, fa - cti su - mus op - pro - bri -
op - pro - bri - um, fa - cti su - mus op - pro - bri -
op - pro - bri - um vi - ci - nis

A
B
C
D
C
A
B
D
C
D

200

Example 6.2: Invertible canon (*Laetentur coeli*, measures 48-53)

Secunda Pars

S
M
C
T
B

O - ri - e - tur in di - e - bus tu -

O - ri - e - tur in di - e - bus tu - is ju - sti - ti - a, in -

O - ri - e - tur

(A)

- - is ju - sti - ti - a.

di - e - bus tu - is ju - sti -

in di - e - bus tu - - is

Example 6.3: Invertible canon (plus cantus firmus as textural padding) from *Aspice*

Domine, measures 72-75

Secunda Pars

The score consists of five staves labeled S, M, C, T, and B. The Soprano (S) part begins with a circled note and has the lyrics "Re - spi - ce Do - -". The Alto (M) part has the lyrics "Re - spi - ce" and is annotated with a bracket and the text "(TEXTURAL PADDING)". The Contralto (C) part has the lyrics "Re spi - ce Do - mi - ne, Do - -". The Tenor (T) part has the lyrics "Re - spi -". The Bass (B) part has the lyrics "Re - spi - ce Do - - mi - ne, Do - -". A horizontal arrow labeled "71" spans the Soprano part. Two diagonal arrows originate from the circled notes in the Soprano and Bass parts, pointing towards the Alto part, illustrating the invertible canon structure.

Example 6.4: Canon from *Defecit in dolore*, beginning of *Secunda Pars*, measures 70-

75 (cf. Example 5.14)

Secunda Pars
70

S
M
C
T
B

Sed tu Do - mi - -
Sed tu Do - - mi - - ne,
Sed tu Do - mi - ne, sed tu Do -
Sed tu Do - - mi - ne
Sed tu

+ps
-ps
A
A
A
A

75

- - - ne.
sed
- - - mi - ne.
(A)
Do - mi - - ne.

Example 6.5: Transposed canon at the beginning of *Laetentur coeli* (1589/16),

measures 1-5

The image displays a musical score for the beginning of the motet *Laetentur coeli*. The score is arranged in five staves, labeled from top to bottom: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The key signature is one flat (B-flat), and the time signature is common time (C). The lyrics are: "Lae - ten - tur coe - li, coe - tur coe - li, et ex - Lae - ten - tur".

Handwritten annotations illustrate a transposed canon between the Superius and Medius parts. In the Superius part, a circled note is marked with a circled 'A'. An arrow labeled 'A' points to the corresponding note in the Medius part, which is also circled. A second arrow labeled 'A' points from the Medius part to the Contratenor part, indicating the transposition. A circled 'P4' is placed between the Superius and Medius parts, indicating a perfect fourth interval. The annotation "(NEW DUO BEGINS)" is written in the Tenor part, marking the start of a new musical duo.

Example 6.6: Canon at alternating fourths and fifths, from *O quam gloriosum*
(1589/13), measures 22-24

Soprano (S): - cti. A - mi -

Alto (M): cti. A - mi - cti sto - lis al - - bis,

Contralto (C): cti. - mi - cti sto - lis al - - bis,

Tenor (T): cti.

Bass (B): A - mi - cti sto - lis al - - bis, al - -

Handwritten annotations: $+5$, $+4$, N.B.

Example 6.9: Variably-constructed canon, type 1

(pair of duos)

(a) *Laetentur coeli*, measures 15-17

S - - ra. Ju - bi - la - te mon - tes lau - - - dem,
 M - - ra. Ju - bi - la - te mon - tes lau - -
 C - ra. Ju - bi - la - te mon - tes lau - dem, iau - - -
 T - - ra. Ju - bi - la - te mon - tes (etc)
 B - ra. Ju - bi - la - te mon - tes lau - - -

(Example 6.9, continued)

(b) Type 1 canon as part of longer fully-periodic canonic unit (*Ne irascaris*, measures 114-119)

115

S Je -

120

S - ru - sa-lem, Je - ru - sa-lem, Je - ru - sa-lem,

M Je - ru - sa-lem, Je - ru sa-lem,

C Je - ru - sa-lem, Je - ru - sa-lem, Je - ru - sa-lem

T Je - ru - sa-lem, Je - ru - sa-lem, Je -

B (CANON CONTINUES) Je - ru - sa-lem, Je - ru

parallel

(etc)

Example 6.10: Variably-constructed canon, Type 3, (*Ne irascaris*, measures 124-126)

125

S
- so - la - ta est.

M
- la - ta est. de - so - la - ta est.

C
- lem, de - so - la - ta est. de - so - la - ta

T
- lem, de - so - la - ta est Je - ru - sa - lem, Je - ru - sa - lem

B
- ru - sa - lem, de - so -

Detailed description: The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is for measures 124-126, with measure 125 starting at the top. The lyrics are: S: - so - la - ta est.; M: - la - ta est. de - so - la - ta est.; C: - lem, de - so - la - ta est. de - so - la - ta; T: - lem, de - so - la - ta est Je - ru - sa - lem, Je - ru - sa - lem; B: - ru - sa - lem, de - so -. Annotations include circles around specific notes and arrows pointing from the Soprano part to the Alto and Contralto parts, indicating the canon's structure.

Example 6.11: Imitation plus parallel doubling (*In resurrectione tua*, measures 23-25)

The musical score consists of five staves labeled S, M, C, T, and B. The lyrics are: S: ex - ul - tet, ex - ul - tet, ex - ul - tet ter - - - - ; M: - ul - tet, ex - ul - tet, ex - ul - tet ter - - - ra, ex - ul - tet ter - ; C: ter - - - - ra, ex - ul - tet, ex - ul - tet ter - - - - ; T: ter - - - - ra, ex - ul - tet, ex - ul - tet, ex - ul - tet ter - ; B: et ex - ul - tet, ex - ul - tet, ex - ul - tet ter - - - ra, .

Handwritten annotations include: **(MELODIC VAR.)** above the Alto staff, **(PARALLEL)** between the Contralto and Tenor staves, and **A** above the Soprano and Bass staves. Arrows indicate the imitation of the Soprano's melody by the Alto and Bass. A measure number **25** is written above the Soprano staff.

Example 6.12: Semi-imitative presentation

(a) *Tristitia et anxietas*, measures 135-36 (cf. Example 5.9)

135

S
spe - ran - tes in _____ te,

M
_____ in _____ te, spe - ran - tes in te, con - so - la - re,

C
_____ te, spe - ran - tes _____ in _____ te, con - so - la - re, con - so

T
spe - ran - tes _____ in _____ te, in te, con - so - la - re.

B
_____ te, _____ spe - ran - tes in te,

(Example 6.12 continued)

(b) *O quam gloriosum*, measures 50-51

50

S
- - - - - e - rit, lau - dan - tes De -

M
- rit, lau - dan - tes De - um, et

C
De - um, et di - cen - tes, lau -

T
lau - dan - tes De - um et di - cen - tes, lau -

B
- rit, lau - dan - tes De - um et di - cen - tes,

(PARTIAL REPEAT)

Example 6.13: Overlapping duos, from *O quam gloriosum*, measures 91-93

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is written in G major and 4/4 time. The lyrics are Latin. The score is divided into two overlapping duos, A and B, indicated by brackets and arrows.

Duo A: Soprano and Alto. The Soprano part has the lyrics "- o, ho - nor, vir - tus," and the Alto part has "- a - rum a - cti - o, ho -".

Duo B: Contralto, Tenor, and Bass. The Contralto part has "- nor, vir - tus, ho - nor, vir - tus." The Tenor part has "ho - nor, vir - tus, et for - ti - tu - do De" and the Bass part has "vir - tus, et for - ti - tu - do De - o no".

The lyrics for the Soprano part are: - o, ho - nor, vir - tus,

The lyrics for the Alto part are: - a - rum a - cti - o, ho -

The lyrics for the Contralto part are: - nor, vir - tus, ho - nor, vir - tus.

The lyrics for the Tenor part are: ho - nor, vir - tus, et for - ti - tu - do De

The lyrics for the Bass part are: vir - tus, et for - ti - tu - do De - o no

Example 6.14: Semi-imitative presentation plus parallel, from *Tristitia et anxietas*, measures 5-8 (cf. Example 5.24)

The musical score consists of five staves, labeled S (Soprano), M (Alto), C (Contralto), T (Tenor), and B (Bass) from top to bottom. The lyrics are: "Tri - sti - ti - a, tri -".

Handwritten annotations include:

- A bracket labeled **A** above the Soprano staff, spanning measures 5 and 6.
- A bracket labeled **A** above the Alto staff, spanning measures 6 and 7.
- A bracket labeled **A** above the Contralto staff, spanning measures 7 and 8.
- A bracket labeled **A** above the Tenor staff, spanning measures 8 and 9.
- A bracket labeled **B** above the Bass staff, spanning measures 9 and 10.
- The phrase **TEXTURAL SUPPORT** is written in the center of the score, between the Alto and Contralto staves, with a large bracket underneath it that spans from the beginning of measure 5 to the end of measure 10.
- A small *s* (piano) dynamic marking is present at the start of the Soprano staff.

Example 6.15: Transposed canon plus parallel**(a) Domine tu jurasti, measures 57-58**

The musical score consists of five staves labeled S, M, C, T, and B from top to bottom. The lyrics are as follows:

- S: i - sti,
- M: pa - tri - bus no - - stris pa - tri - bus
- C: - - stris, pa - tri - bus no -
- T: no - - tris, pa - tri - bus no -
- B: pa - - tri - bus no -

Annotations include:

- A bracket labeled 'A' spanning the final notes of the Soprano and Alto parts.
- A bracket labeled 'A' spanning the final notes of the Alto and Contralto parts.
- A bracket labeled 'A' spanning the final notes of the Tenor and Bass parts.
- A curved arrow labeled '+5' pointing from the final note of the Tenor part to the final note of the Bass part.
- A straight arrow labeled '+5' pointing from the final note of the Contralto part to the final note of the Alto part.

(Example 6.15, continued)

(b) *In resurrectione tua*, measures 26-28 (cf. Example 5.19)

S
- ra, Al - le - lu - - - ya,

M
- - - ra. Al - le - lu - ya, Al - le - lu -

C
- ra. Al - le - lu - - - ya, Al - le -

T
- ra, ter - ra. Al - le - lu - - - ya, Al -

B
ter - ra. Al - le - lu - -

(Example 6.15, concluded)

(c) *Vigilate*, measures 101-102

The musical score consists of five staves, each representing a different vocal part: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The music is written in a single system with a common time signature. The lyrics are distributed across the staves as follows:

- Soprano (S):** vi - gi - la - - -
- Alto (M):** te, vi - gi - la - - - te,
- Contralto (C):** vi - - - gi - la - - -
- Tenor (T):** - - te, vi - gi -
- Bass (B):** - te, vi - gi - la - - -

Four dynamic markings, labeled 'A', are placed above the staves with arrows indicating their duration:

- Staff S: Above the first measure.
- Staff M: Above the second measure.
- Staff C: Above the second measure.
- Staff B: Above the second measure.

Example 6.16: Invertible canon plus parallel doubling

Deus venerunt gentes, measures 91-94 (note false entry in tenor)

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are: "be - sti - is ter - - - rae, car - rum, be - sti - is ter - - - rae, car - rum, be - sti - is ter - - - rae, car - rum, be - sti - is ter - - - rae." The score is annotated with several handwritten elements: a circled '91' above the Soprano staff; a bracket labeled 'A' spanning the Soprano and Alto staves; a bracket labeled 'A' spanning the Alto and Contralto staves; a bracket labeled 'A' spanning the Contralto and Tenor staves; a bracket labeled 'A' spanning the Tenor and Bass staves; a '-7' written below the Soprano staff; a '-7' written below the Alto staff; and the text "(FALSE ENTRY -> FREE MATERIAL)" written above the Tenor staff with an arrow pointing to a specific note. The score is written in a single system with five staves.

Example 6.17: Accompanied transposed canon, from *Aspice Domine*, measures 43-47

(cf. Example 5.21)

45

S A - pe - ri - o - cu - los me - - -

M A - pe - ri - o - cu - los me - - - os, a -

C - di. MOTIVE A - pe - ri - o - cu -

T A - pe - ri - o - cu - los

B A - - pe - ri - o - cu - los me - - - os,

Example 6.18: Accompanied invertible canon, from *Tribulationes civitatum*, measures 20-22 (cf. Example 5.22)

20

The musical score consists of five staves, labeled S (Soprano), M (Alto), C (Contralto), T (Tenor), and B (Basso Continuo) from top to bottom. The music is in a 2/4 time signature with a key signature of one flat. The lyrics are: "- mus, quas pas - sae sunt, et de -".

Handwritten annotations include:

- A circled note on the Soprano staff (measure 21) with an arrow labeled 'A' pointing to a circled note on the Alto staff (measure 20).
- A circled note on the Alto staff (measure 20) with an arrow labeled 'B' pointing to a circled note on the Contralto staff (measure 20).
- A circled note on the Contralto staff (measure 20) with an arrow labeled 'A' pointing to a circled note on the Tenor staff (measure 20).
- A circled note on the Tenor staff (measure 20) with an arrow labeled 'A' pointing to a circled note on the Bass staff (measure 20).
- A circled note on the Bass staff (measure 20) with an arrow labeled 'A' pointing to a circled note on the Tenor staff (measure 21).

Brackets labeled 'A' and 'B' are placed above the staves to indicate specific intervals or relationships between notes in different parts.

Example 7.2: "Thinning out" of harmonic motive, from *O Domine adjuva me*,
measures 18-20

20

S - tis ae - ter - nae, ne me sur - ri - pi - at ho - stis a - stu -

M - ter - - - nae, ne me sur - ri - pi at ho - stis a -

C - tis ae - ter - - - nae, ne me sur - ri - pi - at ho - stis a -

T ae - ter - - - nae, ne me sur - ri - pi -

B - tis ae - ter - nae, _____

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is for measures 18-20 of the piece "O Domine adjuva me". A box highlights a harmonic motive in the Alto and Contralto parts, consisting of a sequence of notes. An arrow points from this box to the Tenor part, where the same motive is shown in a simplified, "thinned out" form. The lyrics are: "tis ae - ter - nae, ne me sur - ri - pi - at ho - stis a - stu -" for Soprano; "ter - - - nae, ne me sur - ri - pi at ho - stis a -" for Alto; "tis ae - ter - - - nae, ne me sur - ri - pi - at ho - stis a -" for Contralto; "ae - ter - - - nae, ne me sur - ri - pi -" for Tenor; and "- tis ae - ter - nae, _____" for Bass. A measure number "20" is written above the Soprano staff.

Example 7.3: Transposition by octave(a) *Vigilate*, measures 1-7

The image displays a musical score for the piece "Vigilate" in measures 1-7. The score is arranged in two systems. The first system consists of five staves, each representing a different voice part: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics for these parts are: SUPERIUS: "Vi - gi - la - - - te,"; MEDIUS: "Vi - gi - la - - - te, vi - gi - la - -"; CONTRATENOR: "Vi - gi - la - -"; TENOR: (no lyrics shown); BASSUS: (no lyrics shown). A box highlights the first measure of the SUPERIUS part, and a vertical line with a downward-pointing arrow labeled "-8" indicates an octave transposition down for the CONTRATENOR part. The second system continues the vocal lines with lyrics: SUPERIUS: "vi - - gi - la - - - te, vi - gi - la -"; MEDIUS: "- te, vi - gi - la - - - te, vi - gi - la - - te."; CONTRATENOR: "- te, vi - gi - la - - - te, vi - gi - la - -"; TENOR: (no lyrics shown); BASSUS: (no lyrics shown). A box highlights the first measure of the BASSUS part in the second system.

(example 7.3 continued)

(b) *Laetentur coeli*, measures 1-7

Musical score for the vocal parts of "Laetentur coeli" (measures 1-7). The score is arranged in five staves, labeled from top to bottom: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics are: "Lae - ten - - - tur coe - - - li, coe - - - li. coe - - - tur coe - li, et ex - ul - tet te - - - Lae - ten - - - tur coe - li, coe - - - Lae - ten - - - tur coe - - -". A large bracketed section covers measures 1-7, with a vertical line and the number "8" indicating the end of this section. The score includes various musical notations such as notes, rests, and dynamic markings.

(example 7.3 concluded)

(c) *Ne irascaris*, measures 75-81

75

Soprano: Ci - vi - tas san - cti tu - -
Alto: Ci - vi - tas san - cti tu - - i, san - cti
Tenor: Ci - - vi - tas

Handwritten annotations: 'A' with arrows above Soprano and Alto staves; '-8' with arrows pointing to the end of phrases in Soprano and Alto staves; 'A' with an arrow above Tenor staff.

80

Soprano: i,
Alto: tu - - i, Ci - -
Tenor: Ci - - vi - tas san
Bass: san - cti tu - -

Handwritten annotations: '(-8)' with an arrow pointing to the end of the Soprano phrase; 'A' with an arrow above the Alto staff.

Example 7.4: Transposition by fifth, from *Defecit in dolore*, measures 70-73

Secunda Pars
70

S Sed tu Do - mi - -

M Sed tu Do - - mi - - ne,

C Sed tu Do - - mi - ne, sed tu Do -

T Sed tu Do - - mi - ne,

B Sed tu

+5

-4
(equivalent to +5)

Example 7.5: Transposed canon at the octave, from *Laetentur coeli*, measures 18-20

S ju - bi - la - te mon - tes lau - dem,
 M dem, lau - dem,
 C - dem, ju - bi - la - te mon - tes lau - dem,
 T lau - dem, ju - bi - la - te mon - tes,
 B - dem, ju - bi - la - te mon - tes

Example 7.6: Transposed canon at the fifth, from *In resurrectione tua*, measures 26-28

(cf. Example 5.18)

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The lyrics are: - ra, Al - le - lu - ya, - ra, Al - le - lu - ya, ter - ra, Al - le - lu - ya, Al - le - lu - ya, ter - ra, Al - le - lu - ya. The score is annotated with a diagram showing a transposed canon at the fifth. A circled note in the Soprano part is connected by a downward arrow labeled '-5' to a circled note in the Contralto part. Horizontal arrows above the Soprano and Contralto staves indicate the continuation of the melodic line. The Soprano part is in a higher register than the Contralto part, and the interval between the circled notes is a fifth.

Example 7.7: Transposed canon at the fourth, from *Laetentur coeli*, measures 1-7

The image displays a musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score is divided into two systems. The first system shows measures 1-7, with the Superius and Medius parts featuring a transposed canon at the fourth. The Superius part begins with the lyrics "Lae - ten - tur coe -", and the Medius part begins with "Lae - ten -". Arrows and circles highlight the interval of a fourth between corresponding notes in the two parts. The second system shows measures 5-7, with the Superius part continuing with "li, coe - li." and the other parts with "tur coe - li, et ex - ul - tet ter -", "Lae - ten - tur coe - li, coe -", and "Lae - ten - tur coe -". The lyrics "Lae - ten -" are also visible at the bottom of the second system.

SUPERIUS
Lae - ten - tur coe -

MEDIUS
Lae - ten -

CONTRATENOR

TENOR

BASSUS

5
li, coe - li.

tur coe - li, et ex - ul - tet ter -

Lae - ten - tur coe - li, coe -

Lae - ten - tur coe -

Lae - ten -

Example 7.8: Canon by alternating fourths and fifths, from *O quam gloriosum*,
measures 22-25 (cf. Example 6.6)

25

S
- cti. A - mi - cti

M
cti. A - mi - cti sto - lis al - - bis, al

C
cti. A - mi - cti sto - lis al - - bis,

T
cti.

B
A - mi - cti sto - lis al - - bis, al - - - -

Interval markings: +5 (between Soprano and Alto), +4 (between Alto and Tenor)

Example 7.10: Variation by melodic inversion

(a) *Defecit in dolore*, opening point

Musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score shows the opening of the piece "Defecit in dolore". The lyrics are: SUPERIUS: De - fe - ; MEDIUS: De - fe - cit in do - lo - re vi - ta - me - ; CONTRATENOR: De - - - fe - cit in - ; TENOR: De - - - fe - cit in - ; BASSUS: De - fe - cit in do - lo - re. Handwritten annotations include "A inv." above the SUPERIUS staff and "A" above the CONTRATENOR staff. A bracket labeled "A inv." spans the TENOR and BASSUS staves.

Detailed musical score for five voices: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The score shows the continuation of the piece "Defecit in dolore". The lyrics are: SUPERIUS: - cit in do - lo - re - ; MEDIUS: - , in do - lo ; CONTRATENOR: do - lo - - re vi ; TENOR: in do - lo - re ; BASSUS: in do - lo - re. A handwritten "5" is above the SUPERIUS staff.

(Example 7.10 continued)

(b) *Domine praestolamur*, measures 70-72

Secunda Pars
70

S
Ve - ni Do - mi - ne

M

C
A inv.
Ve - ni Do - - mi - ne, Do -

T
A
Ve - ni Do - mi - ne, Do - - mi - ne,

B

(Example 7.10 continued)

(c) *Tribulationes civitatum*, measures 24-26

The image shows a musical score for three vocal parts: Soprano (S), Mezzo (M), and Contralto (C). The lyrics are Latin: "- mus. Do - mi - ne ad te sunt o - cu - li no - - stri, - mus. Do - mi - ne ad te sunt o - cu - li no - - - mus. Do - mi - ne ad te sunt o - cu - li no - - -". The Soprano part has a handwritten '25 A' above the first measure. The Mezzo and Contralto parts have a handwritten 'A inv.' above their respective first measures. The Tenor (T) and Bass (B) parts are present but contain no notes or lyrics.

Example 7.11: Incidental use of ic 9 (*Deus venerunt gentes*, measures 47-50)

50

S
mo - rum cu - sto - - di - am, cu - sto

M
m. cu - sto - - di - am, cu - sto - -

C
- po - mo - - rum cu - sto - - - di

T
56 3 4 3
cu - sto - - di - am, cu - sto -

B
54(10 9 10) ← (ic 12)
- di - am, cu - sto - - - di - am,

Example 7.12: Opening module varied by ic 8 (*O Domine adjuva me*, measures 1-5)

The image displays a musical score for the opening of the motet "O Domine adjuva me". The score is arranged in two systems. The first system contains five vocal staves: SUPERIUS, MEDIUS, CONTRATENOR, TENOR, and BASSUS. The lyrics for these parts are: SUPERIUS (no lyrics), MEDIUS (O Do - mi - ne,), CONTRATENOR (O Do - mi - ne ad - ju - va me,), TENOR (O Do - mi - ne ad -), and BASSUS (O Do - mi -). A box is drawn around the first two measures of the figured bass line, which contains the numbers "3" and "3". An arrow labeled "ic 8" points from this box to a similar box in the second system, which contains the numbers "6", "6", and "8". The second system continues the vocal parts with lyrics: SUPERIUS (Do - mi - ne ad - ju - va me, et), CONTRATENOR (O Do - mi - ne ad - ju - va me, et sal - vus), TENOR (O Do - mi - ne ad - ju - va me, O), and BASSUS (- ju - va me, O Do - mi - ne ad - ju - va me, - ne ad - ju - va me, O Do - mi - ne ad -). The figured bass line in the second system shows a variation of the intervallic structure from the first system.

Example 7.13: Opening module varied by ic 12 (*Tristitia et anxietas*, measures 23-26)

Handwritten annotations in the score include:

- A circled "ic 12" above the Soprano staff, indicating the interval class of the variation.
- Letters A, B, and C marking specific melodic segments in the Soprano, Alto, and Tenor parts.
- Arrows pointing from notes in the Alto and Contralto parts to notes in the Tenor part, indicating intervallic relationships.
- Measure numbers 25, 28, and 12.

Lyrics for Soprano (S): oc - cu - pa - ve - runt,

Lyrics for Alto (M): - o - ra me - a, bi - ta - ri - o - ra me - a. in - te - ri -

Lyrics for Contralto (C): - ra me - a,

Lyrics for Tenor (T): - ve - runt in - te - ri - o - ra me - a, in -

Lyrics for Bass (B): oc - cu - pa - ve - runt

Figure 7.1 and Example 7.14: Chart of subject entries and cadences from *Deus venerunt gentes* (cf. Volume 1, Chapter 7, pages 204-206), plus accompanying annotated scores

Figure 7.1a/Example 7.14a: measures 218-24

	m. 218	219	220	221	222	223	224
S				A	C	A	
M				D	E	C	
C							F
	CAD D						

220

S - stris, sub - san - na - ti - o et il - lu - si - o, et

M - ci - - nis no - - stris, **3 6 5 3**

HARMONIC MOTIVE

C - - - stris, sub - san - na - ti - o et il - lu - si - o,

S il - lu - si - o, et il - lu - si - o his,

3 6 5 3 (4 3) 8 5 6 8 (10 10)

M et il - lu - si - o his,

C

Example 7.15: Cadence with simultaneous cross-relation, from *Aspice Domine*:

(a) original statement (measures 51-52); varied recurrence (ic 11), measures 64-65

The image displays a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is divided into two systems, representing the original statement (measures 51-52) and a varied recurrence (measures 64-65). The lyrics are: "os, et vi - de tri - bu - la - ti - o - nem, - de tri - bu - ti - o - nem no - stram, et vi - de tri - bu - ti - o - nem no - stram."

Annotations include:

- A**: A bracketed interval in the Alto part of the original statement, which is repeated in the varied recurrence.
- B**: A bracketed interval in the Soprano part of the original statement, which is repeated in the varied recurrence.
- C**: A bracketed interval in the Tenor part of the original statement, which is repeated in the varied recurrence.
- +8**: An intervallic change from the original statement to the varied recurrence, indicated by an arrow from the Soprano part of the original statement to the Soprano part of the varied recurrence.
- 4**: An intervallic change from the original statement to the varied recurrence, indicated by an arrow from the Alto part of the original statement to the Alto part of the varied recurrence.
- (= ic 11)**: A handwritten note indicating that the varied recurrence is an interval class 11 transformation of the original statement.

(Example 7.15 continued)

(b) restatement of original harmonic motive in measures 67-68

S
stram, et vi - - de tri - bu -
M
et vi - - de tri - bu - la -
C
o - nem, et vi - -
T
no - -
B
et vi - de tri - bu - la - ti -

Handwritten annotations: A (above Soprano), B (below Bass), C (above Tenor).

Example 7.16: Concluding canons from *Deus venerunt gentes*

(a) Canon 1, measures 258-61

S
- - - - - stro sunt,

M
- in cir-cu-i - tu - - no - - stro

C
- stro sunt, qui in cir-cu -
- cir-cu-i - tu no -

T
no - - stro sunt,

B

HARMONIC MOTIVE -> 10 9 8

260

qui in cir-cu - i - tu
(no - - stro sunt,)

sunt, qui
(no - -

i - tu sunt,) no - stro sunt,

no - - stro sunt,

no - - stro sunt,

5 6 7 6 5 = ic 7

6 7 8 7 6 = ic 8

(Example 7.16 continued)

(b) Canon 2 and concluding cadence, measures 261-266

(262)

S i - tu no - -
stro sunt,)

M qui in cir - cu - - i -
(no - - stro

C de - s → 6 5 4 5 6 qui
(no - -

T qui in cir - cu -

B in cir - -

265

- stro sunt, qui in cir - cu - i - tu no - stro sunt.

- tu no - stro sunt, no - - - stro sunt.
3 2 1 2 3 (ORIG. - 8^{ve})

- in cir - cu - - i - tu no - - - - stro sunt.
4 8 (ORIG.)

- i - tu no - - - - - stro sunt.
stro sunt,)

- cu - i - tu no - - - - - stro sunt.

Figures and Examples for Chapter Eight

Figures 8.1-8.8: Reductive charts for each imitative point of *Tristitia et anxietas*

Comments on Subject Labelling:

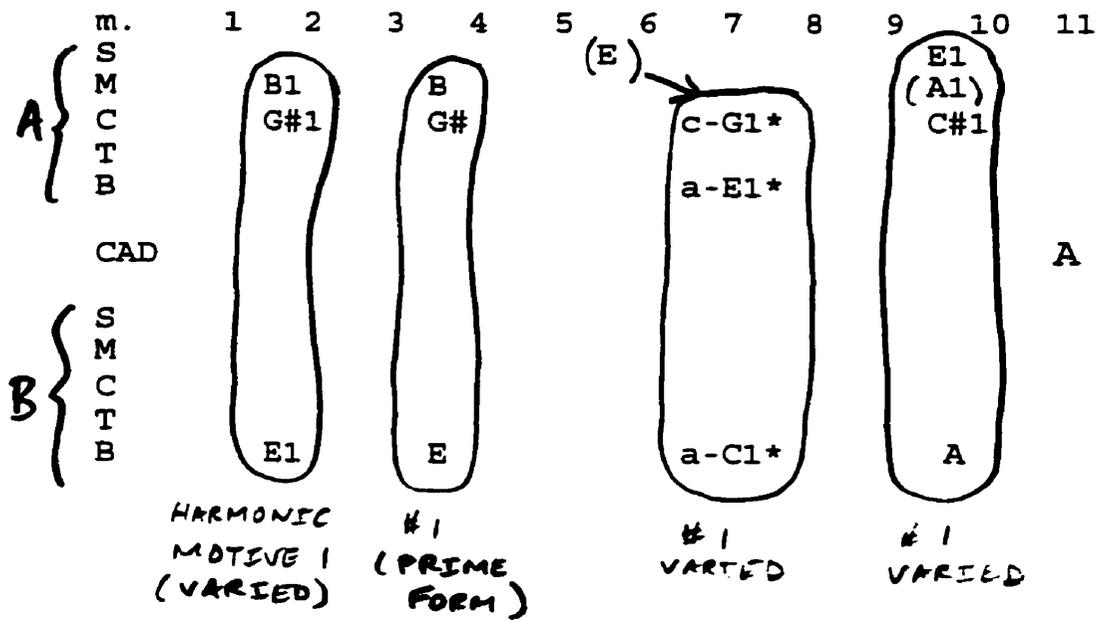
- labelled according to the starting pitches of the entry.
- placed according to voice; Superius, Medius, Contratenor, Tenor and Bassus (SMCTB) from top to bottom.
- most frequently-occurring form of each subject (prime form) is identified *by its starting pitch only*; all variant forms have a numeral in addition to their transposition levels (B1, C2) based on their order of appearance.
- In points where most entries are incomplete, *complete* entries are in **bold type**.
- When a point has multiple subjects, they appear on the reduction from top to bottom, in order of appearance; if subjects appear simultaneously (i.e. a homophonic double point), the higher-pitched one gets priority.
- Subjects with variable head: starting note in lower case; transposition level of the subject's remainder in upper case after a hyphen; i.e. c-G indicates a transposition on G whose first note has been shifted to begin on C (cf. *Tristitia*, measure 6)

Cadences: proper unless otherwise marked; s = simple, p = Phrygian

Figure 8.1: "Tristitia et anxietas" imitative point

Subject A "Tristitia" above, Subject B (bass support) below

(a) Phase 1 (measures 1-11)



(Figure 8.1 continued)

(b) Phase 2 (mm. 11-21); Subject A (in rhythmic diminution) above, Subject C
 "occupaverunt" below

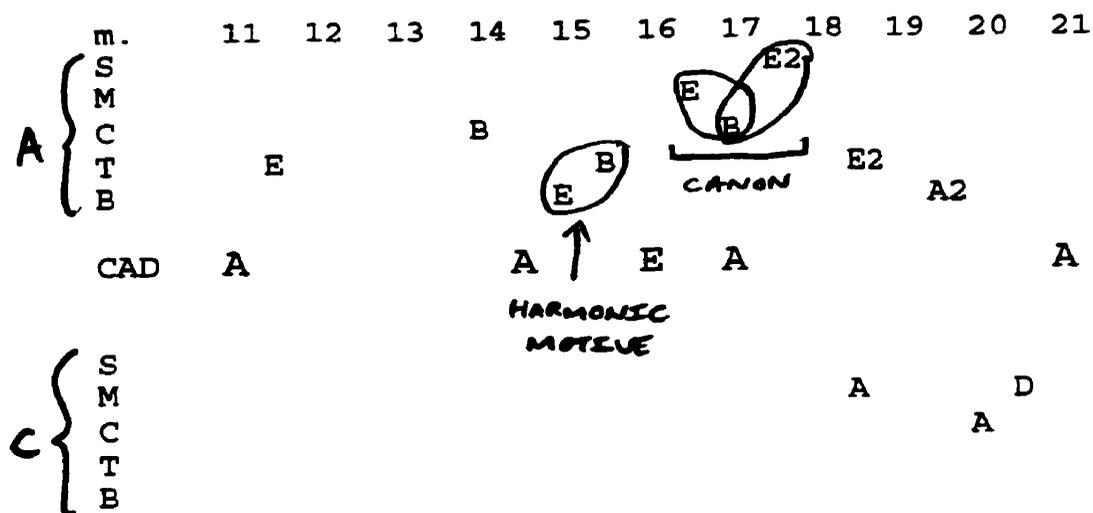
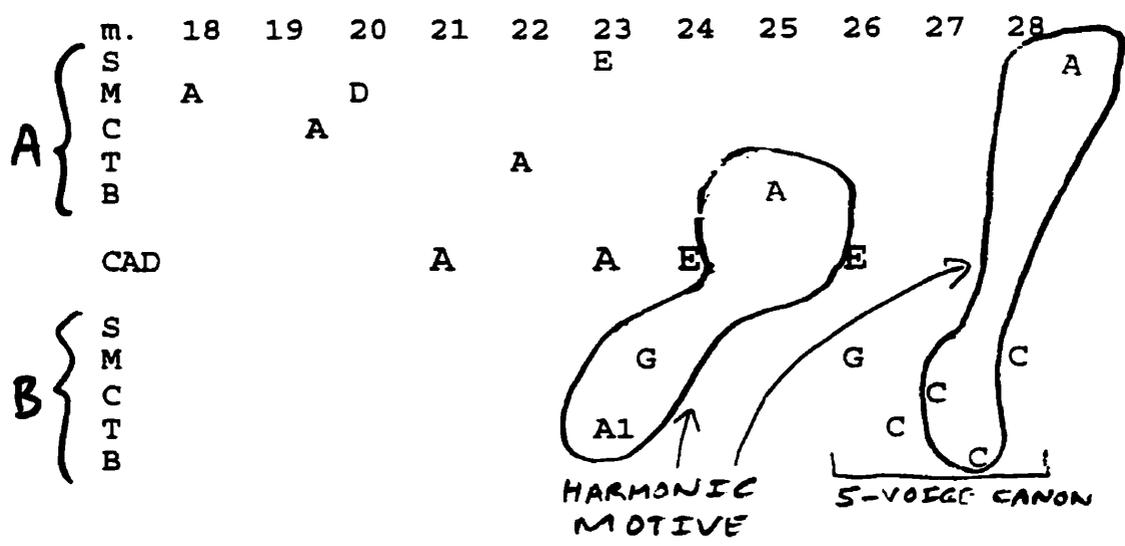


Figure 8.2: "Occupaverunt-interiora mea" double point;

-Subject A "occupaverunt" above, Subject B "interiora mea" below.

(a) Phase 1 (measures 18-28)



(Figure 8.2 continued)

(b) Phase 2 (mm. 28-42; subjects as in Phase 1)

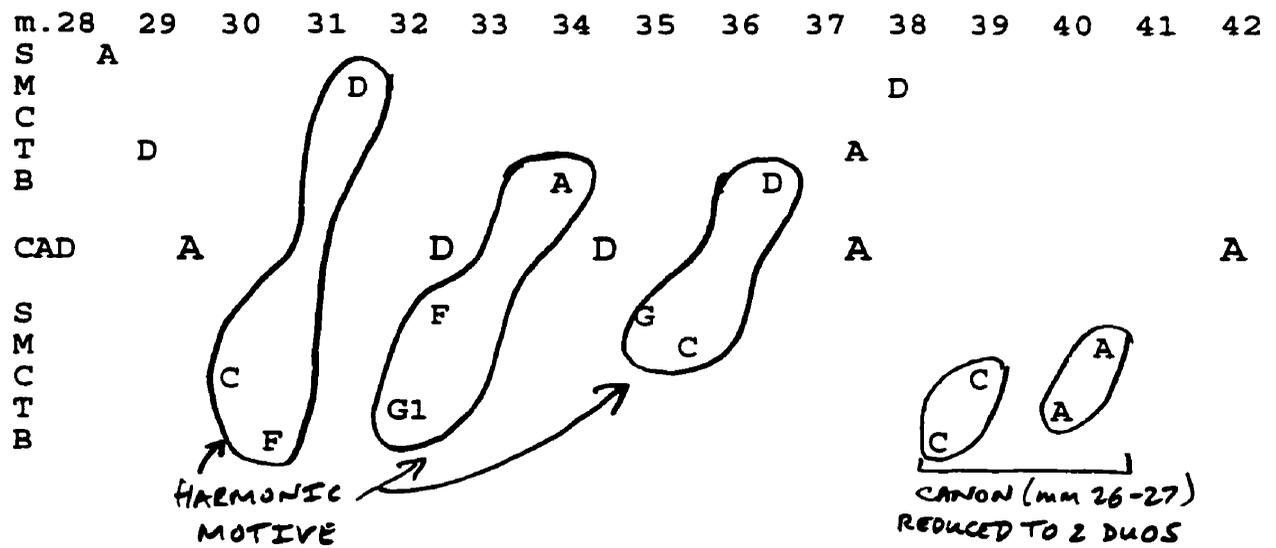


Figure 8.3: "Moestum..in dolore" imitative point, measures 43-55

-Complete "in dolore" subject entries are in **bold type**.

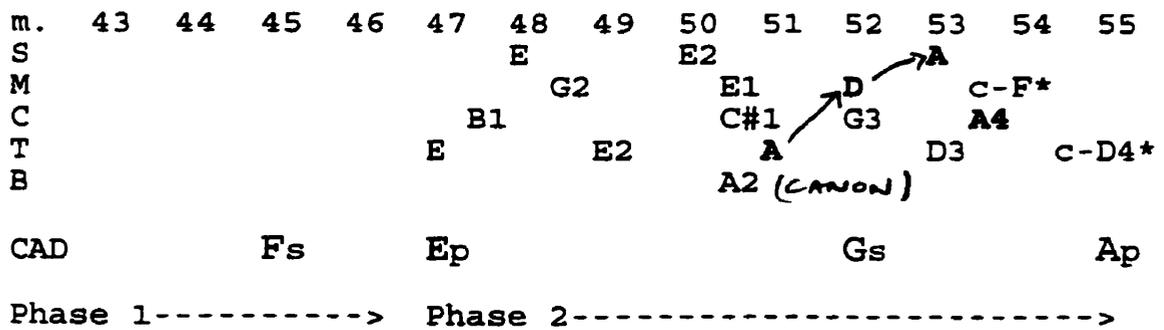


Figure 8.4: "Et contenebrati sunt-oculi mei" imitative point

-Subject A "et contenebrati" above, Subject B "oculi mei" below. Complete "oculi mei" subjects are in **bold type**

(a) Phase 1 (mm. 55-67)

	m.	55	56	57	58	59	60	61	62	63	64	65	66	67
A	S		E1		A							A		
	M								A				D	
	C										E1			A
	T		A1											
	B						D							
	CAD	A					A		D		A		D	A
B	S							G1						
	M						F			G1				
	C			F1							A			
	T			C			F1	A					A	
	B								A					

(Figure 8.4 continued)

(b) Phase 2 (measures 68-82)

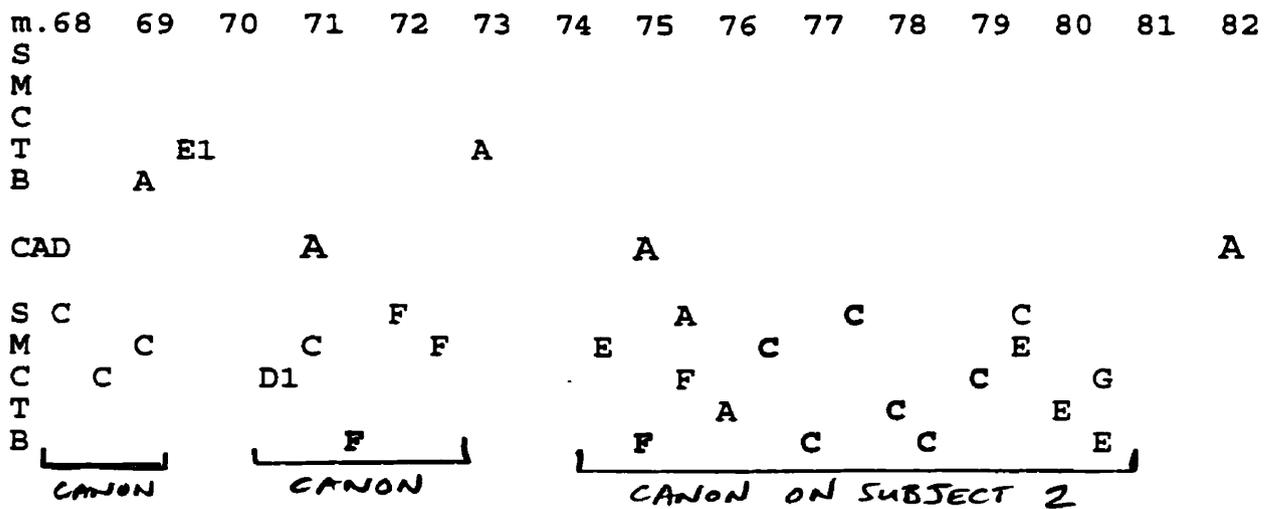
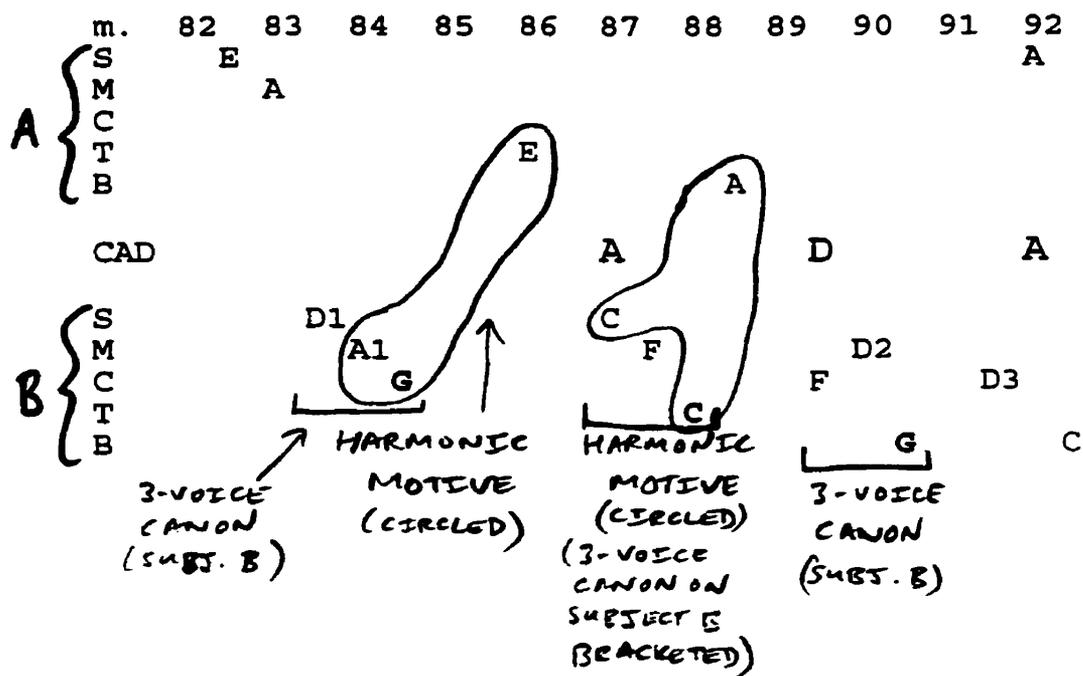


Figure 8.5: "Vae mihi-quia peccavi" imitative point

-Subject A "vae mihi" above; Subject B "quia peccavi" below. Complete "quia peccavi" entries are in bold type.

(a) Phase 1 (measures 82-92)



(Figure 8.5 continued)

(b) Phase 2 (mm. 92-102)

m.	92	93	94	95	96	97	98	99	100	101	102
A {	S	A								B	
	M		E		E						E1
	C							E			
	T										
B											
	CAD A		D		D	A		A		E-A	
B {	S		A4			B6			C		
	M		D3						A	G	
	C					E7			A2		
	T		G	A3						D	
B				A5							
		4-VOICE CANON (SUB. B)							4-VOICE CANON		

(Figure 8.5 concluded)

(c) Phase 3 (mm. 102-13)

	m.	102	103	104	105	106	107	108	109	110	111	112	113
A	S M C T B												
	CAD			A		A				E		A	
B	S M C T B		A	E7		A3G7		G		B3			
		A			E4	E7	E7						
		G		A8	G	E4	E7	A3			E7		
		4-VOICE CANON			7-VOICE CANON								

(Figure 8.6 continued)

(b) Phases 2 and 3 (mm. 123-28; 129-35; Subjects A, B and C)

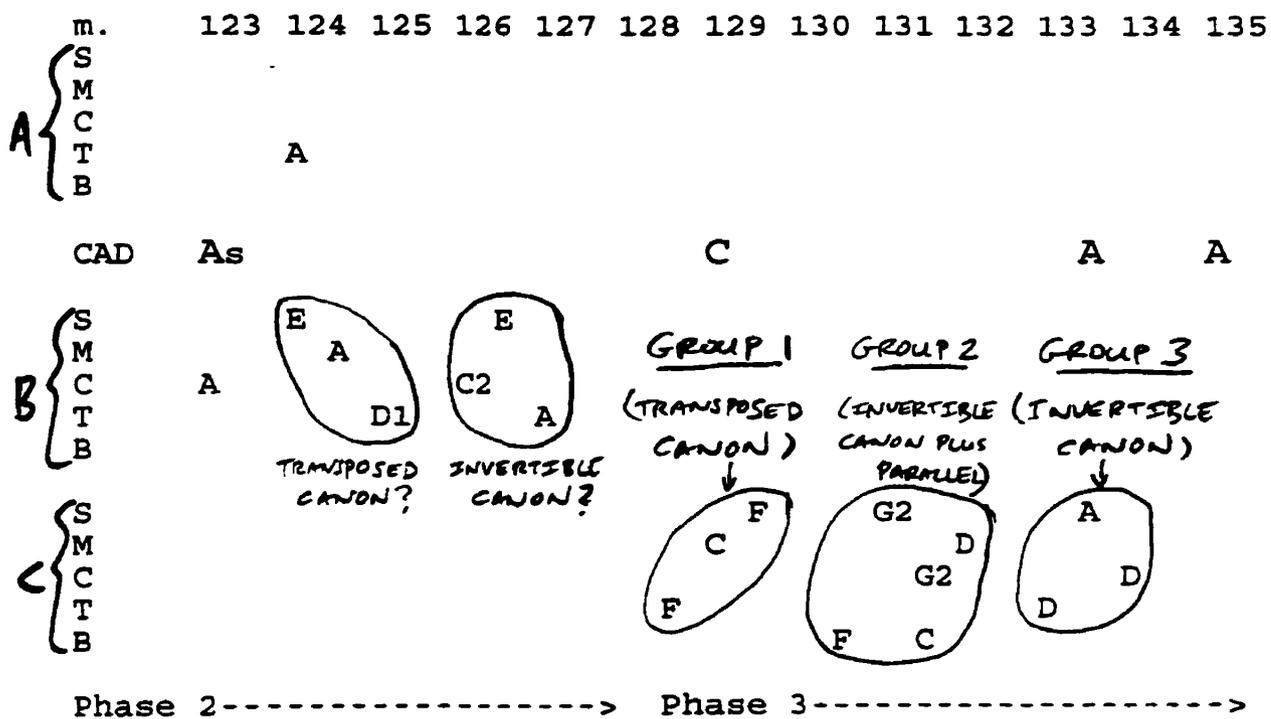
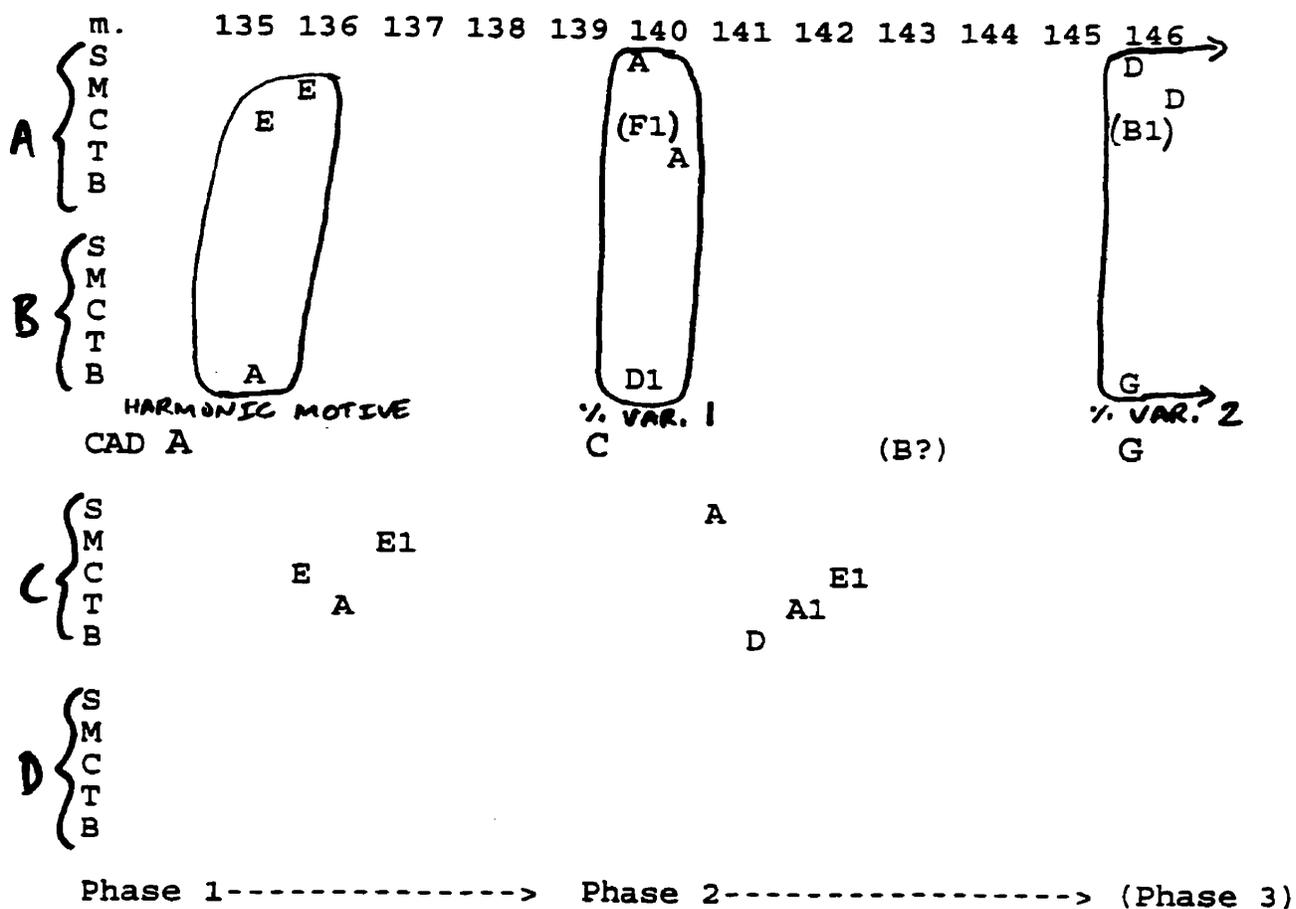


Figure 8.7: "Consolare-sanctum tuum" imitative point

Above Cadence Field: upper line "consolare" (subject A); lower line: "consolare" (subject B; bass support)

Below Cadence Field: upper line: syncopated "consolare" (subject C); lower line: "sanctum tuum" (subject D)

(a) Phases 1 and 2 (measures 135-39; 140-146)



(Figure 8.7 continued)

Above Cadence Field:

- upper line: "consolare" (subject A)
- lower line: "consolare" (subject B; bass support)

Below Cadence Field:

- upper line: syncopated "consolare" (subject C)
- lower line: "sanctum tuum" (subject D)

(b) Phases 3 and 4 (measures 146-51, 151-56)

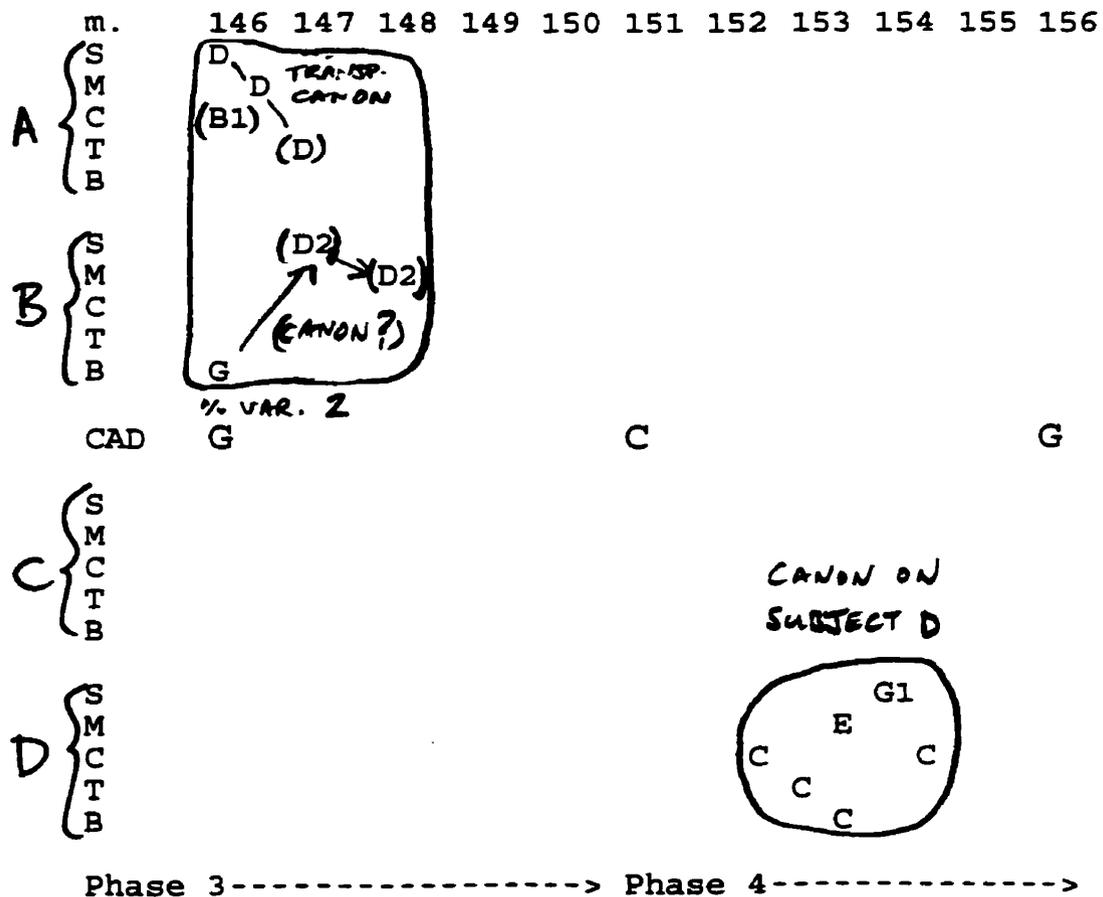
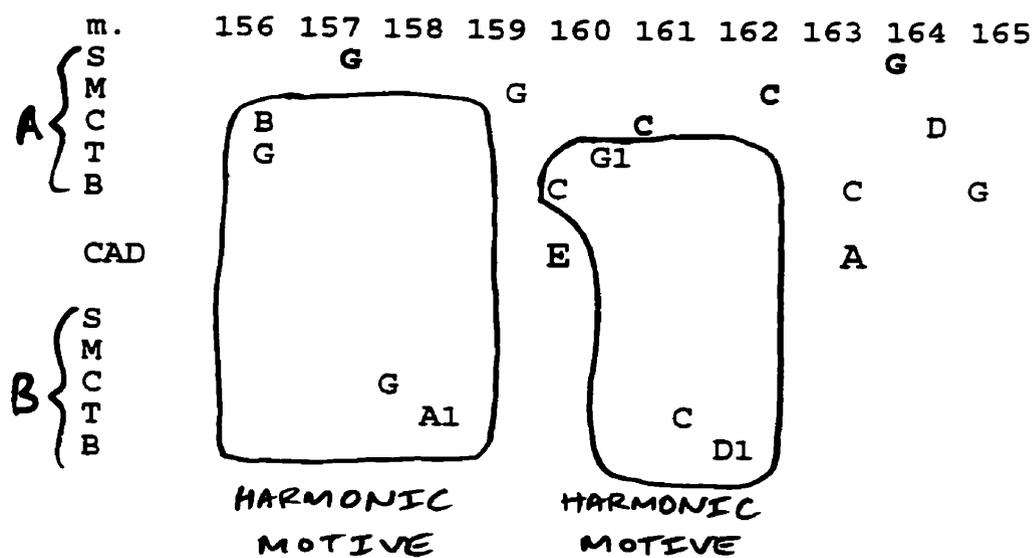


Figure 8.8: "Et miserere mei" imitative point

-upper line: Subject A (complete subject in **bold type**)

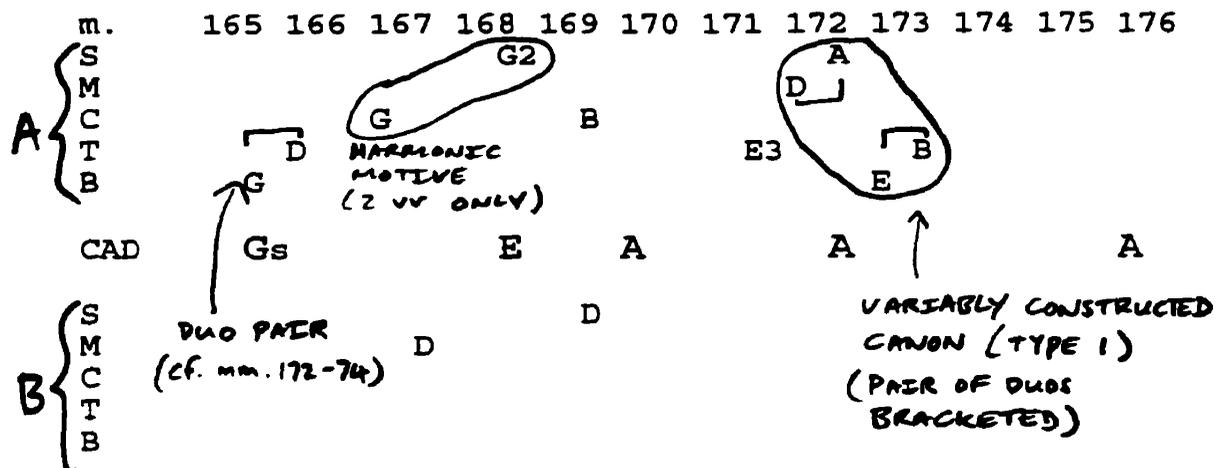
-lower line: Subject B (cantizans form without Arabic numeral; tenorizans form with Arabic numeral)

(a) Phase 1 (mm. 156-65)



(Figure 8.8 continued)

(b) Phase 2, measures 165-76; Subjects A and B: as above.



Example 8.1: Subject B ("interiora mea") entries preparing cadence to A (*Tristitia*,
measures 38-42)

40

S

M
- ve - runt in - te ri - o - ra me - a.

C
in - te ri - o - ra me - a.

T
- runt in - te - ri - o - ra me - a.

B
in - te - ri - o - ra me - a. in - te - ri - o - ra me - a.

Handwritten annotations: *duo #1* (pointing to Tenor entry), *duo #2* (pointing to Contralto entry).

Example 8.2: Complete "in dolore" subject used in canon (measures 51-55)

50

S in do - lo - re, in do - lo - re,

M in do - lo - re, in do - lo - re, in do -
3 4 5 6 5

C do - lo - re, in do - lo - re, do - lo -

T - lo - re, in do - lo - re, in do - lo -

B do - lo - re, in do - lo - re.

55

in 3 4 5 6 5 do - lo - re, et

- lo - re, in do - lo - re.

FALSE ENTRY

- re, in do - lo - re.

- re, do - lo - re, in do - lo - re.

in do - lo - re.

Example 8.3: Goal tone A as "5" of abandoned cadence to D; followed by non-cadential confirmation of D (measures 53-58)

SS

S in do - lo - - - re, et con - te - ne -

M - lo - - - re, in do - lo - re, _____

C - re, in do - lo - - - re, _____

T - re, do - lo - re, in do - lo - re, et con -

B in do - lo - - - re, _____

"7" REST "

"5" REST "

- bra - ti sunt o - cu -

- te - ne - bra - ti sunt

Example 8.4: Excerpt from "oculi mei" canon over E pedal (measures 77-82)

80

S
i, o - cu - li me - i, o - cu - li me -

M
- cu - li me - , o - cu - li me -

C
(PEDAL)
i, o - cu - li me - i, o -

T
me - i, o - cu - li me - i, o - cu - li

B
o - cu - li me - i, o - cu - li me - i, o -

- - - i

- - - i

- cu - li me - i

me - - - i

- cu - li me - i

Example 8.7: Rhythmic canon (cf. Andrews's "rhythmic imitation") leading to final cadence of *Prima Pars* (measures 106-113)

105

S
- a pec-ca - vi, pec-ca - - - vi, qui - a pec-ca -

M
qui - a pec-ca - vi, qui - a pec-ca - - - vi.

C
- vi, vae mi - hi qui - a pec-ca - - -

T
- vi, qui - a pec-ca - vi, qui a pec -

B
- ca - vi, qui - a pec-ca - vi, qui - a pec-ca - vi, qui -

110

- - vi, qui - a pec-ca - - - vi.

qui - a pec-ca - - - vi, qui - a pec-ca - vi.

vi, qui - a pec-ca - - - vi, pec-ca - - - vi.

- ca - vi, qui - a pec-ca - vi, pec-ca - vi.

- a pec-ca - vi, qui - a pec-ca - vi.

Example 8.8: Three "consolare" combinations

(a) measures 135-36 (cf. Example 5.9)

135

S
spe - ran - tes in _____ te,

M
in te, spe - ran - tes in te, con - so - la - re,

C
te, spe - ran - tes in te, con - so - la - re, con - so -

T
spe - ran - tes in te, in te, con - so - la - re.

B
te, spe - ran - tes in te.

A

B

(Example 8.8 concluded)

(c) measures 146-47

145

S
con - so - la - re, con - so - la -

M
con - so - la - re et ad - ju - va me, con - so -

C
ad - ju - va me, et ad - ju - va me, con - so - la -

T
- va me, con - so - la - re et ad - ju -

B
me, con - so - la - re et ad - ju - va

Handwritten annotations: **A** (bracketed over Soprano and Alto lines), **A** (bracketed over Alto and Contralto lines), **B?** (above Contralto line), **A** (bracketed over Tenor and Bass lines), **B** (bracketed over Bass line).

Example 8.9: Harmonic motive of "et miserere mei" imitative point

(a) measures 158-60

The image shows a musical score for five voices: Soprano (S), Alto (M), Contralto (C), Tenor (T), and Bass (B). The score is in a common time signature and features a key signature of one flat. A specific harmonic motive is highlighted with a box and labeled "HARMONIC MOTIVE". This motive consists of a sequence of notes: a half note G4, a quarter note A4, a quarter note B4, a quarter note C5, a quarter note B4, a quarter note A4, and a half note G4. The lyrics for each voice part are as follows:

- Soprano (S)**: (No lyrics shown)
- Alto (M)**: - - - i, et mi-se-re -
- Contralto (C)**: et mi-se-re - - re me - -
- Tenor (T)**: mi-se-re - re me - - i, et
- Bass (B)**: re - re me - - - i,

(Example 8.9 continued)

(b) measures 161-63

HARMONIC MOTIVE
160

S et mi-se-re - - re me - i,
M et mi-se-re
C et mi-se-re - - re me - - - i,
T et mi-se-re - - re me - - - i,
B

Example 8.10: Variably-constructed canon, Type 1 (pair of duos) leading to final cadence (measures 172-76)

175

Soprano (S): et mi-se-re-re me - - - i.

Alto (M): et mi-se-re-re me-i, et mi-se-re-re me-l

Contralto (C): et mi-se-re-re me - - - i.

Tenor (T): - re-re me-i, et mi-se-re-re me-l

Bass (B): - - - i, et mi-se-re-re me - - - i.

Handwritten annotations: '+5' (twice) and '-11' (once) with arrows indicating intervallic relationships between notes in different parts.