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NEW THEORIES FOR OLD MUSIC: 
AN ANALYSIS OF LAMENTATIONS SETTINGS
BY THOMAS TALLIS AND WILLIAM BYRD

By

Enoch Samuel Alan Jacobus
B.A., Asbury College, 2006

A Thesis
Submitted to the Faculty of the
Graduate School of the University of Louisville
In Partial Fulfillment of the Requirements
for the Degree of

Master of Music

School of Music
University of Louisville
Louisville, Kentucky

May 2008
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DEDICATION

This thesis is dedicated to my college theory professor

Dr. Vicki Bell

who awakened in me a love for music theory

and a love for Renaissance choral music.
ACKNOWLEDGEMENTS

I would like to thank my major professor and thesis committee chair, Dr. Anne Marie de Zeeuw, for her guidance and encouragement. She had the wisdom to know when to push me forward and when to let me push myself. Many thanks to Dr. Julia Shinnick for giving generously of her time, resources, and thoughtful consideration, and to Dr. Marc Satterwhite for his willingness to spend so much of his spring break reading this document. Even more, I thank my parents, Alan and Lori Jacobus, for laying the foundation for my musical, intellectual, spiritual, and emotional self.
ABSTRACT

NEW THEORIES FOR OLD MUSIC:
AN ANALYSIS OF LAMENTATIONS SETTINGS
BY THOMAS TALLIS AND WILLIAM BYRD

Enoch S. A. Jacobus

March 19, 2008

Movement through pitch space in the Common Practice Period is generally acknowledged as being structured on the fifth relation, whereas movement through the pitch space of the highly chromatic music of the nineteenth century is thought of as being structured on the third relation. Pitch-space structures in pre-tonal music are rarely if ever discussed. This study presents an alternative method for the analysis of pre-tonal music primarily by defining criteria for an examination of long-term movement through pitch space, as seen in the settings from the Lamentations of Jeremiah by English composers Thomas Tallis and William Byrd. It is the author’s hypothesis that composers in the latter half of the sixteenth century increasingly organized musical pitch space into circle-of-fifths substructures. Even though third relations continued to persist to some extent, it was the fifth relation that was to prevail for the next two centuries.
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CHAPTER I
INTRODUCTION AND REVIEW OF LITERATURE

Tallis’s and Byrd’s settings of texts from the Book of Lamentations (probably composed in the 1560s) achieve a level of intricate craftsmanship and emotional appeal that many of their other works do not reach. Although these pieces are often mentioned in passing as being among some of the composers’ best works, little has been written that treats them in any depth, and most of what is said tends to be historical rather than analytical in emphasis. These historical sources are referenced in Chapter II, “Historical Context.”

Most analytical studies of music from the sixteenth century are broad in scope and general in application, focusing chiefly on mode and counterpoint and giving little attention to harmonic goals or direction. Initially, my analysis followed that approach, but when I discovered unexpected relationships among the first pitches of contrapuntal entries, as well as unusual dissonances at the cadences, then it became apparent that a narrow focus on counterpoint to the exclusion of harmonic and tonal structure would be inadequate. The generally accepted view is that harmonic motion and direction are irrelevant considerations in dealing with linearly-conceived music; however, even though Tallis’s and Byrd’s music is indeed linear and its composers did not conceive of harmony in the same way that later composers did, I argue that harmony is an important element of
this music. I shall demonstrate that these compositions exhibit characteristics foundational to Common Practice harmonic ideas, and that developments that reached fruition in the seventeenth century began in the sixteenth.

There are numerous sources that deal with sixteenth-century counterpoint. Representative examples include studies as old as Johann Joseph Fux’s *Gradus ad Parnassum* and as recent as Robert Gauldin’s *A Practical Approach to Sixteenth-Century Counterpoint*.¹

Equally numerous are studies of tonality versus modality in sixteenth-century music. Harold Powers’s “Tonal Types and Modal Categories in Renaissance Polyphony”² and “Anomalous Modalities,”³ Bernhard Meier’s *The Modes of Classical Vocal Polyphony*,⁴ and Edward Lowinsky’s *Tonality and Atonality in Sixteenth-Century Music*⁵ all center their discussions on the use of mode. Other related articles include John Anthony Caldwell’s “Some Aspects of Tonal Language in Music of the Fifteenth and Sixteenth Centuries”⁶ and Benito Rivera’s “Studies in Analysis and History of Theory:

Sixteenth and Seventeenth Centuries Studies.”⁷ These studies, while valuable, are broad in scope and do not address the questions raised in the present analysis.

Rivera’s article, although dealing with modality, is chiefly concerned with theoretical treatises of the Renaissance. He takes a similar approach in “Harmonic Theory in Musical Treatises of the Late Fifteenth and Early Sixteenth Centuries.”⁸ In it, he makes a case for the idea that Renaissance composers did not necessarily simply let their harmony result from the interaction of the individual vocal lines but may have been quite aware of the vertical aspect of their music. Most of his discussion involves a discourse on treatises of the time. While the subject of his article does not engage the issues of the present study, his thesis supports its direction.

Rivera’s historical approach to the analysis of sixteenth-century music is shared by John Milsom, whose article “Analyzing Josquin”⁹ attempts to find common ground between modern theoretical concerns, such as a logical flow and growth, and the theoretical concerns of Josquin’s time. Besides the fact that Josquin’s style significantly predates that of Tallis and Byrd, Milsom’s application has little to do with harmony or pitch space.

One article that incorporates many procedures is Putnam Aldrich’s “An Approach to the Analysis of Renaissance Music.”¹⁰ The author’s method is historically informed, in that the article deals with issues with which contemporaneous theorists would have

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been concerned. Much of the discussion revolves around modality and, in fact, reacts against interpretations of early music that signal the tonal system. Aldrich's reaction against analyses that find origins of tonality in pre-tonal music is contrary to the position put forth in this thesis.

David Stern's article "Schenkerian Theory and the Analysis of Renaissance Music"\textsuperscript{11} comprises an interesting blend of two seemingly dissimilar approaches. Stern examines historical treatises and lets them inform his application of Heinrich Schenker's ideas to early music. Schenkerian analysis is only truly applicable to the tonal repertoire, and it was developed with German music in mind. Thus Stern's implementation of separate theoretical models presents difficult issues to the theorist. There cannot be an exact correlation of all of Schenker's concepts because the musical language of the Renaissance was considerably different from the language of the Common Practice Period. Stern does, however, recognize the need for a theoretical model for early music that informs scholars about something more than the counterpoint, the mode, and the concerns of theorists of the day.

Another article by Stern, "William Byrd: Mass for Five Voices"\textsuperscript{12} touches on tonality in early music, as well as Byrd's harmonic style and his approach to dissonance. Many of these topics are pertinent to those discussed in this study, but Stern's article is concerned largely with identification of mode and includes a brief review of dissonance treatment.

Very few analyses even approach the issues dealt with in this study. Of those that do, there are four that stand out in particular. The first is Carl Schachter's "Landini's Treatment of Consonance and Dissonance: A Study in Fourteenth-Century Counterpoint." While this study does address some of the same topics as this thesis, the analysis is aimed at music dating from some 150 years before the works of Tallis and Byrd. Although Schachter's article is a discourse on fourteenth-century counterpoint, he does apply a reduction technique derived from that of Heinrich Schenker to some of his examples. The present study is thus not the first to attempt some application of reductionist principles to a piece of pre-tonal music.

The second is Saul Novack's "Fusion of Design and Tonal Order in Mass and Motet: Josquin Desprez and Heinrich Isaac." Novack's investigation is closer than Schachter's to mine in both chronology and topic. He writes of "tonal order," but he seems to be speaking more of the "centric" nature of early music that, while certainly not "tonal" in its strictest meaning, does imply a hierarchy of pitch relations. Novack also employs reduction analysis that is closer to Schenker's model than the one Schachter uses.

Both Schachter's and Novack's articles create some difficulties, however. Both tend to carry over Schenker's V—I and use terms such as major triad. Schachter gives the caveat that he does so only for convenience, and that he does not intend to impute tonal harmonic function to the music. However, Novack does not include such a caveat,

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which casts some doubt on his intention for using terminology and symbols typical of
tonal analysis. Regardless of these considerations, both authors make an attempt to
discover structural pitches in the pre-tonal repertoire.

Similarly, the third source, Frederick J. Bashour's "Towards a More Rigorous
Methodology for the Analysis of the Pre-Tonal Repertory"\(^{15}\) applies reduction analysis to
excerpts from fourteenth-century music. He, too, addresses the logical connection
between pre-tonal and tonal harmonic sensibilities when he writes:

> Consider now the last time you heard a motet by Ockeghem or Obrecht or
Josquin and the number of times your ears were genuinely surprised by the
direction of the tonal movement. And if you attempted an explication of
that movement... you are probably too paranoid to think for a minute that
such movement seems like an awkward primitive groping towards the
normative triadic tonal functions of the "mature" works of the eighteenth
and nineteenth centuries!\(^{16}\)

Bashour is heavily influenced by Schenker, but does not invoke tonal harmonic function
in his reduction sketches as Schachter and Novack do. And although Bashour's article
centers on earlier music than I examine in this study, there is much to be said for his
efforts toward a "more rigorous methodology" for the study of early music.

The fourth, William J. Mitchell's "The Prologue to Orlando di Lasso’s *Prophetiae
Sibyllarum*"\(^{17}\) deals with music that is more nearly contemporary with the works of Tallis
and Byrd than those addressed by previously listed authors. Mitchell also uses reduction
techniques in his discussion. However, he, like those already mentioned, makes

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\(^{15}\) Frederick J. Bashour, "Towards a More Rigorous Methodology for the Analysis of the Pre-Tonal Repertory," in *College Music Symposium* 19, no. 2 (Fall 1979): 140-53.
\(^{16}\) Ibid., 147-148.
relatively limited use of reduction sketches. All these authors tend to focus on smaller passages, and they do not examine, at least in their respective articles, the pitch relations embodied in the work as a whole.

There is something to be said for using caution when applying Schenkerian-inspired ideas to early music. Not all concepts are portable across the divide between tonal and pre-tonal music. That is part of the contention of Howard Wilde’s dissertation “Towards a New Theory of Voice-Leading Structure in Sixteenth-Century Polyphony,” in which the author adopts a perspective based on voice-leading structures commonly known to sixteenth-century theorists. Wilde’s discontent with a strictly Schenkerian approach is valid to an extent, although some of Schenker’s notions about reduction could certainly prove enlightening in a pre-tonal context, given some adjustment.

The use of dissonance in sixteenth-century music has received some attention, due largely to Knud Jeppesen’s book *The Style of Palestrina and the Dissonance*. His study examines exclusively the work of Palestrina, whose music is widely acknowledged to epitomize the style of the mid-sixteenth century. Glen Haydon’s *The Evolution of the Six-Four Chord: A Chapter in the History of Dissonance Treatment*, dedicated to Jeppesen, traces the development of this curious dissonance from the thirteenth century through its use by Monteverdi in the early seventeenth century.

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Perhaps the single source most pertinent to this study is Jack Pilgrim’s “Tallis’ Lamentations and the English Cadence.” In this article, the author discusses particularly unusual dissonances occurring in Tallis’s Lamentations I and II. Pilgrim gives several illuminating examples but neglects to inform the reader where these excerpts can be found. However, many of his concepts have proven useful in this study.

The analysis that follows in this study departs from the typical discourse on modal (or modal vs. tonal), contrapuntal, or historical approaches, although Chapter IV follows Jeppesen’s lead to the extent that it focuses on dissonance treatment in Tallis’s and Byrd’s settings of Lamentations. That chapter addresses a curious use of dissonance, predominantly in Tallis’s settings, as it relates to the text and a historical musical development.

Somewhat along the lines of those authors who have tried to apply some form of Schenker-inspired reductive analysis, I have approached these three sixteenth-century motets in their entirety, rather than examining excerpts only. My graphic analytical models, however, are entirely unlike Schenker’s, owing more to Riemannian notions of pitch space. The concept of pitch space represents, I believe, the true departure here, from previous studies. Pitch space and pitch-class space are terms commonly used in the analysis of modern music, but pitch space is a construct applicable to all music, even if sixteenth-century composers and theorists did not think in those terms. This study seeks to define criteria for identifying structural points in pitch space and to identify the framework that Tallis and Byrd erect in their respective settings.

CHAPTER II

HISTORICAL CONTEXT

The sixteenth century was a tumultuous time for England. Henry VIII having severed his ties with the Roman Church, his children continued to change England’s allegiance back and forth between Protestantism and Catholicism. Thomas Tallis composed for all of them, as a member of the Chapel Royal under Henry VIII, Edward VI, Mary I (for whom he wrote for the Roman liturgy) and Elizabeth I. Paul Doe points out that Elizabeth also requested Latin music from time to time, although it is doubtful whether the Latin settings were used in a liturgical context. 22

In the midst of this social and political controversy, Tallis wrote two Latin motets, settings from the Lamentations of Jeremiah. Paul Doe and David Allinson estimate that Tallis wrote these motets in the mid- to late-1560s, 23 as does David Flanagan, who places them early in the time of Elizabeth. 24 H. B. Collins contends that a comparison of the Lamentations with Tallis’s earlier work points to a time of composition long after

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Elizabeth’s taking the throne, although he does not specify a time. More recent scholarship, however, such as that of David Flanagan, seems to point to the 1560s.

There is some debate as to the purpose of Tallis’s *Lamentations* *I* and *II*, since Latin-texted church music would have had no liturgical place during Elizabeth’s reign. However, as Collins, and also Doe and Allinson, point out, the text is, in fact, liturgical in origin, being taken (with some slight modifications) from the first two lections at Tenebrae in the Sarum rite.

Tallis, a Roman Catholic, may have been writing these Latin motets not for the church, but for himself. Given the minute departures from the liturgical text, other scholars have conjectured that Tallis was writing in a recusant spirit and that he thought of the text as symbolic of what he considered to be England’s abandonment of the proper worship of God. Doe and Allinson admit this possibility, saying: “It should not be assumed that these works were never used liturgically, nor should it be assumed that he ‘doctored’ the texts for affective reasons.” This view is in opposition to that Joseph Kerman and David Mateer who, Flanagan says, “argue that the texts of Elizabethan Lamentations were edited to provide affective texts.” Flanagan and Doe point to the possibility that Tallis wrote the motets for private, home use by fellow recusant Catholics. It is difficult to declare the composer’s intent since his chosen texts were

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26 Ibid.
28 Ibid.
29 Flanagan, 147.
30 Ibid., 124-5.
also set by numerous other composers as far back as the fifteenth century. Still, most composers who had set other verses from Lamentations, or even the same verses, were writing in Catholic countries. The Book of Lamentations, which alludes to the Jewish captivity in Babylon, may have struck a spiritual chord with English Catholics, who, doubtless identified with the texts’ cry to “return to the Lord your God.”

Gunther Massenkeil points to Du Fay’s setting of 1453 as the earliest well-known motet with a text from Lamentations. In this particular motet, Du Fay sets part of the same text used by Tallis over one hundred years later. However, contemporaries of Tallis continued to set the words of Jeremiah into the late sixteenth century. Composers Cristóbal de Morales and, more notably, Giovanni Pierluigi da Palestrina produced settings of Lamentations in 1564. Palestrina’s settings, says Massenkeil, “reveal a stronger tendency to homorhythmic texture in order to obtain a clear declamation of the text.” Similarly, Tallis’s Lamentations I features a fair amount of homorhythmic texture, although both Tallis and Byrd use elaborate polyphony to set the Hebrew initials that precede each verse.

English contemporaries of Tallis and Byrd, such as Robert White and Osbert Parsley, also set the Lamentations to music. Of those four, only Tallis’s settings are consistent with the Sarum tradition. Byrd’s and Parsley’s settings are selected from the Roman tradition, and White’s setting coincides with portions of the lessons for Maundy

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31 Doe, Tallis, 39.
33 Ibid.
Thursday and Good Friday.\textsuperscript{34} This conglomeration of traditions may be due to the shifting allegiance of the English church.

Tallis's settings comprise two distinct pieces, \textit{Lamentations I} and \textit{Lamentations II}. Both are often performed together, or at least thought of as two parts of the same work. Indeed, the first sets the text of Lamentations 1:1-2, while the second sets 1:3-5. The texts are consecutive in both Scripture and liturgical use, but the settings are quite different in character and length. Doe points out that the second setting is quite distinct from the first, saying that they are "two independent motets for use in Holy Week," although he is careful to say that use in Holy Week does not necessarily mean liturgical use.\textsuperscript{35} Doe highlights the historical differences between the two settings, but the two settings are independent for additional reasons that will be discussed in later chapters.

The texts themselves are quite evocative of Tallis's supposed sympathies, which is the reason for so much speculation on his intent. The text of \textit{Lamentations I} is taken from Lamentations 1:1-2:

\begin{quote}
\textit{Quomodo sedit sola civita plena populo?} Facta est quasi vidua domina gentium: princeps provinciarum facta est sub tributo.
\end{quote}

\begin{quote}
\textit{Plorans ploravit in nocte, et lacrimae eius in maxillis eius: non est qui consoletur eam ex omnibus caris eius. Omnes amici eius spreverunt eam, et facti sunt ei inimici.}\textsuperscript{36}
\end{quote}

1. How doth the city sit solitary, that was full of people! how is she become as a widow! She that was great among the nations, and princess among the provinces, how is she become tributary!

2. She weepeth sore in the night, and her tears are on her cheeks: among all her lovers she hath none to comfort her: all her friends have dealt treacherously with her, they are become her enemies.\textsuperscript{37}

\textsuperscript{34} Ibid.
\textsuperscript{35} Doe, \textit{Tallis}, 39.
\textsuperscript{37} All English translations are from the King James Version of the Bible.
Both motets feature the preamble and postscript that were commonly added to the Biblical text in liturgical Lamentations of the period. The preamble to *Lamentations I*, since it is taken from the very beginning of Jeremiah’s Lamentations, is *Incipit lamentatio Ieremiae prophetae* (“[Here] begins the Lamentation of Jeremiah the prophet”), while the preamble of *Lamentations II* is *De lamentatione Ieremiae prophetae* (“From the Lamentation(s) of Jeremiah the prophet”). The Biblical text of *Lamentations II* follows that of *Lamentations I*, being taken from Lamentations 1:3-5:

3. Judah is gone into captivity because of affliction, and because of great servitude: she dwelleth among the heathen, she findeth no rest: all her persecutors overtook her between the straits.

4. The ways of Zion do mourn, because none come to the solemn feasts: all her gates are desolate: her priests sigh, her virgins are afflicted, and she is in bitterness.

5. Her adversaries are the chief, her enemies prosper; for the Lord hath afflicted her for the multitude of her transgressions: her children are gone into captivity before the enemy.

The words *Ierusalem, convertere ad Dominum Deum tuum* (“Jerusalem, return to the Lord your God”) are appended to both settings. This latter text in particular would have appealed to Catholics in a newly Protestant country. The Hebrew letters (Aleph, Beth, and so forth), which did not survive into most English translations, mark the beginning of

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each Latin verse with rich melismas, which, as Massenkeil observes, is analogous to a musical manifestation of illuminated initials in medieval manuscripts.\textsuperscript{39}

William Byrd was, at first, Tallis’s pupil, then his colleague; he was, like Tallis, a devout Catholic. Both men were Gentlemen of the Chapel Royal, and jointly published a collection of sacred songs in 1575, as noted by Milsom.\textsuperscript{40} Both Strunk and Kerman give the impression that Byrd was perhaps even stauncher in his recusancy than Tallis was, having taken part in “pro-Catholic initiatives” and being fervent in his composition of sacred Latin music.\textsuperscript{41}

Flanagan places Byrd’s setting from Lamentations within the same decade as Tallis’s.\textsuperscript{42} Given that Byrd was considerably younger than Tallis when he wrote his setting\textsuperscript{43} and that its composition preceded the majority of Catholic persecution in England, Flanagan believes it to have been written more for Byrd’s own education rather than for the liturgy of a recusant Catholic movement.\textsuperscript{44}

Byrd’s text is abridged from the original, omitting the last third of each verse of Lamentations 2:8a-b, 9a-b, and 10a-b.\textsuperscript{45}

\begin{thebibliography}{1}
\bibitem{Massenkeil} Massenkeil.
\bibitem{Flanagan} Flanagan, 140.
\bibitem{Kerman2} Flanagan, 141.
\bibitem{Omitted} The omitted passages are shown in brackets.
\end{thebibliography}
8. The Lord hath purposed to destroy the wall of the daughter of Zion: he hath stretched out a line, he hath not withdrawn his hand from destroying: [therefore he made the rampart and the wall to lament; they languished together.]

9. Her gates are sunk into the ground; he hath destroyed and broken her bars: her king and her princes are among the Gentiles: [the law is no more; her prophets also find no vision from the Lord.]

10. The elders of the daughter of Zion sit upon the ground, and keep silence: they have cast up dust upon their heads; [they have girded themselves with sackcloth: the virgins of Jerusalem hang down their heads to the ground.]

This shortened version of the Biblical text may support the argument that Byrd wrote his setting not for the liturgy but as an exercise in expressive writing. Flanagan admits this as well, but makes the caveat that the abbreviated text itself is not conclusive evidence.

Citing an example, he says: “the same practice was followed by that paragon of liturgical propriety, Palestrina, in his own Lamentations.” This text, too, is preceded by De lamentatione Jeremiae prophetae and followed by Jerusalem, convertere ad Dominum Deum tuum. Joseph Kerman says of Byrd’s setting: “The work lacks . . . the simple intensity of those by Tallis. In its contrapuntal sweep, however, and in the powerful rough climax on ‘Jerusalem convertere,’ it goes beyond the range of either of the older composers [Tallis and White].”

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47 Flanagan, 141.
48 Kerman.
Tallis and Byrd are perhaps the foremost English composers of the sixteenth
century. Their Lamentations, particularly those of Tallis, are lauded by many scholars as
some of their finest compositions, although these pieces often receive little attention in an
overview of the composers’ works. Some of the analysis in the following chapters
challenges aspects of previous assumptions about historical trends in music of the period.
The present study reveals a possible fork in the road of musical development.

At the divergence, one path leads to what will become functional, Common
Practice harmony, in which harmonic succession rests primarily upon the circle-of-fifths
principle. Other composers, such as Orlande de Lassus, Luca Marenzio, Adrian Willaert,
Cipriano de Rore, and Carlo Gesualdo took the other path in their highly chromatic
music, which tends to move through pitch space by the interval of a third (or sixth). This
chromatic musical development of the late sixteenth and early seventeenth centuries
belongs to the Mannerists, composers whose preferred aesthetic emphasized the text
through exaggerated contrast and text painting, often involving very dramatic
chromaticism.\(^{49}\) The former path, the one that led to Common Practice harmony, initially
took preeminence. It was eventually supplanted by highly chromatic writing in the late
nineteenth century, which was, in a way, an eventual fulfillment of the compositional
developments of the Mannerists.

Tallis’s and Byrd’s motets from the Lamentations stand at the crossroads of the
two paths. Tallis’s Lamentations contain elements of both styles, although he composed
in a much less affected style than the Mannerists did, and over the course of his two
settings, one sees a shift to increasing numbers of fifth-related structural pitches, even

though third relations are still prevalent. Byrd, in spite of a proclivity for cross relations and chromatic moments, exhibits a much stronger sense of fifth-relations between structural pitches than Tallis does.

The analysis that follows will present evidence in support of this hypothesis: composers in the latter half of the sixteenth century increasingly organized musical pitch space into circle-of-fifths substructures. Even though third relations continued to persist to some extent, it was the fifth relation that was to prevail for the next two centuries.
CHAPTER III
MAPPING STRUCTURAL POINTS IN PITCH-SPACE

Much analysis of polyphonic works of the sixteenth century has been locked into a study of the counterpoint itself. The individual lines interacting with each other create vertical sonorities which, although triadic, are not necessarily functional. However, it ought to be noted that functional harmony as we understand it has its roots in the developing harmonic sensibilities of sixteenth-century composers like Palestrina, Tallis, and others. This point is hardly in dispute, but it is not often explored. If it rests upon an unquestioned assumption that music of this era was not harmonically conceived, an analysis may overlook the possibility of an harmonic organization lying on a deeper level. Sixteenth-century polyphony may not be functional from beat to beat or half-measure to half-measure, but it may have some “tonal” direction. In this particular case I do not use the word *tonal* to refer to the understanding of the hierarchical use of chords in a given key, i.e. common-practice tonality, but rather to refer to the idea that structural tones in each line can have a relation to the tones of cadences and perhaps even the final cadence of the work.

Approaching music from a given historical period, one expects to find the relationships in it to be organized in a way that is common to that era. Analysis of Baroque or Classical music is approached with the understanding that chord relations and/or overall harmonic scheme will be based on root movement by fifth. Analysis of
Romantic music is approached with the understanding that root movement by third will be much more common than it was in preceding periods, and at times, third relations will supplant the tonic-dominant axis entirely. But in pre-tonal music such expectations may not be present, even if some of those relationships are. Something one might expect to find is an increasing preference among sixteenth-century composers for fifth-related chords as time draws closer to the Common Practice Period. However, much of the polyphonic music written at the close of the sixteenth century and beginning of the seventeenth century was highly chromatic, such as the works of Gesualdo and Lassus, and chromatic writing tends to favor third relations.

Two ideas are foundational to this chapter’s treatment of harmonic schemes in Tallis’s and Byrd’s settings from Lamentations: the relationships of structural pitches in pitch space, and the strong roles of the third and fifth in harmonic schemes. Imitative polyphonic music often gives noticeable clues to the whereabouts of its structural pitches, even though these pitches are not structural in a Schenkerian sense. Structural pitches tend to occur at the beginnings and ends of phrases. Because these beginnings and endings are not simultaneous, these structural pitches may be obscured in the texture, particularly in inner voices.

For the most part, text plays the chief role in organizing the music. Often, a complete thought or line of text is broken down into sub-phrases, which may be repeated before continuing to the next sub-phrase. It is in the case of sub-phrases that overlapping or other less definite cadences occur. Cadential de-emphasis gives a sense of denied repose, or partial repose, similar in effect to the interaction that results when musical cadences do not line up with the textual cadence in every voice, or in textual cadences
that end and begin the next section of text before all parts have finished the previous one. Nevertheless, there are guides to determine whether one is truly hearing a new entrance or merely a restatement or continuation into the next section of text. I have set two overarching principles as guides for the determination of entries in these settings by Tallis and Byrd:

1. In any individual voice, the onset of a new section of text (text phrase), usually a complete thought in itself, constitutes an entry. Such entries are often preceded by a rest. Mere repetition of parts of a text phrase does not constitute an entry. Naturally, an entry in any one voice is part of a group of entries, easily recognized by the proximity of the entries. However, sometimes, an entry group is widely spread out, and one or more voices may begin a new entry group before the former entry group is complete.

2. A point of imitation (POI) also constitutes an entry group. Any potential entry participating in the POI is considered genuine. In my opinion, this second principle may override the first.

In this study, a voice is considered to contain an entry when it meets one or both of these criteria. Each point at which the voice is said to begin an entry is, of course, thought of as a member of a group of entries in each voice; any entry must be examined in relation to the entries around it in other voices. Suffice it to say that meeting only one of the principles is a fairly good indication that the entry is of lesser structural importance than other passages in which both principles apply.

The first principle (an entry should start with the beginning of the text phrase, not a repetition of parts of the text phrase) is text-oriented, i.e., possible entries are examined
based on how the text is broken up. This division of the entire text into text-phrases can be determined easily from an examination of the setting, although from time to time a text phrase may be divided into sub-phrases.

A rest is the first and most obvious clue to an entrance. Rests are used judiciously in this type of music because there is no accompaniment, and with only five parts, none can be spared for long silences. Thus the occurrence of a rest is often quite significant and usually imparts a great deal of importance to the first pitch that follows it.

The beginning of Tallis’s *Lamentations I* is representative of numerous passages that could be taken from either composer’s settings. In Example 1, each of the first five entries clearly occurs at the point a new voice enters.

**Example 1:** Tallis, *Lamentations I*, mm. 1-11

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50 All examples from Tallis are my own edition based on Tallis, “Lamentations I” and “Lamentations II,” in *Tudor Church Music*, 102-22.
This example contains some “false entries” as well as genuine ones. In m. 6, the word \textit{prophetae} is repeated in the superius and discantus (on E4 and C4, respectively). This repetition does not constitute a new entrance; there are no rests preceding the pitches in question and the word is not a textual sub-phrase in and of itself. However, on the same beat in the tenor, a bona fide entrance occurs on E3, and it is preceded by a rest, signaling a genuine repetition of the opening text of the motet. As each voice reenters (tenor in m. 6, bassus in m. 7, superius and discantus in m. 8) its entrance is preceded by rest.

Measure 9 presents an exception. Here the contratenor enters with \textit{prophetae}, a word which belonged to the longer text phrase \textit{Incipit lamentatio Ieremiae prophetae}. In m. 6 it was decidedly not a new entry. However, here its appearance strongly suggests a new entry because of the imitation it sets up with the rising perfect fourth (or perfect fifth).

The eight recurrences of the same motive coupled to the word \textit{prophetae} in mm. 10-11 support this interpretation. So while the rests that precede some of those entries in mm. 9-11 may be a clue, what truly causes the ear to hear these as important pitches is the imitation of the motive.
Finding rests is not a sure way of identifying entrances, however. There are instances, such as mm. 67 and 68 (baritone and tenor II respectively) in Byrd’s setting (Example 2⁵¹), in which a rest merely interjects a pause before a repetition of the last word of the textual phrase; it does not denote an entrance.

Example 2: Byrd, De Lamentatione Jeremiae prophetae, mm. 66-69

![Musical notation for Example 2]

One could make the same argument as before: both “entries” begin with a rising perfect fourth. But in this context, only two voices are involved and there is no imitation beyond the first two notes. Considering the fact that they do not adequately fulfill either principle, they will not be considered entries.

Conversely, Byrd’s setting also contains instances in which a voice begins the next text-phrase without a preceding rest (mm. 73, tenor I, Example 3). Clearly, this first

statement of a new point of imitation initiates a new set of entries, even though it is not marked by a rest.

Example 3: Byrd, *De Lamentatione Jeremiae prophetae*, mm. 72-79

The second principle (points of imitation) designates entries based on the music, rather than the text; i.e., potential entries are determined based on their involvement in
the imitation of a musical motive. Since the terms of this study privilege pitch space and relationships within it, the POI (point of imitation) principle can often override the text-phrase principle.

A POI can be a help or a hindrance to the determination of an entry or entry group. For the most part, one could recognize entrances based on a POI and the result would be approximately the same as that presented here. However, there are passages in which authentic entrances (complete statements with the text phrase, sometimes even with a preceding rest) are not imitative, and would consequently be excluded from the discussion. Similarly, there are instances in which a new POI begins in the middle of a text phrase (as in mm. 9-11, Example 1), even after the complete text phrase has been stated in its entirety.

A good example of both difficulties is shown in Example 4. This passage shows a POI on the text *regem ejus et principem ejus in gentibus* already in progress, having begun in m. 105. The imitation lasts only through *regem ejus*, followed by free counterpoint through the rest of the phrase. However, at m. 117, the text *in gentibus* begins a new POI, even though it is not a new phrase of text, and even though it was heard connected to the whole phrase as early as mm. 109-110 (bass). Thus, the statement of *in gentibus* sounded in m. 117 by the alto is in a precarious position because it does not have any of the text-related earmarks of an entrance. However, the entries that imitate the alto entry stir the listener’s melodic memory. Therefore, the statement of *in gentibus* in m. 117 (and similar situations in other passages) is considered an entrance. Example 4, also contains several non-imitative statements of *in gentibus*, which are therefore not
considered entries. The bass iteration of *in gentibus* in m. 117-118 and the tenor II statement in m. 119-120 do not participate in the imitation.

**Example 4:** Byrd, *De Lamentatione Jeremiae prophetae*, mm. 110-123
This passage is problematic for reasons in addition to those addressed above. It could also be argued that the first entrance of the new POI on *in gentibus* actually is begun by the baritone a beat earlier than the alto entrance. This statement is rhythmically identical to the others that follow, and except for the first interval (a rising fourth, rather than a repetition), its contour is similar. However, I do not consider it the first entrance for two reasons: 1) it begins on a metrically weak beat, whereas those that follow (initiated by the alto) begin on a metrically strong beat, and 2) that difference of the first interval keeps the ear from connecting it with the POI that follows, whereas the ear is fully aware of the congruity between the alto entrance and those that follow. Even though the baritone entrance in m. 120 is metrically weak, it is, except for the first interval, the inverse contour of previous entries. I consider it an entrance because it is
preceded by a rest and begins with the text that has by that time been established as a new sub-phrase.

Locating entrances of new musical material is relatively simple, but finding the cadence is a different matter, since the various lines often end independently of one another. The first six measures of Tallis’s *Lamentations I* (Example 5) show that the superius and discantus end their phrases when the contratenor has barely begun.

**Example 5:** Tallis, *Lamentations I*, mm. 1-7

For the cadence we must rely on the music, since we cannot hope to reconcile the textual cadences of each voice. Any one voice may contain a cadential figure, but that alone does not carry the weight of a cadence. Hunting for the cadence is a little like playing poker. We must listen for the “tell,” the disclosure that the music is about to cadence.

The tenor holds a cadential figure in m. 5 that is, in a sense, a “bluff.” In this case, the tenor initiates a preparation for the cadence proper, but is not, itself, the cadence. The continuation of motion, i.e., the drive into m. 6, prevents the music from cadencing in m. 5. It is in m. 6 that we find a cessation that gives a stronger sense of closure. The closure
is not absolute, however, and it does not sound like it, since Tallis is about to repeat the text the listener has just heard.

On the other hand, it could be argued that the cadence occurs at the end of m. 5 and what occurs at the beginning of m. 6 is a cadential extension. To modern ears, or even Common Practice ears, the notion of an authentic $i^{6/4}-V-I$ cadential pattern (in m. 5) is preferable to the plagal iv-I pattern (in m. 6). However, the pre-tonal idiom did not necessarily privilege one over the other. In much polyphonic music from the sixteenth century, a “plagal” progression was just as desirable as, or perhaps only slightly less desirable than, an “authentic” progression.

Considering these criteria for adjudicating beginning and ending points, the relationships formed between points in pitch space suggests an interesting development, both within each work and on a larger scale, foreshadowing Common Practice understanding of pitch space. Tallis’s Lamentations I, for example, begins with an entrance on B (discantus, m. 1), followed by E (tenor, m. 1), and later A (bassus, m. 3). These entrances symmetrically surround E by perfect fifths. Entrances continue on E and A through the first two sections of text, continuing that fifth relation between entrances. This pattern is shown in Figure 1a.\textsuperscript{52}

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\textsuperscript{52} Graphs in this chapter do not account for octave register, octave duplication of simultaneous entries, or time elapsed between entries. Graphs are intended to reflect pitch class relationships and order of entries. Solid lines indicate cadences that separate entry groups. Dashed lines indicate elided cadences or non-existent (i.e., indiscernable cadential) divisions between a text phrase and one or more of its sub-phrases. E.g. in Figure 1a, the dashed line delineates between the POI begun with the word Incipit and the POI begun by its sub-phrase prophetae.
This illustration displays only the pitch and order of each entry, with simultaneous entries stacked on top of each other. Rather than delineating entry groups by measure number, sectionalizing by text provides a clearer diagram for two reasons. First, music of the Renaissance was not yet written with bar lines, a modern editorial imposition. (However, for the reader's convenience, measure numbers based on the cited edition are included in each figure label.) Second, measure numbers do not reflect form in this music as they might in the Common Practice Period, because in many cases, one section of text may not end until the next has already begun.

The letter-graph model is useful for highlighting the first pitch of each entry. What it does not display as readily are the patterns of motion from entry to entry, and in turn their relations to cadences. It is for this reason that at times it is more beneficial to view a line graph of the same material, as in Figure 1b. Figure 1b\textsuperscript{53} represents the same passage displayed in Figure 1a. The line-graph model emphasizes the distance in pitch

\textsuperscript{53} Each vertical line represents an entry. The point at which the diagonal reaches a vertical line indicates the pitch of the entry, e.g. the first three entries of Figure 1b are B, E, and A, respectively. Vertical lines do not delineate equal time intervals; all time intervals between entries are represented by the same distance on the graph. However, entries are lined up vertically to show when they occur simultaneously, e.g. the "prophetæ" section in Figure 1b.
space between points of entry, rather than the points themselves, making motion and relational patterns more easily seen. In contrast to the letter graph, which merely indicates the existence of cadences, the line graph shows the sonority of the cadence along the top edge of the graph, between dark vertical lines or sometimes lighter dashed lines. For example, the dashed lines of Figure 1b correspond to the single dashed line of Figure 1a. The dashed line is understood to represent a weak or indefinite cadence. In Figure 1b, the sonority of that weak cadence is A major.

Figure 1b: Tallis, *Lamentations I*, pitch-space line graph, mm. 1-17

The most important drawback to the line-graph model is that, given the organization of pitch space into lines designated into perfect fifths, the line-graph model does not differentiate between the major and minor thirds that fall between these lines. Problems arise when the pitches that fall between the “lines of fifths” move by fifth themselves. In these instances the graph does not reflect the quality of the fifth, even though they are invariably perfect as well. I have done my best to remedy this problem by extending the vertical aspect of the graph to accommodate these moments, but it is not always practical. A comparison with the letter graph should clarify any confusion that may arise; in
tandem, these two kinds of graphs should serve well to reveal structural pitch relationships.

Looking again at either graph, one sees a clear opening up of the pitch space in the first section of text, *Incipit*, of which E is the center. Toward the end of that section the oscillation between A and E creates some ambiguity as to whether A or E is more important. The *Incipit* section is exemplary of typical imitative counterpoint in which the second entry is a perfect fifth away from the first. This is more or less the way sixteenth-century counterpoint is taught, as epitomized in the work of Palestrina.

The *prophetæ* section presents a different orientation, with entries organized into thirds and the center of the passage being C, even if C is not always used as an entry pitch. What draws the ear toward A are the three cadences on what modern theorists would call an A-major sonority. In truth, however, the cadence at the end of *Incipit* and the one at the end of *prophetæ* are more appropriately seen as the same cadence, and the *prophetæ* section as an extension of the *Incipit* cadence, because less than two measures separates them. Nevertheless, the repetition of the A sonority draws the ear closer to A than E. The *Aleph* section returns to the A/E axis (still with more A than E), which is abandoned after the next section (Figures 2a and b) begins.

From the previous graphs, one can see more than the simple organization of entries in fifth-related pitch levels. In the *prophetæ* section, one begins to see hints of a triadic organization, almost like a long-term arpeggiation of noncontiguous notes, which is, more or less, a Schenkerian idea. In Figure 2a one sees triadic entries again.
Through the *Quomodo* and *facta est* sections, sonorities on A continue to be emphasized in a predominantly homophonic texture. Still homophonic, the *dominum* entry group begins a transition to a new area of pitch space (Figure 2b), by ending with simultaneous entries that outline a C major chord. Through all these sections, the E acts as a long-term pivot tone, so that over the course of the *princeps* entry group, the entries outline an E minor triad. The *Facta est sub* entry group functions as a retransition to the former area of pitch space. As one can see, Tallis transitions from one area to another by introducing entries at pitch levels that anticipate or have something in common with entries that come before and after. *Sub tributo* reintroduces strong fifth-related entries that are reminiscent of the opening entries of the *Incipit* section (Figure 1a).

In this passage, one sees an increasing number of third-related entries, due in part to the sections in Figure 2b labeled "predominantly homophonic." Because its distinguishing characteristic is the simultaneity of entries, homophony favors the presence of imperfect consonances more a purely polyphonic texture tends to. Given this predilection for thirds, it is not surprising to find entries in third relation to one another in
this passage.\textsuperscript{54} The homophonic entry groups seem to influence the polyphonic sections that follow, \textit{princeps} and \textit{facta est sub}, which also feature a number of entries related by third.

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{figure2b.png}
\caption{Tallis, \textit{Lamentations I}, pitch-space line graph, mm. 19-34}
\end{figure}

What the line graph highlights that the letter graph does not is the pattern that is created by the entries beginning in the \textit{princeps} section. The graph shows geometrically the first entries of that section, which are repeated across the cadence and again in the \textit{facta est sub} section. Although the first and last entries are separated by nearly five measures, the passage seems to function like a large-scale sequence.

\textit{Lamentations I} sets up a textural pattern of following the initial Hebrew letter (i.e. \textit{Aleph} and \textit{Beth}) sections of text with a homophonic statement of the verse from the book

\textsuperscript{54} Those sections marked “predominantly homophonic” indicate that the entries tend to be homophonic. However, after this initial vertical alignment, the homophony quickly takes on polyphonic tendencies.
of Lamentations. This appeared in Figures 2a and b and will appear again in Figures 3a and b.

Third-related entries continue to permeate the pitch space, in both homophonic and polyphonic entries. The entries of each section have something in common with those that come before and those that come after. The setting began with an entry on B-natural, and here, to the text *Plorans ploravit in nocte et lacrimae eius in maxillis eius* (She weeps in the night, and her tears are on her cheeks), the entries point in a direction that, in a tonal context, is as far removed from the original encircling of E-natural as possible. As the name suggests, Lamentations is filled with dolorous texts. But I believe Tallis singles this out as a particularly poignant portion of the verses he has chosen.

Immediately after that line of text is completed, one sees a dramatic shift back toward the pitch space originally occupied. As the term “key” cannot apply to this circumstance, one might use the term “home pitch space” instead to refer to the space occupied at the beginning of the piece. The dramatic shift in pitch space is better shown in Figure 3b.
The relation between entries in the *plorans* section (graphed as a V-shaped motion) is one that Tallis recycles toward the end of *Lamentations I* (see Figures 4a and b).

In this last third of the second verse more fifth-related entries occur than at any other point since the beginning. It is fitting, then, to note the similarities between the first three entries of the *spreverunt* section and those of the *Incipit* section (see Figures 1a and b).
In the appended text,\textsuperscript{55} \textit{Ierusalem, Ierusalem, convertere ad Dominum Deum tuum}, one hears a marked return to third-related entries, and a familiar geometric design appears in Figure 4b.

The V-shaped set of entries that first appeared in the \textit{Plorans} section returns a major third higher in the first section of \textit{Ierusalem}, and then up an additional perfect fifth in the second section of \textit{Ierusalem}.

The third relation seems to play a significant role in Tallis’s first setting from the Lamentations. This is true of entries’ pitch relations to each other, as well as of entry-cadence relations and cadence-cadence relations. Entries related by third also appear in his \textit{Lamentations II}, but perhaps to a lesser degree. In \textit{Lamentations II}, Tallis does not exhibit the partiality for homophonic entries that he did in \textit{Lamentations I}. This change

\footnotesize{\textsuperscript{55} This portion of the text is not in the Vulgate. It was added to the ends of the passages selected for settings, similar to the “Thanks be to God” sometimes appended to Scripture readings. The same is true of the opening text: \textit{Incipit lamentatio Ieremiae prophetae} which is simply translated “The beginning of the Lamentations of Jeremiah the prophet.”}
does not eliminate simultaneous entries in thirds by any means, but it does markedly decrease the profusion of third-related entries.

Figures 5a and b graph the introductory passage and the first verse. The similarity between the first entries of *Lamentations II* (Figure 5a) and those of *Lamentations I* (Figure 1a) is noteworthy.

![Figure 5a: Tallis, Lamentations II, pitch-space letter graph, mm. 1-45](image)

While Figure 5a only indicates one path after the *Migravit* section, Figure 5b actually shows two options for diagramming Tallis’s path through structural pitch space. The upper option, which mirrors that shown in Figure 5a, is preferable because it tends to remain within the framework of fifth-relations established at the beginning and end of the piece, but the lower option is also a possibility. There are two points later in the piece at which the two options can reunite. Therefore, eventually, either one will lead to the same point in pitch space. In this discussion the upper option (the darker of the two lines) is favored on the graph. It must be remembered that there is only one path that Tallis takes through pitch space, but the graph shows two ways to conceptualize that path.
The optional split occurs at the beginning of the *habitavit* section. An argument can be made for either. In favor of the upper path, the D entry sounded in the *Migravit* section does, in a way, foreshadow the direction that the *habitavit* section will take; since both sections contain entries on D, D acts, in effect, as a common tone.

![Figure 5b: Tallis, *Lamentations II*, pitch-space line graph, mm. 1-45](image)

In favor of the lower path, the C sounded after the D in the *Migravit* section forms a triadic relationship with the first entries (A and F) of the *habitavit* section. Further, C, G, and F form an undulating set of fifth-related entries that seems to be a common feature of both *Lamentations I* and *Lamentations II*. I favor the upper path for reasons already stated, but in truth, this model of pitch space cannot ideally accommodate either choice.

The pitch space that was opened up in the first verse remains open, although it is continually filled in (see Figure 6a).
Figure 6a: Tallis, *Lamentations II*, pitch-space letter graph, mm. 48-82

Whereas *Lamentations I* tended to stay within a smaller pitch space for longer periods of time, and move more gradually within its range, *Lamentations II* may appear slightly more frenetic when viewed on a graph, as it seems to link the high points, with the lower points on the graph (and many points in between) in proximity to each other. The idea of a tent or canopy might be an appropriate metaphor. In Figures 5a and 6a, the points higher on the graph, namely the As, are like tent poles that open up the pitch space, while points lower on the graph, such as the Gs (and sometimes Cs) are like tent pegs that maintain the bottom of the pitch space. Without either, the “tent” will collapse, and the spatial structure ceases to be defined.
Figure 6b: Tallis, *Lamentations II*, pitch-space line graph, mm. 48-82

In Figure 6b, one sees two junctures at which one conceptual path can flow into the other. These two possible points begin and end the amaritudine section (the last entry group of verse two). The analyst may choose to converge the two conceptual paths at the former or the latter juncture, but both paths must inevitably unite for the third and last verse, shown in Figures 7a and b.

The graphs of the last verse, beginning with the initial Heth, are similar to those from *Lamentations I*.

Figure 7a: Tallis, *Lamentations II*, pitch-space letter graph, mm. 84-132
This passage even presents a brief section of predominantly homophonic texture (Figure 7b), similar to the occurrences in *Lamentations I*. One of the major differences between the two settings that these graphs show is the way Tallis treats the last line of text, *Ierusalem, Ierusalem, convertere ad Dominum Deum tuum*. Again, this portion of the text is not found at the end of this verse in the Vulgate, but it is traditionally added to the end of settings from Lamentations.

![Figure 7b: Tallis, Lamentations II, pitch-space line graph, mm. 84-132](image)

In *Lamentations I*, Tallis states that line (*Ierusalem, Ierusalem, convertere ad Dominum Deum tuum*) in full, repeats the entire line of text, and then breaks off *convertere ad Dominum Deum tuum* stating it as its own subsection. In *Lamentations II*, Tallis draws this phrase out over a longer period of time and breaks it into smaller pieces. The listener hears *Ierusalem, Ierusalem* only once. The *convertere* subsection seems briefly to take on a life of its own, but is interrupted by fragments, *Deum tuum* and *Dominum Deum tuum* (which become sub-subphrases). *Convertere* then returns on the same rhythmic motive as before. What the graph does not show clearly, because it is so brief, is the cadence and rearticulation of *Convertere* in the last five bars. While Tallis
chooses to reiterate the *Ierusalem* portion of the text phrase in *Lamentations I*, he fragments and elaborates on *convertere* in *Lamentations II*.

From *Lamentations I* to *Lamentations II*, one can see what I believe to be an increased preference for entries related by fifth. There are, of course, numerous examples of third-related (or sixth-related) entries, as there are in William Byrd’s setting. However, there seems to be greater emphasis placed on fifth-related entries as the composition dates draw closer to the Common Practice Period.

Byrd’s setting, like Tallis’s second, begins with the non-scriptural, introductory text *De lamentatione Jeremiae* [in this edition, spelled *Jeremiae*] *prophetae*. Figures 8a and b reveal Byrd’s proclivity for entries related by fifth.

![Figure 8a: Byrd, *De Lamentatione Jeremiae prophetae*, pitch-space letter graph, mm. 1-77](image)

The only third-related entries that occur in this first verse are in the *Cogitavit* and *apertitione* sections. In the *Cogitavit* section, the entries on G are the dominating force, standing in fifth relation to the D before and the C after, with the E-flat merely interrupting the focus on G. In the *apertitione* section, the E-flat again seems to interrupt
the relation from F to C. But the E-flat ends up taking on its own fifth-related partner, the B-flat (which also stands in fifth-relation to the F).

The line graph displays the crossing of fifth relations more clearly, perhaps, by showing the alternate connection from a higher F, the one that falls between the lines of D and A, jumping down two fifths to the E-flat.

Figure 8b: Byrd, *De Lamentatione*, pitch-space line graph, mm. 1-77

If this analytical path is preferred, then the C becomes ancillary to a higher order of fifths (the F—B-flat—E-flat framework). The question of which entries form the framework upon which other entries hang becomes increasingly important in this discussion through the course of Byrd’s setting. This line graph attributes the structural role to the F—C fifth relation, rather than the F—B-flat—E-flat relations, because a structural F and C relationship operates more smoothly within the framework of fifths that surround this section of text.

It interesting to note in Figure 8b the near symmetry of entries in both the *De lamentatione* and *Heth* sections. This symmetry does not necessarily include time between entries, even though the graph gives the impression of entries at regular
intervals. An investigation into temporal symmetry extends beyond the topic of this discussion, but it could prove to have interesting parallels.

*Teth* begins the second verse of Byrd’s setting in a way similar to the opening of the *De lamentatione* section (Figures 9a and b). Already, one sees the scarcity of simultaneous entries, as opposed to Tallis’s approach, particularly in *Lamentations I*.

![Figure 9a: Byrd, De Lamentatione, pitch-space letter graph, mm. 80-121](image)

Most striking in this passage is the space covered in the middle of the *perdidit* section by consecutive entries on B-flat, C, and D. These three successive entries are quite close to each other in a stepwise model of pitch space. But in the model based on fifths, they are quite spread out. The intervening fifths between B-flat and C, and C and D (F and G respectively) have been omitted, but it is noteworthy that F precedes the “spread-eagle” figure and G follows it, thus filling in the pitch space that the B-flat—C—D figure has opened. Placing the D high on the graph, rather than in third relation to B-flat and F, highlights the role of D as reminiscent of the D entries of *Teth* and the D entries to come in *regem* and *in gentibus*.
Both graphs show the option of placing the A higher on the graph than what is shown as “preferred.” In the case of these A entries, they do not seem to function as the D entries do, and thus they ought to be placed in third relation to C or F.

The last verse, as well as the postscript, is not the longest of Byrd’s setting, but it is certainly the busiest. The post-text, _Ierusalem, Ierusalem, convertere ad Dominum Deum tuum_, alone is elaborated upon for some thirty measures. Still dominated by fifth-related entries, this verse exhibits more third-related entries and more simultaneous entries than previous phrases do, although not many (Figures 10a and b).
The graphs in Figures 10a and b contain somewhat disconcerting disjunctions in the *capita* section and between the *Jerusalem* and *convertere* sections. This is due partly to the constraints of space. Since the beginning, Byrd writes, more or less, entries that move downward on the graph. This downward movement is directed in earnest in the *consperserunt* and *capita* sections. So while in reality the progression continues to descend in pitch space, I have transferred it abruptly onto a higher portion of the graph primarily because the farther down on the graph one travels, the further into flats one

Figure 10a: Byrd, *De Lamentatione*, pitch-space letter graph, mm. 124-192
goes. To accurately reflect these entries in pitch-space, which is not equally tempered, it makes more sense to return to a higher latitude on the graph.

Figure 10b: Byrd, *De Lamentatione*, pitch-space line graph, mm. 124-192
This flaw in the model also occurs earlier in Byrd’s setting to a lesser degree, but here it becomes rather glaring. For this reason, additional models may be necessary to explain the way in which Byrd moves through pitch space. One of these is illustrated below in Figure 11. This lattice-like model, here represented by several strands, shows alternate pathways to fifth and third relations.

Figure 11: Vertical Lattice Model of Pitch Space
For example, the C is related to A in (at least) two ways. If the context in which entries on C and A are found shows entries on E as well, then the three pitches (A, C, and E) make a strong case for the third relation. On the other hand, if there are G and D entries, then the A and C may be a part of an overarching fifth-relation structure.

If one connects the ends of these strands and wraps them around in a spiral, the chain of fifths remains continuous, while maintaining the proximity of the thirds shown in Figure 11. This three-dimensional cyclical model is shown in Figure 12, which in some ways resembles the Neo-Riemannian map of pitch space. Here, fifth relations are arranged vertically, while third relations are arranged diagonally. Whereas the Neo-Riemannian model shows the transformational relationships of triads, this model does not deal with triads at all, but with third and fifth relations in pitch space. The Neo-Riemannian model depends on pitch space and equal temperament, causing the tonnetz to curve back upon itself to create a torus. Since neither Byrd nor Tallis was working in context of equal temperament, pitch space (not pitch-class space) causes the present model to spiral off in either direction infinitely.
Figure 12: Spiral Lattice Model of Pitch Space

The purpose of this model is to see the logical paths from one point in pitch space to another, and depending on what other pitches are involved, one path may be more logical than another. Thus, for example, entries on G and E, may be surrounded by entries on D and A, implying a strong fifth-relation structure. This path lies around the spiral. Conversely, if the entry on G lies among entries on C and E, then an entry on E is adjunct to the G (and to the C). Thus it is simpler to reach the E entry by moving across the gap separating G from E and E from C, rather than making a circle-of-fifths detour to E and then back to C or G. In this context, the E is tangent to a superseding structure.

Having seen these three settings from Lamentations, one may conclude that the English sensibility of under-girding harmonic direction seems to move from the third relation to the perfect fifth. These three pieces in themselves are but a microcosm, certainly not sufficient to see definitive trends, but further research into the larger body of
English sixteenth-century music could reveal a growing preference among English composer (and perhaps continental composers as well) for a quasi-circle-of-fifths harmonic structure that scholars more readily associate with the seventeenth century.

Burkholder and Palisca, when comparing the music of Byrd to that of several of his continental counterparts, have this to say: “In the music of Byrd, cadences are more frequent, imitation is freer and almost constant, homophony is rare, and the voice lines are often more angular and energetic.”56 This is certainly true even in a comparison of Tallis’s and Byrd’s Lamentations. I believe it is very likely that freer imitation, and more angular and energetic vocal lines are consistent with Byrd’s movement through structural pitch space. Burkholder and Palisca make the following statement regarding Byrd’s famous anthem Sing Joyfully unto God: “The typical cadence includes bass motion of a fifth down or fourth up . . . . This type of cadence became increasingly common over the course of the sixteenth century and is the ancestor of the modern dominant-to-tonic cadence.”57 This statement is almost invariably true in Byrd’s Lamentations, and is notable in that it departs from the typical sixteenth century clausula vera (sixth-to-octave or third-to-unison) cadential formula described by Robert Gauldin.58 Byrd’s cadences differ from those of his teacher as well. In Lamentations I, Tallis tends to use the falling fourth or rising fifth in the bass at cadences, which give a more “plagal” sound (in Common Practice terminology) than Byrd’s cadences do. In Lamentations II, he tempers this tendency with a great number of cadences that are more similar to those of Byrd.

57 Ibid.
What is of greater significance in the two composers' cadences is a dissonant phenomenon that appears to be peculiar to the English School. In fact, it seems to be as uniquely English as the preference for imperfect consonances in early polyphony. The development of English music (and many other aspects of English culture) tended to develop somewhat independently from that of the continent. In the next chapter, I will discuss these instances of dissonant cadences and their role in these works.
CHAPTER IV
DISSONANCE AND THE ENGLISH CADENCE

In spite of the widely recognized concordant style of sixteenth-century sacred choral music, Tallis makes seemingly unusual departures from what might be considered the consonant "ideal" into moments of harsh dissonance. The poignancy of these moments is augmented by their isolation from one another. This chapter will discuss these harsh and unusual dissonances and their possible explanations.

Anyone who has studied sixteenth-century counterpoint knows of the numerous guidelines and rules governing the composition of vocal polyphony, with regard to both melodic and harmonic intervals. Composers took great pains to unite the horizontal and vertical relationships of their compositions by strictly controlling their use of dissonance. In their respective settings of Lamentations, Tallis writes harsher dissonances than does Byrd. This is surprising because Byrd is often regarded as the more experimental of the two, and certainly more chromatic, given his proclivity for false relations.

Had Tallis’s Lamentations I and II been composed around the turn of the seventeenth century, a listener might attribute these startling dissonances to Mannerism, supposing the composer to be evoking in music the meaning of a particularly poignant word or phrase. But since his settings predate the Mannerist movement, another explanation must be sought.
Example 6 shows one such dissonance, perhaps the most unusual, and the only one of its kind in *Lamentations I*. The harshness of the dissonance at the end of m. 47 seems to result from the combination of several lesser dissonances that, had any occurred alone, would not cause surprise. The F₄ in the superius becomes a suspension, in conflict with the E-flat₃ in the tenor. When the F resolves down, which is expected, it resolves to an E-natural, which is not expected.

**Example 6:** Tallis, *Lamentations I*, mm. 45-48

Tallis has led the listener to believe that E-flat (sounding in the bassus, contratenor, and tenor in m. 46) would be the resolution of the suspension by preceding m. 47 with a passage heavy laden with B-flats and E-flats. But he denies that expectation, leaving the even harsher dissonance of E-natural against E-flat. In this brief moment at the end of m. 47, Tallis writes what would, in a tonal context, be considered a C triad, but it is simultaneously major and minor. Again, the listener expects this dissonance to be
resolved, but the tenor E-flat and the contratenor C move down to D and B-flat respectively, surrounding the bassus C in whole tones (although the B-flat is in a higher octave).

Granted, the F4 suspension in itself behaves normally, using the E-natural to prepare for the imminent cadential arrival. The passing D and B♭ are approached and left properly. Linearly, all the lines make sense; it is their combination that makes for such a discordant moment. Why then, do these all happen at once? Tallis could have avoided the harsh dissonance by writing this passage as shown in Example 7.

Only one pitch has been changed in Example 7: the tenor E-flat in m. 47 has become a C3 instead. This simple change eliminates the grittiest parts of the dissonance. The sonority that had been clouded by the E-flat is now more recognizable as—if it were in a tonal context—a V, V⁷, or V⁹ in F, depending on one’s choice of non-chord tones. So why does Tallis muddy this passage with the E-flat? The answer may lie in the fact that Tallis’s version preserves the integrity of the individual lines.

Example 6 shows that Tallis sets up the melodic/rhythmic motive (\(\text{\textit{\textdagger}}\), or a variant thereof) as early as the end of m. 45 in the tenor that is sequenced all the way to the cadence and is imitated in the contratenor and bassus in mm. 46 and 47. Looking at the tenor line alone, it is plain that Tallis favors the preservation of the motive over the vertical sonority that it would create.

It is generally acknowledged that in music of this period, harmony was a result of linear writing for each voice (as opposed to the conscious manipulation of voices to create harmonic support in the Baroque Era). Sometimes this view can imply that Renaissance composers took a “come-what-may” approach to their music, but it is more appropriately understood to mean that consonance, not functionality within a “key,” was the guiding principle of harmonic language. This latter understanding is certainly true; the harmonies, although sometimes treated as they might be in a tonal environment, are nevertheless not functional.

Still, some authors contend that Renaissance composers were meticulous in their harmonic choices, perhaps to the point of thinking harmonically rather than linearly.\(^\text{59}\) While it seems evident that these composers did indeed take great care in working out the vertical element of their music, in this instance Tallis gives credence to the earlier-held view that linearity supersedes verticality.

It may be significant that this passage occurs at a cadence point. Jack Pilgrim, in his article “Tallis’s \textit{Lamentations} and the English Cadence,” addresses this type of issue directly, calling the reconciliation of the horizontal and vertical demands of the music

“the greatest difficulty of sixteenth century music.” He goes on to reference Knud Jeppesen:

Perhaps the greatest difficulty of sixteenth century music is that of reconciling the horizontal and vertical demands of the music. Jeppesen says: “Although the harmonic element also claimed its rights, which were often granted to a remarkable degree, the chief aim was the melodic beauty of the individual parts. In situations where the vertical control of the horizontal caused difficulties, the occasion was often unscrupulously utilized to promote the freest possible development of the melody.”

This statement seems applicable to the dissonance of Example 6 in light of Pilgrim’s description of what he calls the “English Cadence”: a “peculiar use of the suspension” in which the harmonic and melodic impulses of the composer conflict. This conflict results in the completion of the chord before the suspension has resolved. Pilgrim gives the passage shown in Example 8, claiming it is from Tallis, although he does not specify where it can be found. However, his example does look remarkably similar to the latter half of the passage shown in Example 9, apart from the editorially chosen musica ficta.

Example 8: Pilgrim, “Tallis’s Lamentations and the English Cadence”

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60 Pilgrim, 2.
61 Jeppesen, 178.
62 Pilgrim, 2.
63 Ibid., 4.
Here, the D in the top voice is suspended over the A sonority below, waiting to resolve to the C-sharp. But before that resolution can occur, the alto voice has already sounded a C-natural. This dissonance is softer than the one discussed earlier in Example 6 because the pitches in cross relation do not overlap. There are numerous examples of this softer version of the English cadence in Tallis’s Lamentations. In fact, of the three instances of English cadence in his first setting (the first shown in Example 6), two are of this more palatable sort. One has already been shown in Example 9; the other is shown below in Example 10.
Examples 9 and 10 bear a remarkable similarity to one another, but neither quite matches the passage cited by Pilgrim. He remarks that this softer form of the English cadence is more characteristic than the harsher is. But, as seen in Example 6, when individual lines assert themselves, the result can be quite dissonant.

*Lamentations II* shows a marked increase in Tallis’s preference for English cadences, both harsh and soft. The count of English cadences in *Lamentations II* is somewhere in the vicinity of eighteen. The frequency of these dissonant cadences increases over the course of the motet, culminating in a passage near the end that contains one every two to three bars.

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64 Pilgrim, 4.
The first instance happens near the beginning, perhaps foreshadowing a later passage that is rife with English cadences (Example 11). This particular passage is interesting for two reasons.

**Example 11**: Tallis, *Lamentations II*, mm. 11-12

The first is that at the beginning of m. 11, the superius follows what would be a typical cadential pattern (which is extended through m. 12). But rather than inserting the *musica ficta* on the C4 that would complete that idiom, Tallis chooses to keep the C-natural, consonant with the C4 in the contratenor.

The second is that the soft English cadence that finally does occur at the end of m. 11 (with a cross relation between the tenor F3 and contratenor F-sharp3) passes inconspicuously. Some might argue that the ear perceives it this way because it is, in
fact, not really an English cadence. This is a valid point if one analyzes the first half of the last beat (m. 11) as a different chord from the last half of beat 4. However, the pitches that contribute to such a reading, namely the discantus B-flat3 and the contratenor G3, behave like suspensions, having been prepared in a weak metric position relative to the dissonance between the G and F (tenor). Yet the ear perceives this passage as predominantly consonant, rather than dissonant, essentially giving the impression of I\(^{6/4}\) – V – I, in modern terms. The F in the tenor, then, seems to be the factor that keeps such a reading from being entirely reliable. Although the true nature of this passage may be a point of contention, through it Tallis eases the listener into a gradual awareness of the English cadence “sound,” which becomes more important as the motet progresses.

The next occurrence does not appear for another forty bars. When it does, it is more noticeable than the first, but still not exceptionally strident (Example 12). There is no question here that what happens in m. 47 is indeed an English cadence.

**Example 12:** Tallis, *Lamentations II*, mm. 46-47
The dissonances that soon follow (Example 13) are not, strictly speaking, English cadences as we have come to know them. The tenor sounds a melodic cadence in m. 57 (G—F-sharp—G), but the motion surrounding it, goaded on by the F-natural in the discantus, prevents a full harmonic cadence. A moment later the same relationship emerges between the discantus and bassus at the beginning m. 58. Therefore one might call these elided or frustrated English cadences.

Example 13: Tallis, *Lamentations II*, mm. 57-59.3

In this passage, the lower three voices complete a cadential formula common in the sixteenth century, the *clausula vera* (literally “true closure”), a term used to refer to the structural voices of a cadence, which are those voices that approach the cadential octave
by step from above and below.\textsuperscript{65} In Example 12, the \textit{clausula vera} of m. 57 is found in the tenor and bassus. But before the lower voices have completed the cadential formula, the upper two voices continue the motion forward. The event would be unremarkable except for the fact that the discantus enters on an F-natural at the same time the tenor sounds an F-sharp as a \textit{ficta}-imposed, pseudo-leadingtone. Most other dissonances resulting from the English cadence idiom are prepared in some way, whereas here, the discantus enters directly into a dissonance.

The similarly elided cadence that immediately follows in m. 58 (of Example 13) does not feature a \textit{clausula vera}. Again, each dissonance is the direct result of Tallis's giving precedence to linear integrity over vertical consonance. This passage essentially articulates the same dissonance twice in a row, caused by imitating voices that continue to be eluded by a definite sense of repose.

All this tension creates the expectation of some sort of stable resolution. In this Example 13, stability is frustrated even in the end by a deceptive cadence that spurs the music on. Pilgrim says:

\begin{quote}
The effectiveness lies in the heightening of the relief at the \textit{final} chord: the emphasis has moved from the immediate point of resolution of the suspension so that instead of a discord being resolved on to a concord, it is now resolved on to a harsher discord and consequently the fundamental conception of the suspension seems to be in jeopardy through this encroachment of the vertical element.\textsuperscript{66}
\end{quote}

Similar instances of English cadences accumulate as one goes further into \textit{Lamentations II}: mm. 71-72.1, 81, 95-97.1, 98-99.1, 101-102.1, 103-104.1, 104-105.1, 106, 108, 111,

\textsuperscript{65} Gauldin, 137.
\textsuperscript{66} Pilgrim, 5.
113, 113-114.1, and 114. Some of these are softer and some harsher. One can see from this list that mm. 95-114 are rife with English cadences.

In his setting from Lamentations, Byrd does not seem so partial to the English cadence as Tallis. This near absence of what seems to be a common idiom of English Renaissance composers is striking in Byrd’s case, since he is commonly thought of as being enamored of chromaticism and cross relations. In general, his setting is more consonant that that of Tallis, or rather, the dissonances are more conventionally like Palestrina’s. However, there is one instance of the English cadence in Byrd’s setting. The very fact that it is one instance versus the many contained in the setting of Tallis should draw attention.

It would seem, then, that this one instance might be important. Indeed, the occurrence of this particular kind of dissonance, as Pilgrim has said, creates a sense of tension and repose that seems to supersede that of other dissonances characteristic of Renaissance polyphony. Byrd hints at the possibility of an English cadence in mm. 41-42 (Example 14), but does not follow through with a genuine English cadence until much later.
The composer manages to avoid an overlap of the F3 (baritone) and F♯4 (alto) at the end of m. 41 (after the dotted barline). Rather than a D triad that is simultaneously major and minor in quality, Byrd creates a more chromatic motion that is perhaps more akin to the idiom of Lassus or Gesualdo.

In many ways, this instance is aurally similar to an English cadence. The F heavily influences the way the listener perceives the following F-sharp. Although it is uncertain what the venue of performance for this work might have been, certainly the reverberant acoustical surrounding of a cathedral would have produced the same effect as would an English cadence.
The first occurrence of a true English cadence does not occur until m. 175. The significance of its placement here lies in the text. The setting is nearing its end, and, as was usually the case in settings from the Book of Lamentations, it is at the end that composers would append the text *Jerusalem, Jerusalem, convertere ad Dominum Deum tuum* (Jerusalem, Jerusalem, return to the Lord your God). This is a common thread that runs through compositions setting text from Lamentations during that time, and is perhaps the most poignant part of the text.

**Example 15: Byrd, De Lamentatione Jeremiae prophetae, mm. 174-176.1**

As discussed earlier, some hold that Byrd, as a recusant Catholic in a Protestant England, wrote this work for private use, perhaps as an expression of his desire to return to what he considered the true faith. Even if the setting was intended for liturgical use,
such an emotional dissonance at the point where the prophet is calling the Israel to return to God could certainly be viewed as Byrd’s personal feelings breaking through the texture (in essence, “England, England, return to the Lord your God”).

This singular English cadence precipitates a passage of increased chromaticism caused by cross relations. It is quite striking to the listener, particularly in the passage shown in Example 16.

**Example 16: Byrd, *De Lamentatione Jeremiae prophetae*, mm. 180-190.2**
(Example 16, continued)

A

\[\text{verte re ad Dominum Deum tu um.}\]

T I

\[\text{ad Dominum Deum tu um. tu - - -}\]

T II

\[\text{Dom inum Deum tu um.}\]

B

\[\text{mi num Deum tu um, con -}\]

B

\[\text{Dom inum Deum tu um, tu um.}\]
Here, Byrd seems to almost anticipate the inclinations of the Mannerists and their method of evading by a semitone the pitch expected by the listener.

Even with his proclivity for cross relations and chromaticism, Byrd's setting has remarkably few moments of harsh dissonance, and none is perhaps so striking as some of those in Tallis, particularly that shown in Example 6.
CONCLUSION

Even though these three motets were written in the same country, probably within the same decade, and by composers who not only knew each other but had many ties, the three settings are surprisingly different. The differences are not necessarily perceptible on the musical surface. On a deeper, structural level, however, there seems to be a logical development.

In Tallis’s music, one sees vestiges of an older school of composition, one in which linear considerations take precedence over vertical ones. Tallis’s one-time pupil, on the other hand, seems to anticipate certain elements of music that are to come after him. Byrd leans more on the structural fifth relation and less on the strident sound of the English cadence than Tallis does.

Both Tallis and Byrd create similar effects through different means. Tallis favors, sometimes heavily, the English cadence as a way of conveying an affective text. The English cadence is striking in its unusual pitch simultaneities. Byrd prefers the powerful affect of chromaticism to paint the text. Chromaticism, as perceived in De lamentatione, is essentially dissonance over time, i.e. striking juxtaposition in proximity, but not necessarily in simultaneity.

All three motets in some way seem to foreshadow musical developments to come. Tallis’s inclination for entries related by third bears a commonality with harmonic third relations that permeate not only sixteenth-century Mannerist music, but also many
nineteenth-century works. But he does not venture far into actual chromaticism. Horizontal writing supersedes vertical writing, creating striking dissonances that will find no parallel in later music until the twentieth century.

Byrd's motet reflects a growing dependence on a structural under-girding of perfect fifths. In this microcosm, there may be evidence that his music anticipates the substructure that dominated the Common Practice Period. At the same time, Byrd does not write many dissonances, suggesting a degree of awareness of "vertical" harmony not traditionally credited to Renaissance composers. Still, Byrd's music can be quite chromatic, in a way that bears some resemblance to the Mannerists as well.

Only more study of a wider range of compositions and composers will reveal whether such an extrapolation can truly be made. It is possible that these three motets, which one would expect to be similar in almost every way, represent, in miniature, a larger trend in mid- to late-sixteenth-century music.
REFERENCES


Bashour, Frederick J. “Towards a More Rigorous Methodology for the Analysis of the Pre-Tonal Repertory.” *College Music Symposium* 19, no. 2 (Fall 1979): 140-53.


APPENDIX 1
LAMENTATIONS I
Thomas Tallis
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APPENDIX 2

LAMENTATIONS II
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APPENDIX 3

DE LAMENTATIONE JEREMIAE PROPHETAE

William Byrd
De Lamentatione Jeremiæ
Cogitavit Dominus dispares murum filiae Sion. filiae Sion; tenet duum funiculum suum.
CURRICULUM VITAE

NAME: Enoch S. A. Jacobus

CONTACT: Phone: 502-216-2072
          enochobus@gmail.com

DOB: Muskegon, Michigan – October 23, 1983

EDUCATION:

M.M., Music Theory, University of Louisville, Louisville, KY, expected
      May, 2008
Concentrations: Theory, Composition

B.A., Music, Asbury College, Wilmore, KY, 2006
Concentrations: Composition/Arranging, Oboe

EXPERIENCE:

Teaching Assistant, University of Louisville, 2006-2008
Courses: Fundamentals of Music Theory, sight-singing lessons,
        Theory I, Theory II

Music Theory Tutor, Asbury College, 2004-2006
Courses: Written Theory I and II, Advanced Musicianship I and II

OTHER TRAINING:

Music Instructor and Counselor, Camp Ladore, PA, 2006, 2007

PUBLIC PERFORMANCES:

Original Compositions:

Displacement, Trio Bel Canto, Mercyhurst College D’Angelo Dept. of
      Music, Walker Recital Hall, PA, 11 November 2007

Displacement, Trio Bel Canto, University of Louisville New Music
      Festival, Margaret Comstock Concert Hall, Louisville, KY, 3
      October 2007

Pluto is the Ninth Planet, Earsight (electronic music concert), Malcolm
      Bird Recital Hall, University of Louisville, KY, 4 April 2007

Composition Recital, Hughes Auditorium, Asbury College, 30 March
      2006. Five works: Prelude on “Innsbruck,” Intrada for Brass and
      Percussion, Meditation, Selections from Missa Solemnis,
      To Render Tune
Intrada for Brass and Percussion, Kentucky Music Educator’s Association Conference, February 2006

Ensemble and Solo:
Early Music Advent Concert, University Early Music Ensemble, Christ Church Cathedral, Louisville, KY, 2007
Concert Tour, Asbury College Collegium Musicum Vocal Ensemble, Palestrina, Rome, and Florence, Italy, 2007
Early Music Concert, University Early Music Ensemble, St. Brigid Church, Louisville, KY, 2006
Concert Tour, Cedarville Concert Band, Beijing and Shanghai, China, 2006
Participation in Service, Asbury College Collegium Musicum Vocal Ensemble, National Cathedral, Washington D.C., 2005
27th Australian International Band Festival, Cedarville Concert Band, Sydney Opera House, 2004
Oboe Recital, Asbury College, 2003

AWARDS AND HONORS:
Who’s Who in American Colleges and Universities, 2006
Kentucky Music Educators Association Undergraduate Division Composition Winner, 2006
Peniston Honors Recital winner in oboe and composition, Asbury College, 2005

PROFESSIONAL SOCIETIES:
Music Theory Midwest

INVITED PRESENTATIONS:
“Dissonance and Chromaticism in Tallis and Byrd’s Lamentations,” presented 14 February 2008, Asbury College

SKILLS:
Microsoft Office
Online Ear-training Software
Finale 2007
Blackboard
Latin