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Bass-Triadic Cadence Formulae in Melchior Neusidler's Original Compositions from Il Primo (-Secondo) Intabolatura Di Liuto

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Abstract

There was a paradigmatic shift in the discourse surrounding lute music between the early sixteenth and seventeenth centuries. The lute treatises written by early sixteenth-century German lutenists, such as Hans Judenkünig, Hanse Gerle, and Hans Newsidler, focused on technical directives that support a linear conception of music. However, lutenists active in the late sixteenth and early seventeenth century, such as Matthaeus Waissel and Jean-Baptiste Besard, describe technical accommodations for vertically conceived structures. Contemporaneously, at the turn of the seventeenth century, the discourse on bass primacy and triadic structures developed from an undercurrent, cast in the shadow of counterpoint treatises, to a prominent discourse, starting in 1581 with Johannes Avianus, who described triads as coherent musical objects to 1610 with Johannes Lippius, who codified the concept of triadic inversion. What elevated a slight undercurrent of discourse on music theory to the presiding conversation?

Born in 1531, the prominent Germain lutenist Melchior Neusidler directly influenced John Dowland and Jakub Reys, both of whom were instrumental in developing lute compositional practice heading into the seventeenth century. Additionally, Neusidler incorporates a curious compositional technique that displays the struggle between counterpoint and harmony, demonstrating the shift into vertical coherence. He conglomerates a style evocative of freely linear vocal polyphony with dense, triadic homophonic textures. In Neusidler's homophonic writing, which encompasses most of his original oeuvre, he prioritizes triadic and vertical coherence,

often at the expense of counterpoint directives. Understanding how Neusidler fits the historical gap between the early sixteenth-century German tradition and the advent of the French Baroque lute tradition that was instrumental to the development of harmony and tonality will enrich and inform current practitioners of lute music, cultivate a discussion on lute music as a catalyst of the development of harmonic structures in the broader study of early music, and provide a more complete picture of the historical trajectory of the repertoire.

Table of Contents

List of Tables

List of Figures

Chapter 1 Introduction

When I first began studying music theory and music history as an undergraduate student, I learned that common practice harmony was a practice initiated by keyboard musicians from the late 17th-Century French Baroque, which led ultimately to Jean-Philippe Rameau's *Traité de l'harmonie* (1722), codifying harmonic practice into the Baroque and subsequent tonal traditions. After reading Heinrich Schenker's *Harmony* (1906), which pervasively cites Rameau's treatise, I was inspired to read Rameau's text as a primary source document due to its influence on twentieth- and twenty-first-century harmonic and tonal analysis. As a guitarist, I was curious to explore why Rameau defined harmony through overtones produced by the division of a string. Reading Rameau's text revealed surprising references to René Descartes's *Compendium musicae* (1650, but likely written in 1618); I only knew Descartes from his contributions to mathematics and philosophy. Descartes's publication coincided with the rapidly developing French Baroque lute tradition, and he, like Rameau, explained the overtone series through the division of a string. I decided to study the Elizabethan and French Baroque lute traditions, hoping to glean insights into harmonic and tonal practices that may have preceded common practice harmony.

While taking a course titled "Repertoires of the Lute, Vihuela, and Guitar," taught by Professor Christopher Berg, I was struck by French Baroque lute music and its unexpected beauty—its cascading and free polyphony and its harmonic and tonal coherence. Nowhere in my preceding music education had I encountered a similar style,

and I wanted to learn more. So, I enrolled in an independent study with Professor Berg, who encouraged me to spend time each day reading through lute books. I began with Jean-Baptiste Besard's *Thesaurus Harmonicus*, *Lord Herbert of Cherbury's Lute Book*, and Denis Gaultier's *La Rhétorique des Dieux*. I delved most deeply into *Thesaurus Harmonicus* for the pragmatic reason that the collection was written for the eight-course lute, which almost fits comfortably on the guitar. While reading through a *fantasia* attributed to Jakub Reys, I was surprised by the tonal coherence established by uniform cadence structures. I was surprised that a lute book published in 1603 contained a composition that reflected tonal elements, contradicting my expectations for the early French Baroque period. I felt this piece merited investigation. It was through reading Piotr Poźniak's historical research into Polish lutenist Jakub Reys that I encountered an unexpected influence: a mid-sixteenth-century German lutenist, Melchior Neusidler. The *fantasia* I thought had been written by Jakub Reys, according to Poźniak, had been initially published by Melchior Neusidler as "Ricercar Secondo" (*Primo Libro*), about which he contends that "there is no doubt…as to their being the same compositions."[1] I played through the four *ricercari* from Neusidler's *Il primo libro* and found similar harmonically functional writing that I observed in Jakub Reys' compositions published nearly forty years prior in 1566. In this paper, I hope to elucidate the historical position, relevance, and influence of Melchior Neusidler through an investigation into changes reflected in sixteenth-century- to early seventeenth-century lute instructions; Define the parameters governing the realization of *musica ficta*, especially as they pertain to

[1] Jakub Polak, *Jakub Polak (Jacob Polonois): Collected Works*, edited by Piotr Poźniak. (Kraków: Polskie Wydawnictwo Muzyczne, 1993), 29.

Neusidler's intabulations; Make a case for the emerging triadic structures and bass primacy that coincides with Neusidler's historical position; and Extract bass-triadic paradigms used by Neusidler to write vertically coherent cadences. I will focus on twelve pieces by Neusidler published in his *Il primo [-secondo] libro* (1566), including eight *ricercari* and four *pass'e mezi*.

Need For Study

There is a gap in analytical literature focused on music from the sixteenth-century German lute tradition, especially on original compositions, and expository research into how it influenced tonal practices employed by French Baroque lutenists. Musicologist Arthur J. Ness states that:

> A critical edition of Melchior Newsidler's output is well deserving of highest priority. In the 1960s, Thomas Binkley started a complete edition which was announced in Kurt Dorfmüller…but his manuscript was destroyed in a fire[place?]. Being aware of the particularly knotty editorial complexities of Newsidler's output…, Mr. Binkley has apparently decided not to resume his projected edition.
>
> More recently, the Hungarian lutenist-musicologist Daniel Benkö has told me of his interest in editing a complete edition of the lute music of all Newsidlers (Hans, Melchior and Conrad), and has started with the works of Hans. Thus, his Melchior edition is perhaps some years away.[2]

Fortunately, Charles Jacobs transcribed Melchior Neusidler's original compositions in his publication, *Collected Works of Melchior Neusidler: Intabolatura di Liuto (Venice, 1566), An Edition of the Original Music.*[3] Neusidler's intabulations have

[2] Arthur Joseph Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich: A Bibliographical Study with Emphasis on the Works of Marco Dall'Aquilla and Melchior Newsidler (Volumes I and 2)" (PhD. Diss., New York University, 1984), University Microfilms International, 227.

[3] Melchior Neusidler, Intabolatura di Liuto (Venice, 1566): An Edition of the Original Music, ed. Charles Jacobs (Ottawa: The Institute of Mediaeval Music, 1994).

become the subject of both Yavor Genov's publication "The arrangements of Motets in *Wurstisen lute book*" and Arthur Ness's dissertation "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," both of which will be discussed at greater length in *Chapter 3* and *Chapter 2*, respectively. An excerpt from Neusidler's "Ricercar Secondo" (*Secondo Libro*) is compared to part of John Dowland's *Fantasia* P1a in Paul O'Dette's "Dowland's iPod."[4] Still, it is not analyzed for its harmonic or cadential content. We are missing an analytical discourse on this body of work since we have Neusidler's collected original compositions transcribed to standard notation.

I claim that Melchior Neusidler's writing in 1566 incorporates vertically coherent bass-triadic paradigms in his cadences and applies and subverts them, which could be observed as precursory to the transition into common practice harmony. Neusidler's publication coincides with a growing interest in bass-generated triads, which likely influenced the harmonic developments underlying the more influential and widely studied seventeenth-century French lute tradition. Neusidler fits a gap between the early sixteenth-century German lutenists Hans Judenkünig, Hans Gerle, and Hans Newsidler, who describe a linear conception of music in their treatises, and late sixteenth-century German lutenist Matthaeus Waissel, and early seventeenth-century French lutenist Jean-Baptiste Besard, who represent a more vertical conception of music. Considering Neusidler's influence on John Dowland and Jakub Reys, we are missing a crucial component of how sixteenth-century lute music developed towards bass-triadic cadence paradigms without analyzing Neusidler's compositional approach. Much of the sixteenth-

[4] Paul O'Dette, "Dowland's iPod: some possible models for John Dowland's lute fantasias," *Early Music* Vol. 41, No. 2 (May 2013): 306-307.

century German lute music has been left unstudied by analysts because of the cryptic nature underlying German lute tablature, and I hope that this study will not only demonstrate the academic and intellectual value of this music but also display its significance in the broader Western Art Music tradition.

Purpose for Study

I have two goals for conducting this study: I hope my paper reaches an audience of music scholars interested in Renaissance lute traditions and that my argument is convincing enough to propagate further research into Melchior Neusidler and his role in developing bass-triadic cadence formulae, which likely influenced subsequent lutenists. I also aim to illuminate the value, beauty, and significance of relatively un-programmed music written by Neusidler, whose compositions would augment the existing guitar repertory. Thankfully, a resurgence in the popularity of early music, especially lute music, has led to more recital programming and historically informed recordings.

Literature Review

The literature relevant to discussing cadential structures in Melchior Neusidler's original compositions in this thesis falls into three categories: Translations of lute treatises preceding and following Neusidler's lifetime; Discussions about the realization of *musica ficta* and lute intabulations, primarily related to Neusidler's *oeuvre*; and Debates on the philosophy of musical analysis and translations of theoretical treatises, which depict the rising significance of the bass voice and triadic structures.

To contextualize Neusidler's position within the broader lute traditions, it will be necessary to evaluate how lutenists viewed technical and theoretical approaches toward lute playing before and after Neusidler's lifetime. The three lutenists most likely

influenced Neusidler are Hans Judenkünig, Hans Newsidler, and Hans Gerle, all active in the early sixteenth-century German lute tradition. Martha Blackman translated Hans Judenkünig's *Ain Schone Kunstliche Underweisung* (1523), Marc Southard and Suzanna Cooper translated Hans Newsidler's *Ein Newgeordent Künstlich Lautenbuch* (1536), about which Paul O'Dette offers a few corrections, and Jane Pierce translated Hans Gerle's *Musica teusch* (1532) and *Musica und Tabulatur* (1546). An investigation into similarities and differences between these treatises paints a portrait of the nature of lute discourse Neusidler would have encountered in his early life. Two lutenists whom Neusidler likely influenced are Matthaeus Waissel, who published the last sixteenth-century German lute treatise, and Jean-Baptiste Besard, who published perhaps the most robust collection of lute music in his *Thesaurus Harmonicus* (1603). Douglas Alton Smith translated Waissel's *Lautenbuch* (1592), and Julia Sutton translated Jean-Baptiste Besard's *Thesaurus Harmonicus*, *Isagoge* (1617), and *Novus Partus* (1617). Tracing the developments and discourse surrounding lute practices between 1592 and 1617 will contextualize how lute technique and theory were discussed after Neusidler's lifetime and into the subsequent generation of lutenists.

In the sixteenth century, accidentals indicating pitch inflections were not an explicit component of score publications, and often, musicians had to inflect music based on counterpoint rules, especially near cadences, through a practice called *musica ficta*. Lute intabulations of vocal compositions allow access to how lutenists realized *musica ficta*, which can contextualize their priorities concerning cadence writing. Finally, scholarship on Melchior Neusidler's preferences toward realizing *musica ficta* will support his compositional approach. First, this study will investigate the definition and

standard realization practices of singers who had to make intentional decisions to inflect their respective parts by discussing Margaret Bent's "Diatonic 'Ficta'" (1984), Karol Berger's *Musica ficta: Theories of Accidental Inflections in Vocal Polyphony* (1987), and Peter Urquhart's chapter "Contrapuntal and Cadential Aspects" from *Sound and Sense in Franco-Flemish Music of the Renaissance* (2021). Bent's study will serve as a historical context for *musica ficta*, Berger's study will offer insights into the realization of *musica ficta* from the perspective of sixteenth-century theorists, and Urquhart's study presents an *a posteriori* investigation into musical qualities that would signal a singer to inflect their part through a survey of cadential writing in vocal polyphony written after Josquin. Second, I will investigate how these authors discuss instrumental intabulations as they relate to *musica ficta* and compare their comments with Hans Gerle's discussion on *mi-contra-fa* directives from *Musica und* Tabulatur, Arthur Ness's "The Herwarth Lute Manuscripts at the Bavarian State Library" (1984), and Yavor Genov's "The arrangements of Motets in *Wurstisen lute book*" (2019). Both Ness and Genov analyze Neusidler's intabulations of vocal music: Ness from an investigation into how *musica ficta* helps assign authorship, and Genov makes abstractions depicting Neusidler's preferences in realizing *musica ficta*. The final discussion on *musica ficta* and intabulations will center around Genov's abstractions regarding Neusidler's realization of *musica ficta* and their possible relationship to Neusidler's preferences in his original compositions.

Analyzing sixteenth-century music can often resemble a minefield of anachronisms and inauthenticity. Defining a study built around vertical structures when the shadow of "modalism" hovers over all discourse on sixteenth-century music requires

caution in defining terms and methodology. First, I will address Benito Rivera's three questions depicting "the issues occupying scholars of Renaissance theory…To what extent can we rely on early theoretical treatises to teach us about the structural design of Renaissance music? How profitable can modern systems of analysis be applied to early music? What real influence did modal theory bring to bear on the actual practice of musical composition?"[5] This study will rely most heavily on Peter Schubert's view on the futility of attempting to analyze music compositional practice from the lens of theorists writing in the sixteenth century in "Authentic Analysis" (1994), Harold Power's distinction between *emic*, or *a priori*, and etic, or *a posteriori* analyses in "Tonal Types and Modal Categories in Renaissance Polyphony" (1981), and Don Randel's question into the apprehension surrounding assigning modern indicators to sixteenth-century music that models that which the indicators describe, in "Emerging Triadic Tonality in the Fifteenth Century" (1971). Second, this study will investigate the nature of triads, triadic progressions, and bass primacy through the historiographical investigation and scholarship of late fifteenth- to early seventeenth-century theory treatises conducted by Benito Rivera in "The 'Isagoge' (1581) of Johannes Avianius" (1978), "Harmonic Theory in Musical Treatises of the Late Fifteenth and Early Sixteenth Centuries" (1979), "The Seventeenth-Century Theory of Triadic Generation and Invertibility…" (1984), and "The Two-Voice Framework and Its Harmonization in Arcadelt's First Book of Madrigals" (1987), and Bonnie Blackburn in "The Dispute about Harmony c. 1500 and the Creation of a New Style" (1999). Finally, I will summarize Randel's argument depicting V-I

[5] Benito V. Rivera, "Studies in Analysis and History of Theory: The Sixteenth and Seventeenth Centuries," *Music Theory Spectrum*, Vol. 11, No. 1, Special Issue: *The Society for Music Theory*: The First Decade (Spring, 1989): 24.

cadences as a necessary musical structure built out of contrapuntal necessity in four-voice musical texture as a predicate for investigating the contrapuntal choices made by Neusidler in his bass-triadic cadence paradigms.

Methodology

To build abstractions on Melchior Neusidler's cadential writing, I will analyze 125 cadences from the homophonic sections in his original compositions in *Il primo [-secondo] libro*, using Charles Jacobs' transcriptions from *Intabolatura di Liuto (Venice, 1566): An Edition of the Original Music*. First, I will organize the underlying bass progressions by cadence final to extract common bass paradigms. Second, I will investigate the ways Neusidler constructs complete, root-positioned triads for cadence finals that often subvert the *cantizans-tenorizans*, major sixth to octave or minor third to unison, framework in favor of incorporating the triadic third. The term "*cantizans*" defines the ascending motion from between *ti* and *ut*, historically found in the cantus, and the term "*tenorizans*" defines the descending motion between *re* and *ut.* Finally, I will investigate how Neusidler applies, strengthens, and subverts his bass-triadic cadence formulae through secondary function and deceptive motion. This study will demonstrate that Neusidler cultivates and interacts with bass-triadic cadence paradigms as intentionally composed musical objects rather than incidental counterpoint outcomes, representing his prioritization of vertical coherence that contrasts a "modalist" interpretation.

Limitations

My study includes investigating Neusidler's homophonic writing in his original compositions from *Il primo [-secondo] libro*. I am not making the case that Neusidler

wrote tonally, only that his homophonic cadences resemble, *a posteriori*, the tonal practices increasingly endemic to subsequent generations of lutenists. I am excluding Neusidler's polyphonic textures and the music that happens between cadences, which contradict the notion that he wrote tonally. I do not argue the ways that Neusidler's influences may have led to his manner of cadential writing or the ways that Neusidler directly influenced the subsequent generation of lutenists, aside from his relationship with John Dowland and Jakub Reys. I am excluding the vast literature from the sixteenth century and modern theorists on counterpoint and modality in the sixteenth century, favoring the triadic undercurrents that only appear in select treatises until gaining popularity long after Neusidler's death.

Chapter 2 Comparative Analysis of Early Sixteenth- to Early Seventeenth-Century Lute Instructions

Historical Background

In his 1987 article, "Melchior Neusidler: Intabluation and Transcription," Charles Jacobs notes that "the music of Melchior Neusidler provides the occasion, perhaps unique in music history, in which a composer's work is presented in three different tablature notations."[6] Jacobs later makes the statement that Neusidler "was one of the most highly regarded German lutenists of the late sixteenth century…[and that] The geographic diversity of his publications-Italy, Prussia and Alsace—, as well as inclusion of a considerable quantity of his music in Flemish musical collections, suggests that Melchior enjoyed widespread fame in his day."[7] Similarly, Arthur Ness claims that Neusidler was "perhaps one of the most important German lutenist-composers of the mid-16th century," because his compositions were widely disseminated, his pieces survive in more significant numbers than his contemporaries—many of which wear a patina of brilliant ornamentations, and he frequently uses the lute's highest tessitura, "demanding of the player great virtuoso skill."[8] Ness continued his praises, stating that Neusidler's original works and intabulations show him to be an excellent composer, which significantly

[6] Charles Jacobs, "Melchior Neusidler: Intabulation and Transcription," Journal of the Lute Society of America, Inc. Volumes XX-XXI (1987-1988): 108.

[7] Melchior Neusidler, *Il primo [-secondo] libro: Intavolatura di Liuto*, intro. by Charles G. Jacobs (Genéve: Minkoff, 2002), Preface.

[8] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 226.

influenced contemporary lutenist composers.[9] Before we delve into Ness's final point, some context is due to the reader.

Melchior Neusidler was born in Nuremberg 1531 and died in Augsburg 1590 and was the eldest son of Hans Neusidler,[10] who was a "distinguished Nuremburg lutenist."[11] On December 31, 1552, Melchior became a citizen of Augsburg, relinquishing his Nuremberg citizenship, where he served as "co-leader" of "Stille Musica," which was a group hired to play festivals and in the houses of prominent citizens.[12] In 1566, Neusidler published his first two volumes of lute music, *Il primo libro intavolatura di liuto Melchior Neysidley Alemano, Sonatore di Liuto in Augusta, ove sono Madrigali Canzon Francesi, Pass'e mezi, Saltarelli & alcuni suoi Ricercari*, dedicated to Johann Langnauer, and *Secondo Libro…ove sono Motetti, Canzon Francesi, Pass'e mezi &…Ricercari*, dedicated to Melchior Link in Venice in Italian tablature.[13] A selection of pieces from these prints were published in French tablature by Phalèse & Bellère at Louvain in 1571, which is likely how his works reached England. Some of these pieces appear in manuscripts along with John Dowland.[14] In 1573*, Il Primo/Il Secondo Libro* was reproduced in German tablature as the *Tabulatura continens Praestantissimas et Selectissimas Quasque Cantiones* in Frankfurt.[15] In 1574, he traveled to Strassburg to

[9] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 226.

[10] Hans Radke, "Neusidler family," in *Grove Music Online,* rev. Wolfgang Boetticher and Christian Meyer (20 January 2001), https://doi.org/10.1093/gmo/9781561592630.article.19795.

[11] Melchior Neusidler, *Il primo [-secondo] libro: Intavolatura di Liuto*, Preface.

[12] Radke, "Neusidler family."

[13] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 230.

[14] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 230.

[15] Melchior Neusidler, *Intabolatura di Liuto (Venice, 1566): An Edition of the Original Music*, Introduction.

supervise Bernhard Jobin on his *Teutsch Lautenbuch*, dedicated to Princess Dorothea, Duchess of Bavaria and Wittenberg.[16] From September 1580 to May 1581, Neusidler was employed by Archduke Ferdinand II at Innsbruck as "lutenist,"[17] but was dismissed for eating meat during Lent.[18] One of his patrons was Octavian II Fuggar, a member of the leading family in Augsburg, and Neusidler played in his house often and received alms when he ailing from gout near his death;[19] Fugger's accounts show payments to him at New Year's and his performances "bey der Tafel" at banquets and while sledding.[20]

This document will focus on Melchior Neusidler's *Il primo (-secondo) libro: Intabolatura di Liuto*, which "consists of intabulations of contemporary polyphony, sacred and secular, dances, and ricercars."[21] Charles Jacobs accounts that "The *Primo Libro* presents a group of transcriptions of madrigals, including ones by Lassus (N$^{o.}$ 1), Berchem (N$^{o.}$ 2), D. Ferabosco (N$^{o.}$ 3), Verdelot (N$^{o.}$ 5), and Rore (N$^{os.}$ 7 and 8), followed by transcriptions of chansons by Lassus (N$^{os.}$ 9, 11-13 and 16), Arcadelt (N$^{o.}$ 10), and an anonymous author (N$^{o.}$ 14)" and that "the Secondo Libro contains a series of intabulations of Lassus motets (N$^{os.}$ 1-6), followed by transcriptions of Chansons by such composers as, again, Lassus (N$^{os.}$ 7, 8 and 12) in addition to Willaert (N$^{o.}$ 9) and Crecquillion (N$^{o.}$ 10)."[22] Neusidler's intabulations and transcriptions will be a topic for discussion later this chapter, but what will be more significant to the study, as a whole,

[16] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 231.

[17] Radke, "Neusidler family."

[18] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 231.

[19] Radke, "Neusidler family."

[20] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 231.

[21] Neusidler, *Il primo [-secondo] libro*, Introduction.

[22] Neusidler, *Il primo [-secondo] libro*, Introduction.

are the two passamezzo-saltarello pairs and four ricercars in *Il primo Libro*, and the two passamezzo-saltarello pairs, and four ricercars in *Il secondo libro* upon which I will focus my cadential analysis.

A Priori: Lute Instructions Preceding Melchior Neusidler

Introduction

The early sixteenth century brought three monumental figures to the German Lute Tradition: Hans Judenkünig, Hans Gerle, and Melchior Neusidler's father, Hans Newsidler. Given the dissemination of their music and instructional treatises across Germany, it is likely Melchior Neusidler would have interacted with their contributions. Comparing these figures is necessary to contextualize Neusidler in a broader tradition.

Hans Judenkünig was born in Schwäbisch Gmünd circa 1445-1450 and died in Vienna in early March 1526. Judenkünig's family came from Württemberg, and his father was likely Hartmann Judenkünig. The first records describing Judenkünig's lute activity come from the Corpus Christi confraternity at the Stephansdom in Vienna in 1518. Wolfgang Boetticher states that "he had probably already been working as a musician there for some time."[23] Marc Southard and Suzana Cooper remark that Hans Judenkünig's first publication was *Utilis & compendiaria introdutivo…(Vienna, 151?)*,[24], which was the earliest published of the treatises I discuss.

[23] Wolfgang Boetticher, "Judenkünig, Hans," in *Grove Music Online* (2001), Accessed 24 Jan. 2024, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000014525.

[24] Marc Southard and Suzana Cooper, "A Translation of Hans Newsidler's *Ein Newgeordent Künstlich Lautenbuch*…(1536)," *Journal of the Lute Society of America, Inc.*, Volume XI (1978): 6.

Hans Gerle was born in Nuremberg circa 1500 and died in Nuremberg in 1570. Gerle was a skilled lutenist, lute maker, and arranger of several volumes of instrumental music. He was probably the son of Conrad Gerle, who was a popular lute maker in Nuremberg.[25] Though his birth year is uncertain, Jane Pierce writes that "knowing his period of writing to be from 1532 to 1552, we may estimate his date of birth at about 1500…[and that] one reference indicates that he was the eldest of Conrad's children."[26] Gerle's output includes five known publications: *Musica teusch* (Nuremberg, 1532), *Tabulatur auff die Laudten* (Nuremberg, 1533), *Music teusch* [second edition] (Nuremberg, 1537), *Musica und Tabulatur* (Nuremberg, 1546), and *Ein newes sehr nünstlichs Lautenbuch* (Nuremberg, 1552).[27] Pierce notes that "the musical contents of Hans Gerle's volumes fall into three large categories: preludes, or, as Gerle labels them, 'priambels;' dances; and intabulations of polyphonic vocal pieces."[28]

Hans Newsidler was born in Bratislava, Hungary in 1508 and died in Nuremberg, in 1563. Southard and Cooper note that "by around 1530 [Newsidler] had settled in Nuremberg, where he was active as a lutenist, composer, luthier, and teacher until his death."[29] Newsidler's 1536 publication, *Ein Newgeordent Künstlich Lautenbuch…*, arrived later than Judenkünig' and Gerle's and was "the first of a series of nine lute books

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[25] Howard Mayer Brown and Lynda Sayce, "Gerle, Hans," in *Grove Music Online* (2001), Accessed 24 Jan. 2024, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000010933.

[26] Jane Pierce, "Hans Gerle: Sixteenth-Century Lutenist and Pedagogue," *Journal of the Lute Society of America, Inc.*, Volume VI (1973): 19.

[27] Pierce, "Hans Gerle [Journal]," 20-21.

[28] Pierce, "Hans Gerle [Journal]," 22.

[29] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 5.

published…between 1536 and 1549."[30] Though "much of the technical information and some of the didactic exercises and pieces from the first volume found their way into the subsequent ones…Newsidler's first book remains his basic and most complete didactic text."[31] These three figures formed the musical landscape upon which Melchoir Neusidler would build during his career.

The Didactic Texts of Judenkünig, Gerle, and Newsidler: Technical Directives

Judenkünig, Gerle, and Newsidler produced pedagogical and technical treatises that were instrumental in how Melchior Neusidler formulated his compositional language. With the development of string and instrument technology, the lute grew from five courses to, in many cases, ten courses between the early sixteenth and early seventeenth centuries. There was opposition to the growing scale of the lute, most notably by Hans Gerle, who argued in his 1532 publication, *Musica teusch,* that:

> Many dare to play on thirteen strings [six courses], and to promote the same as lofty and excellent, and to call it great art; yet this does not completely please me. For I say this, that as many use it, it is no art but mere laziness, and is a disgrace to all lutes…Thus, I say that when one uses it for nothing but scordatura, so that it happens only for the sake of fame and honor, and that one wants this to happen with it, let everyone guard against such music. It is a great disgrace.[32]

Contrast Hans Gerle's sentiment with Melchior Neusidler, who in the preface to his 1574 book described the six-course lute as "inadequate" noting "now that music has risen to

[30] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 5.

[31] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 5.

[32] Jane Gail Pierce, "Hans Gerle: Sixteenth-Century Lutenist and Pedagogue" (PhD Diss., University of North Carolina at Chapel Hill, 1973), University Microfilms, 136.

such heights of artistic beauty [one] cannot achieve the full range of pleasing harmonies or fingerings on such a lute" and that a seven-course lute "would be adequate."[33]

With the growing number of courses tied to the lute and the shift between more linear and more vertical musical thinking—a topic we will explore through this chapter, and the increase in independent voices within musical textures came a paradigmatic shift in how lutenists wrote about right-hand technique. First, we will explore the didactic texts written by Judenkünig, Gerle, and Newsidler to learn about how they perceived right-hand fingering.

With linear musical textures, we see agreement between Judenkünig, Gerle, and Newsidler, who all prescribe the thumb-forefinger alternation. In describing the five basic principles of lute technique, Judenkünig says that "if letters or numbers are written one after the other and eighths are the time value, then strike the first downward with the thumb and the next with the forefinger upward."[34] In Gerle's directions regarding coloratura, he states that "every time a run begins you must begin it with the thumb, and the other letters or numbers with the index finger."[35] Newsidler offers the most specific directions on linear passagework with the right hand where he says when:

> There is a long run that is arranged in such a fashion that a beginning student will learn to strike the thumb and forefinger of the right hand alternately. The thumb lifts and moves downward and the forefinger simply goes upward…one has to alternate striking these fingers, one down and the other up until the run is completed.[36]

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[33] Radke, "Neusidler family."

[34] Martha Blackman, "A Translation of Hans Judenkünig's *Ain Schone Kunstliche Underweisung…(1523)," The Lute Society Journal*, Volume XIV (1972):," 35.

[35] Pierce, "Hans Gerle [Diss.]," 218.

[36] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 18.

Paul O'Dette made a few notes about Southard's and Cooper's translating Newsidler's "first principle of the lute," to say, "each time you see a dot as in the illustration, strike upward with the forefinger, making certain you lift the thumb first…" that he was instead saying "to begin" rather than "to lift." Further, O'Dette states "that Newsidler used the 'thumb-under' technique is clear from his instruction that the thumb and index finger should move…'around one another'…[which] has been incorrectly translated 'alternately.'"[37]

With vertical structures, there was some discrepancy between Judenkünig, Gerle, and Newsidler in their instructions. Gerle writes in his 1546 edition of his lute instructions:

> Observe [that] when two letters lie one above the other, you must finger with the left hand, and you must play with the right hand, with the thumb and index finger. And if you want to learn with three voices, then you must use the middle finger [of the right hand] for the third voice.[38]

Contrast Gerle's directive with Hans Newsidler's, who remarks that when using the right hand:

> It is true that it [the forefinger] has to go upward twice in succession even though it has been said that one only moves upward when there are single dots…When there are three voices on top of one another [in a chord] or even if there are only two, one must pinch the two fingers [thumb and forefinger] together. Therefore it is necessary for the forefinger to go upward twice in succession.[39]

We cannot look to Judenkünig for clarity on this matter, for when he describes playing music written for two voices, he notes that:

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[37] Paul, O'Dette, "Communications," *Journal of the Lute Society of America, Inc*., Volume XII (1979): 99.

[38] Pierce, "Hans Gerle [Diss.]," 213.

[39] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 18.

> When two letters are written one above the other, finger both at once with the correct fingers of the left hand. At the same time pluck both strings simultaneously between the thumb and forefinger of the right hand, touching no other strings than those indicated.[40]

However, when he later describes right-hand technique as it pertains to compositions containing three voices, he directs the reader that "when letters are shown vertically, pluck them simultaneously."[41] In this juxtaposition, Newsidler is applying the thumb-forefinger relationship commonly prescribed to linear textures as a solution for music requiring the simultaneous activation of three strings. In contrast, Gerle simply uses an additional finger to avoid doubling the forefinger. We will see that Gerle's approach is adopted and extended in the later treatises, displaying a significant shift in how the right hand is used to accommodate increasingly vertical musical structures and an eventual departure from absolute adherence to 'thumb-under' technique.

Judenkünig, Gerle, and Newsidler uniformly direct their readers to sustain notes with the left hand for as long as the rhythmic indicators dictate. Judenkünig notes in his fourth directive concerning playing compositions with three voices that the reader should observe that "when a cross appears over a letter, [to] let the left hand finger remain pressed down and use instead of it the next finger," and in his fifth directive "Leave the fingers down as long as [they] can to sustain the notes. If really necessary you must break this rule when the fingers are needed elsewhere, otherwise, NEVER."[42] Gerle echoes Judenkünig's fourth directive, relaying to the reading "that [they] will sometimes find a little start beside various letters. When one of these [stars] lies beside a letter, then [they]

[40] Blackman, "A Translation of *Ain Schone Kunstliche Underweisung*," 35.

[41] Blackman, "A Translation of *Ain Schone Kunstliche Underweisung*," 35.

[42] Blackman, "A Translation of *Ain Schone Kunstliche Underweisung*," 36.

must hold the fingers still upon it until the beat is over."[43] Newsidler additionally incorporates a symbol—a cross—and indicates to the reader that:

> Whenever it is found one must keep the fingers still on those letters until the next leüfflein or hooks are struck, or for as long as one can hear the string. Frequently there occur passages in which one hardly has the time to strike [the held note] but one has to release the little cross if one is to complete the passage. This is acceptable.[44]

It is worth noting that in the cases where a symbol is indicated to dictate the holding of a left-hand finger, the voice in which the finger is held varies through the compositions. We will see that later lutenists will qualify the directive to hold left-hand fingers differently.

A Posteriori: Lute Treatises After Melchior Neusidler

Introduction

To contextualize Melchior Neusidler's place in lute history, it is essential also to explore treatises from the later German, and the contemporaneously blossoming French, lute traditions written at the turn of the seventeenth century. I will investigate the lute instructions written by Matthaeus Waissel and Jean-Baptiste Besard because of the influence on subsequent lutenists—especially with the latter—and their respective proximal relationships to Neusidler, which allows a high probability of influence.

Matthaeus Waissel was born in Bartenstein, East Prussia, circa 1540, and died in Königsberg, 1602. February 1, 1560, Waissel matriculated in the theological faculty of the University of Königsberg. Until December 1573, Waissel was a teacher in the school at Schippenbeil, and from early 1574 until he was dismissed in 1587, he served as pastor in Langheim bei Rastenburg. After his dismissal, Waissel returned to Königsberg where

[43] Pierce, "Hans Gerle [Diss.]," 218.

[44] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 18.

he published a reprint of *Tabulatura* in 1591, which was a reprint of his 1573 publication of the same name containing "52 vocal intabulations and dances;" *the Tabulatura/Guter gemeiner Deudtscher Tentze*, a "collection of eight dances with *Sprung* for two lutes tuned a fourth apart," in 1592; the Tabulatura/Allerly künstlicher Preambulen…, which contains "eight preambles and 128 dances or groups of dances," in 1591; and finally his 1592 publication, *Lautenbuch*, which will be a topic in the next section.[45] Douglas Alton Smith indicates that "it is difficult to determine which pieces, if any, were actually composed by Waissel himself…[because] the presence of several concordances with Italian and French publications and with other German books suggests that Waissel was a collector and disseminator of lute music rather than a composer,"[46] but regardless "Waissel's Lautenbuch is the last German Renaissance method and the last edition of German tablature to be printed."[47]

Jean-Baptiste Besard was born in Besançon in 1567, and died "somewhere," circa 1625. Julia Sutton designates Besard, in her article "The Lute Instructions of Jean-Baptiste Besard," as "a peripatetic Bergundian gentleman educated in Italy who worked in Germany, [who] was a man of wide interests; [noting that] he seems to have been at once a jurist, a physician, and a lutenist."[48] Besard studied at the University of Dôle and was granted Doctor of Ecclesiastical and Civil Law on March 19, 1587; he appears to have matriculated to the University of Heidelberg on May 13, 1592 and noted in his

[45] Douglas Alton Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," *Journal of the Lute Society of America, Inc.*, Vol. VIII (1975): 50.

[46] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 51.

[47] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 49.

[48] Julia Sutton, "The Lute Instructions of Jean-Baptiste Besard," *The Musical Quarterly*, Vol. 51, No. 2 (April 1965): 345.

Thesaurus Harmonicus that he was a student of fame lutenist, Laurencini of Rome sometime between 1587 and 1592.[49] Though Besard's whereabouts lacked concrete evidence after 1597, he must have been in Cologne sometime between 1600 and 1601 "due to [the] discovery of German lute tablature bearing his signature.[50] In 1603, Besard published *Thesaurus Harmonicus* in Cologne, which contained "a set of lute instructions, the "De modo testudine libellus," which was "translated into English, with minor changes by Robert Dowland in 1610 as 'Necessarie Observations Belonging to the Lute and Lute-Playing,"' which appeared in his *Varietie of Lute-Lessons*.[51] *Thesaurus Harmonicus* was a monumental publication containing 403 compositions in ten books, mainly grouped according to "type of piece" written by 21 named and 55 anonymous composers.[52] Sutton also notes that Besard's instructions "appeared in various MSS, e.g., Hainhofer's collection for lute of 1603 and 1604, with the examples transcribed into Italian tablature.[53] Not much is known, again, about Besard's whereabouts between 1604-1617, but he went to Augsburg sometime before the Summer of 1617 because of a "friendship with Hainhofer, who 'belonged to the men of influence.'"[54] In 1617 Besard published his *Novus Partus*, which "included…a revision of the 'De Mode, the Ad artem,' which also appeared at the same time as a separate pamphlet in German, the *Isagoge*.[55] *Novus Partus*

[49] Peter Kiraly, "Jean Baptiste Besard: new and neglected biographical information," *The Lute: The Journal of The Lute Society*, Volume XXXV (1995): 62.

[50] Kiraly, "Jean Baptiste Besard," 63.

[51] Sutton, "The Lute Instructions of Jean-Baptiste Besard," 347.

[52] Julia Sutton, "Jean Baptist Besard, Renaissance Gentleman," *Journal of the Lute Society of America, Inc.*, No. 1 (1968): 2.

[53] Sutton, "The Lute Instructions of Jean-Baptiste Besard,"346.

[54] Kiraly, "Jean Baptiste Besard," 64-65.

[55] Sutton, "The Lute Instructions of Jean-Baptiste Besard," 347.

contains 59 compositions divided into three sections: twelve pieces for three lutes and two or three voices and viols; twelve for two lutes; and 35 for solo lute.[56] It is important to note that in his *Isagoge*, Besard wrote, "Joh. Dolandus, an excellent English lutenist, says, in a beautiful lute-book/ which he published in England: As far as the modem or system of studying the lute is concerned/ he knew nothing better to suggest/ than what Johann. Baptist. Besardus has written about it,"[57] which represents Besard's influence on the French and Elizabethan lute traditions during his lifetime.

The Didactic Texts of Waissel and Besard: Technical Directives

Between Waissel and Besard, we observe a change in right-hand position, which plays a role in how each author addresses coloratura passages. In Waissel's *Lautenbuch* he says that:

> The right arm is placed not too high, but almost in the middle behind the bridge, so that the hand is stretched out somewhat lengthwise, resting firmly on the little finger, which is placed on the top of the lute and held motionless. The index finger strikes over the thumb, the thumb into the hand…[which is better and contributes more to speed than when the index finger moves under the thumb into the hand.[58]

Waissel specifies to state that "In coloraturas, only the thumb and index finger are used, one after the other, the thumb striking downwards and the index finger upwards,"[59] upon which he applies the rule that "if the note value of the formation is longer than that of the coloratura, begin the coloratura with the thumb…but if the formation's note value is the same as the coloratura, pluck up with the index

[56] Sutton, "Jean Baptist Besard, Renaissance Gentleman," 3.

[57] Julia Sumberg Sutton, "Jean-Baptiste Besard's *Novus Partus* of 1617" (PhD. Diss., The University of Rochester, Eastman School of Music, 1962), University Microfilms, Inc., 260.

[58] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 57.

[59] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 70.

finger directly after the formation,"[60] which maintains the premises that the thumb and index finger must be alternated and that the thumb must be placed on the strong beats. To summarize, Waissel directs the reader to use the 'thumb-under' technique noted by Hans Newsidler and to preserve the alternation between thumb and index finger in linear passagework. In contrast, Besard offers a notably distinct approach towards the positioning of the right hand as translated in Robert Dowland's *Varietie of Lute-Lessons*:

> First, set your little finger on the belly of the LUTE, not towards the Rose, but a little lower, stretch out your thumb with all the force you can, especially if thy thumb be short, so that the other fingers may be carried in a manner of a fist, and let the thumb be held higher than them…yet they which have a short thumb may imitate those which strike the strings with the thumb under the other fingers, which though it be nothing so elegant, yet to them it will be more easy.[61]

Besard describes the position wherein the thumb falls outside the index finger—in rather than 'thumb-under'—which likely expands on the desire to accommodate an increasing emphasis on vertical structures. Besard also notes that, though thumb and index finger alternations are preferred in executing coloratura, "the first two fingers may be used in diminutions very well instead of the thumb and the fore-finger, if they be placed with some basses, so that the middle finger be in place of the thumb…"[62] Though Besard maintains the superiority of thumb to index finger alternation, we see a significant departure from its absolute prescription to accommodate textures where coloratura is placed over an active bass part and from the 'thumb-under' technique.

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[60] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 72.

[61] Sutton, "Jean-Baptiste Besard's *Novus Partus* of 1617," 197.

[62] Sutton, "Jean-Baptiste Besard's *Novus Partus* of 1617," 200.

Regarding cases where the right hand must accommodate vertical sonorities, Hans Newsidler's approach toward 'index finger doubling' loses out to Hans Gerle's incorporation of the middle finger. Waissel dictates that:

> If the formation has three voices, pluck it with the thumb, index finger, and middle finger. If the formation has four voices, pluck it with the thumb, index finger, middle finger, and ring finger. If the formation has five voices, pluck two strings at the same time with the index finger. If the formation has six voices, pluck two with the thumb and two with the index finger, and pluck the others with the other two fingers.[63]

To accommodate vertical structures occupying six strings is an issue not mentioned by the early sixteenth-century German lutenists. However, the notion of playing a six-note chord with only the thumb and index finger is rarely a pragmatic solution and likely hints towards Besard's eventual shift in right-hand position. Comparatively, Besard prescribes in *Novus Partus* that:

> Here the rule should be observed that two letters, whether on adjacent or on nearby strings, or on widely separated strings, should usually be plucked by the thumb and the second [middle] finger, so that if a single letter follows that must be plucked by the index finger, it will not have to be used twice in a row while the strings are being moved towards each other. This we forbid. But if there are three notes in a chord, use the thumb, index, and middle (or second) fingers; finally, in a four-note chord, use all the fingers except the little finger…When there are more than four strings to be plucked, as happens very often, then, keeping the same order of the fingers, have the thumb and index fingers pluck two strings apiece. This is indeed a frequent occurrence.[64]

It is worth noting that Besard agrees with Waissel on specific fingers to use in growing vertical structures except in the case where two notes are played simultaneously, where Waissel suggests using the thumb and index finger, Besard prescribes thumb and middle so that the index can be free to play the subsequent note following the chord without

[63] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 69.

[64] Sutton, "Jean-Baptiste Besard's *Novus Partus* of 1617," 244-245.

finger repetition. This point certainly aligns with Besard's directive to alternate the middle and index fingers in passages requiring the thumb for accompanying bass notes.

Finally, the notion that the left hand holds notes for their full rhythm values is consistent between Waissel and Besard and the preceding Judenkünig, Gerle, and Newsidler, but with one critical caveat. Waissel writes that:

> When you have stopped a formation, you must not lift a finger from the letters, but rather remain on the letters while the sound lasts, unless it is necessary to lift a finger for a coloratura. This is so that the voices are not interrupted but are allowed to sound completely. It is especially important for the bass, for if the bass is not complete, the song pales and has no appeal or loveliness.[65]

The notes must be held for their prescribed values, except when it is impossible to execute on the instrument, in which case, maintain the bass. This is a sentiment echoed and augmented by Besard in his *Novus Partus*:

> Hold your fingers down whenever possible, therefore, especially when playing a bass note, which should be held while the other fingers are busy on other strings, until another bass note occurs. Also, hold both bass and treble notes, if possible, while there is motion in the inner voices. If this is impossible, due to lack of fingers, it is preferable to release the finder that is playing the treble note, for it is usually better to lose this voice than the bass.[66]

Besard, like Weissal, notes the prominence of the bass over all other voices but creates an additional hierarchy in dictating the preservation of the outer voices over inner voices. Recall that with Judenkünig, Gerle, and Newsidler, the voice that should be held would be explicitly indicated and that this was more a measure towards notating polyphonic textures containing differing rhythmic values given a single rhythmic indicator—so that

[65] Smith, "The Instructions in Matthaeus Waissel's Lautenbuch," 68.

[66] Sutton, "Jean-Baptiste Besard's *Novus Partus* of 1617," 241-242.

the reader could distinguish voices—rather than a pragmatic left-hand approach towards executing multi-voiced textures.

Reflections and Comparative Analysis

With this chapter, I hoped to offer historical context to Melchior Neusidler, those lutenists who wrote treatises about which he was likely aware, Hans Judenkünig, Hans Gerle, Hans Newsidler, and those he likely influenced, Mattheaus Waissel and Jean-Baptiste Besard. I also wanted to highlight some significant distinctions between philosophies on right- and left-hand technique between the early-mid sixteenth-century German lute tradition and the late sixteenth and early seventeenth-century lute traditions in Germany, France, and England to set the groundwork for describing some compositional and analytical trends during this timeframe that will help support my analysis. In summary: We see the codification towards, and departure from, the 'thumb-under' technique in favor of a right-hand position wherein the thumb falls outside the index finger; A shift from an absolutist application of thumb and index finger alternation to *coloratura* to the allowance of middle and index finger alternations to accommodate increased bass activity; A departure from applying only the thumb and index finger to vertical structures, using repeated index finger strokes, to using the thumb, index, and middle fingers to execute three note textures, to finally adding the ring finger and repeating the thumb and index finger strokes to accommodate six-voice textures; and The establishment of a hierarchy, beginning with held left-hand fingers being explicitly indicated as a means to display polyphony, but an otherwise egalitarian texture, to a prioritization of bass notes over other voices, and with Besard, bass and treble notes over inner voices. I argue that each of these technical shifts parallel not only an increase in the

number of courses attached to the lute but an increase in voices in polyphonic music, an increasing prioritization of the bass and treble voices in composition, and subsequently, an increased emphasis on vertical structures in music, which leads to the questions: Where does Melchior Neusidler's compositional approach fall in the trajectory between linear and vertical conceptions of music? How does this shift towards vertical coherence relate to the bass-centered triadic structures found in common practice harmony? To what extent does Neusidler's writing resemble contrapuntal polyphony and harmonic paradigms? Investigating the latter will demonstrate the manner and extent to which Neusidler influenced the subsequent lute traditions.

Chapter 3 *Musica Ficta* and Intabulation

Analyzing the extent to which Melchior Neusidler prioritized linear or vertical features in writing cadences requires investigating his realization of *musica ficta* in his vocal intabulations. Intabulations offer an opportunity for comparison between an original vocal score, wherein *musica ficta* went traditionally unrealized, and an intabulation, which requires an intabulator to make theoretical decisions that can help us to define their compositional preferences. Though admittedly, intabulations are fundamentally distinct from original compositions in that composers writing their music would likely navigate composition by their theoretical priorities. In contrast, with intabulation, they must manipulate an already written piece that may not be written to best suit their compositional style. I believe that it is through the juxtaposition between the priorities of the composer and intabulator that we can glean the most fruitful insights into the intabulator's reconciliation of ideals with practice—that is, they cannot define their compositional approach *a priori*.

Musica Ficta: Introductory Remarks

Margaret Bent defines *musica ficta* within its historical juxtaposition against *musica recta*. Bent claims that "*musica recta* is not an arsenal of fixed pitches but denotes a set of relationships to a notational norm of pitch stability that is more like a flotilla at anchor than a Procrustean bed of a pre-tuned piano,"[67] which contradicts the notion that

[67] Margaret Bent, "Diatonic 'Ficta,'" *Early Music History*, Vol. 4 (1984): 10.

musica recta is situated in some absolute tuning. Consider that the lute during the sixteenth century was tuned in accordance with a taut first course rather than some universally accepted, absolute pitch center and that its remaining courses were tuned relatively to the first. Consider the tuning instructions offered by Hans Newsidler:

> One should first set the first course neither too high nor too low, but just as high as the string will stand…after setting the first course, stop k (first course, second fret), and as k sounds, tune 3 (third course, open)…when 3 is tuned, stop n (third course, third fret), and as n sounds, tune 1 (Fifth course, open)…when 1 is tuned stop f (fifth course, second fret), and as f sounds, tune 4 (second course, open)…when 4 sounds stop o (second course, third fret), and as o sounds, tune 2 (fourth course, open)…when 2 is tuned stop g (fourth course, second fret), and as g sounds tune the [open] sixth course.[68]

In contrast to *musica recta*, Bent notes that "the 'operation of *musica ficta*,' that is, the substitution at any point, for contrapuntal reasons, of a tone for a semitone (or vice versa), could mean that the absolute frequency of the As, Bs, Cs that follow may not be the same as they were before, although the local interval relationships of small segments will remain intact."[69] Bent relates *musica recta* and *musica ficta* historically to hexachordal theory, so that if we consider *musica recta* as the pitch collection [F, G, A, B-flat, C, D] within the *hexachordum molle* (soft hexachord), then *musica ficta* could involve changing B-flat to B-natural. Bent states that "for the period around 1500, these are the two primary rules of counterpoint that may require fictive adjustment…: the prohibition of imperfect fifths or octaves sounding together…[and] the discouragement of tritone melodic outlines, especially unmediated ones."[70]

[68] Southard and Cooper, "A Translation of *Ein Newgeordent Künstlich Lautenbuch*," 12-13.

[69] Bent, "Diatonic 'Ficta,'" 10.

[70] Bent, "Diatonic 'Ficta,'" 23-24.

Margaret Bent and Alexander Silbiger summarize an account made by E.E. Lowinsky, in his introduction to H.C. Slim's *Musia Nova* (1964), about the categorization and application of *musica ficta* into "*causa necessitatis* [a cause based on need, or for the sake of consonance in counterpoint]" and "*causa pulchritudinis* [a cause based on beauty, or for the sake of preserving melody]":

> *Causa necessitatis*: I.1, the prohibition of the simultaneous sounding of *mi* against *fa* [B-natural sounding against B-flat]…; I.2, the 'una nota super *la*' rule to prevent a linear tritone when a line ascends above the syllable *la* [F against B-natural would often permit adjusting to B-flat]…; and I.3, the prohibition of false relations. *Causa pulchritudinis*: II.1, the raising of the leading note at cadential formulae; II.2, the rule of propinquity, that is, approaching a perfect consonance in two voices by the nearest imperfect consonance [for cadences, a naturally occurring minor-sixth should be made major when preceding an octave, and a major-third should be made minor when preceding a unison]; and II.3, the rule of ending on a complete triad [if the final triad is built on a minor-third, i.e., a minor triad, raise the middle note to render a major triad].[71]

It should be noted that while Lowinsky's directives offer a theoretical basis for understanding the possible applications of *musica ficta*, we will observe objections to Lowinsky's rules in the following sections. The debate between whether to preserve the rules of propinquity and raised leading tones or the rules governing *mi-contra-fa* or *fa-super-la* becomes a salient discourse on whether composers or intabulators prioritized vertical or linear consonances, respectively, and can provide insights into Neusdiler's preferences.

[71] Margaret Bent and Alexander Silbiger, "Musica ficta," in *Grove Music Online*, (2001), Accessed 28 Jan. 2024, https://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.000.0001/omo-9781561592630-e-0000019406.

Musica ficta: Cadential Formulae

I will investigate two studies on the realization of *musica ficta* in cadential structures, written by Karol Berger and Peter Urquhart, to attempt to offer more depth into the rules governing *musica ficta* and the extent to which sixteenth-century composers adhered to them. Both Berger and Urquhart begin their studies by establishing the rule of propinquity.

Rule of Propinquity

Berger states that "the progression from an imperfect to a perfect consonance was governed throughout our period by a rule which, in its more general (relaxed) form, stipulated that one part should proceed by a diatonic semitone and that one of the steps forming the imperfect consonance might be inflected if this were necessary to produce a semitone progression," but offers the question: "How strictly was the rule governing progressions from imperfect to perfect consonances observed."[72] Berger's investigation primarily centered on a thorough investigation into musical theory treatises written in, and around, the sixteenth century. Urquhart begins with the premise that "it has long been known that the two-voice framework of the interval of a sixth progressing to an octave, or its inversion of a third progressing to a unison, is the primary foundation of most cadential motion in fifteenth- and sixteenth-century music" and states that "we will explore empirical evidence for and against the application of this rule, by means of an

[72] Karol Berger, *Musica ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino* (Cambridge: Cambridge University Press, 1987), 127.

extensive and detailed look at cadences for five or more voices in the motet literature of the sixteenth century after Josquin."[73]

Realizing Propinquity at Cadences

Berger begins his discussion by inquiring whether the upper or lower voice should be corrected when necessary and how to choose.[74] Consider that with a minor sixth interval, each voice is a whole step away from their respective goals [e.g., A and F are each a whole step from octave Gs], and to expand to a major sixth, one voice would need to change [e.g., A→A-flat, or F→F-sharp]. Berger assesses that in "only one cadential [tone], namely A, the choice of the leading tone is unclear," but that in all other cases, the choice to sharpen the seventh, i.e. 'upper voice,' was preferred and that inflecting "only 7, but not 2, was the absolutely indispensable component of the penultimate harmony of all cadences."[75] Regarding cadences to A, Berger distinguishes that A represents either Phrygian or a transposed mode, which, for the former, "the semitone below 2 occurred naturally, leaving no choice."[76] After an investigation into A as a transposed, rather than Phrygian, tonal center, Berger concludes that "theoretical evidence from the time of Ramos on, at any rate, points overwhelmingly in favor of the use of B-*mi* for cadential leading tone whenever the choice was open," which means that "if there is a flat in the

[73] Peter W. Urquhart, "Chapter Three: Contrapuntal and Cadential Aspects," in *Sound and Sense in Franco-Flemish Music of the Renaissance: Sharps, Flats, and the Problem of 'Musica ficta'* (Leuven: Peeters Publishers, 2021), 177.

[74] Berger, *Musica ficta*, 139.

[75] Berger, *Musica ficta*, 140-141.

[76] Berger, *Musica ficta*, 141.

key signature…the [seventh] will not be sharpened…but when there are no flats in the key signatures, the formula…requires the sharpening of the [seventh]."[77]

Urquhart argues that "the use of sharps to adjust penultimate sixths would have been more common than the use of flats, assuming that accidentals were added by performers."[78] He criticizes Berger for initially "refusing to accept the idea that one voice might be favored over the other" in decisions made concerning inflection, stating that "our questions about cadence inflections concern the choices made by two musicians reading from their parts, not a decision by one all-knowing musician" and that the issue is in "Berger's conflation of the search for rules for performers' accidentals with theorists' recommendations to composers regarding proper counterpoint."[79] It is worth noting that Urquhart builds his entire argument on the realization of *musica ficta* on the notion that "in the fifteenth and sixteenth centuries these decisions [those made concerning inflection] were made most likely by singers individually, reading from their own lines…[and] singers had two kinds of information to work with: what was presented to them in the notation and what they could hear around them."[80] Though Urquhart embarks on a thorough journey to assess indicators that would cause a singer—mainly the cantus—to inflect, it is not so applicable to lute intabulations where the intabulator was a sort of "all-knowing musician." Furthering the discussion of cadences on A, Urquhart claims that "that in sixteenth-century repertory there really is no ambiguity to the

[77] Berger, *Musica ficta*, 144-145.

[78] Urquhart, "Contrapuntal and Cadential Aspects," 177.

[79] Urquhart, "Contrapuntal and Cadential Aspects," 207 & 209.

[80] Urquhart, "Contrapuntal and Cadential Aspects," 192.

inflection of cadences to A; the two types—Phrygian cadences (*tenorizans* inflection), and subsemitone cadences (*cantizans* inflection)—are discrete and easily identified."[81]

Both Berger and Urquhart conclude that the *cantizans*, that is, the seventh, be raised for the sake of propinquity to inflect a minor sixth to a major sixth when preceding an octave at cadences, despite Urquhart's criticisms of Berger's methodology. The only exception is the so-called "Phrygian cadence," wherein the sixth is already major, but the half-step resides in the *tenorizans*, that is, the second, and thus, the *cantizans* need not be inflected. What is powerful about the agreement in outcome between Berger and Urquhart is that it demonstrates alignment between sixteenth-century theory and compositional practice.

Propinquity in Cross-Relations

When observing the practice of inflecting the *cantizans* in cadence formulae, a vital debate arises concerning scenarios that would invoke a cross-relation between the *cantizans* and another voice, which entails a vertical relationship between a pitch and its chromatic alteration, e.g., B-natural, and B-flat. In this debate, we must grapple with whether the vertical sonority or the linear voice-leading takes precedence in the realization of *musica ficta*, and it is here that we see the widest discrepancy between the concepts of "realization as a performer" and "realization of, as Urquhart states, the 'all-knowing musician.'"

Urquhart's philosophy on cadential inflection stems from his performance-practice-centered approach toward defining the parameters governing *musica ficta*. He argues that "[his] proposal is predicated on the assumption that the *cantizans* always

[81] Urquhart, "Contrapuntal and Cadential Aspects," 220.

receives the inflection when it is required to attain propinquity. And it need hardly be said that this assumption—that the *cantizans* would be inflected regardless of the interactions with surrounding voices—has not been widely shared by others."[82] Urquhart first dispels the notion that the *cantizans* be inflected on occasion but left uninflected to avoid cross-relations by claiming that:

> The idea of applying the either/or approach to the entire repertory is attractive, for it clarifies the issues involved, and avoids the logical contradictions caused by judging singers' practice based on its harmonic effect…[but] since the clash that is judged unacceptable is not within the view of that voice that is making the decision to inflect or not (the *cantizans*), it makes better sense either to claim that performers never inflected cadence approaches that lack the semitone, or to assume that performers always applied the needed semitones regardless of the clash that would sometimes occur…[83]

In his argument, Urquhart holds that a singer could not adjust an inflection upon subsequent reading of a piece. Second, Urquhart cites Vincent Arlettaz, who claimed that "the appearance of the doubled seventh degree in cadences is evidence that Franco-Flemish composers from the end of the fifteenth century to the mid-sixteenth century did not inflect cadences at all."[84] Urquhart notes that he and Arlettaz agree on the premise that "the practice of inflecting cadences when there is no doubling of the seventh degree, and to refrain from inflection when there is a doubling of seven…is untenable…[but Arlattaz's] theory of a general avoidance of cadence inflections in music from Ockeghem through Clemens, and [Urquhart's] theory about the use of cross-relations in the same repertory, cannot both be true."[85] After conducting a study that divided cadences

[82] Urquhart, "Contrapuntal and Cadential Aspects," 246.

[83] Urquhart, "Contrapuntal and Cadential Aspects," 248.

[84] Urquhart, "Contrapuntal and Cadential Aspects," 249.

[85] Urquhart, "Contrapuntal and Cadential Aspects," 254.

containing possible cross-relations into three categories: simultaneous cross-relations, predicted cross-relations, and adjacent cross-relation; and building upon "internal evidence provided by theorists, by intabulations, and by explicit accidentals" and "internal evidence provided by the analysis of a small number of cadences formed with special linear characteristics that help confirm the presence of the subsemitone,"[86] Urquhart concludes that:

> Proof of the cross-relation in early sixteenth century Franco-Flemish music resided in the combination of a number of observations: Evidence found among theorists of the period…; Evidence of organ intabulations by Johannes Rühling…; The occasional explicit accidentals found in the repertory…; Internal evidence to be found in three cadences to F from our database,…; Internal evidence of 28 mixolydian cadences in which the inflection of the *cantizans* is confirmed linearly, against uninflected versions of the same pitches in the *quintizans* [fifth-voice]; Three 'smoking guns' from outside the database, in which simultaneous cross-relations are proven to exist by the combination of internal and external evidence, that is, linear evidence in both the *quintizans* and *cantizans*, together with explicit signs, evidence of revision in response to the cross-relation, and a wider context provided by *cantizans* behavior throughout an entire mass.[87]

Urquhart's conclusion that the *cantizans* would be inflected regardless of the activity in other concurrent voices because the voice would only be conceived linearly by an individual musician likely holds merit when considering the literal realization of vocal compositions by singers, but brings me to the following inquiry concerning the realization of propinquity in lute intabulations: Would a lutenist consider the cross-relation between voices egregious enough to avoid inflection when intabulating a cadence, or would they maintain the rule of propinquity and inflect the *cantizans* irrespective of the vertical relationship? Given that a lutenist can observe the broader

[86] Urquhart, "Contrapuntal and Cadential Aspects," 260.

[87] Urquhart, "Contrapuntal and Cadential Aspects," 295-296.

musical texture, they would not be beholden to the limitations of reading a single musical line in time. Thus, they would have the agency to make a preferential decision. Further, it is unreasonable to assume that a lutenist would attempt to realize *musica ficta* to best emulate the perceived limitations of a vocalist reading a part in time rather than through their principles as they fit on the lute.

Lute Intabulations and *Musica Ficta*

The premise of using lute intabulations to make analytical claims on the sixteenth-century compositional practices has been a contentious topic, especially when it comes to realizing *musica ficta*. Arthur Ness claims that "intabulations can provide much information about performance practices, and lute intabulations, in particular (since they give exact indications of accidentals), can provide important resources for the realization of *musica ficta* and the style of embellishment may provide clues for improvisation."[88] Yavor Genov states that "lute intabulations of vocal music are important to scholars in many aspects. Apart from the matter of adding embellishments and passages, word painting, organizing cadences, or particular significance and complexity is also the problem of using alterations (*musica ficta*)."[89] Urquhart uses intabulations as a tool for determining whether cross-relations were permissible in cases where inflecting the *cantizans* at a cadence is in question, noting that "the use of the subsemitone is provided by intabulations of the vocal repertory into the form of lute, vihuela, or organ tablature."[90] Bent quotes Howard Mayer Brown who "argued that tablatures for fretted instruments

[88] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 235.

[89] Yavor Genov, "The arrangements of Motets in *Wurstisen lute book*. More about the process of intabulation," *Bulgarian Musicology*, No. 1 (2019):," 26.

[90] Urquhart, "Contrapuntal and Cadential Aspects," 269.

indicate with greater precision and consistency than do organ tablatures the precise 'chromatic inflections'—a 'vast and largely unexplored repertory for the investigation of *musica ficta*," only to retort "that must remind ourselves that they are not so much transcriptions as arrangements…neither modern notation nor tablature can provide the only, or the most correct, or even an accurate representation of what singers operating under a totally different set of constraints and options…would have produced."[91] Bent posits that "many of the lute and keyboard arrangements fall short of the solutions demanded by the rules of counterpoint and *musica ficta* precisely because those arrangers, despite their different goal, were caught on the horns of the same dilemma that faces modern editors—namely that of finding a compromise between the ideal sound and a notational spelling that would look worryingly different from the vocally conceived original from which each is working,"[92] leading her to the conclusion that her argument "should disqualify counter-arguments couched in terms of absolute frequency, pitch stability,…, and tablature evidence for such notes as prescriptive for vocal performance."[93] Bent's claim could be augmented by the fact that lute intabulations need not only fit into lute tablature, but they must also fit on the instrument, which means that the intabulator must make decisions that satisfy not only counterpoint and *musica ficta* rules but must be playable—a limitation not imposed on individual vocal lines. Urquhart cites Robert Toft, who "favored using the evidence of intabulations directly, to create vocal performances in conformance with at least one legitimate aural pattern from the

[91] Bent, "Diatonic 'Ficta,'" 42.

[92] Bent, "Diatonic 'Ficta,'" 43.

[93] Bent, "Diatonic 'Ficta,'" 48.

period," and notes that Toft viewed "no one version of a work [as] any better than another, as long as they fit within the boundaries of the practices of the time," which [he indicates that] intabulations do by definition."[94]

Toft's argument that an intabulation articulates a realization of one possible "legitimate aural pattern from the period" resonates with the fact that lutenists were trained in the same counterpoint and *musica ficta* rules that governed the composition of vocal scores. However, I tend to agree with Bent on her apprehension towards making claims on vocal performance practice that are staked in a lute intabulation. I disagree that the most significant issue in conflating choices in intabulation to vocal performance practice has to do with notational limitations but rather with physical limitations. While we might be hearing one possible realization of a vocal score, preference would be given to the realization that better suits the instrument, so are all realizations equal? What should not be a point of contention, however, is what we can learn about practices in realizing *musica ficta* on the lute from lute intabulations and instructions on intabulating on the lute. If, for example, a lutenist tended to avoid cross-relations in their lute intabulations, it seems unlikely that they would suddenly welcome cross-relations in their original compositions.

Hans Gerle's "Transcription" Instructions

In his 1546 publication, *Musica und Tabulatur*, Hans Gerle includes two sections on transcribing music, including one specifically focused on lute transcriptions. Jane Pierce notes in her analyses of Gerle's intabulations that "as in the other intabulations,

[94] Urquhart, "Contrapuntal and Cadential Aspects," 269-270.

musica ficta in the original is realized in the transcription"[95] but she claims that "nowhere in [Gerle's instructions does he mention raising leading tones; [even though] his practice…is to go ahead and raise them."[96] Though Gerle did not state explicitly to inflect voices to accommodate the rules of *musica ficta*, consider his statement about intabulations on the viol:

> I have also added the [places] for you where you have all *fa*'s and *mi*'s that you need…but you will know how to judge when you need *fa* or *mi* they do not like in the space where I show them above…if you want *fa* or *mi* and it does not lie in the scale, then I have drawn it separately. And the third and highest row in the scale with its tablature belongs to the distant, where you find the c on the c-*sol-fa-ut* key and the o on the g-*sol-re-ut*; you also find the *fa* and the *mi* drawn next to it.[97]

I can only make the conjecture as to why Gerle would need to indicate *fa*'s or *mi*'s which "[do] not lie on the scale" has to do with, not only transposition, which is the topic on which he was explicitly speaking, but inflecting pitches. My conjecture is supported by Gerle's later claim about transcribing for the lute:

> Now, other *fa*'s are written in song; as I have shown before, they lie inside the song, and not at the beginning. When the same *fa*'s appear in the song, they belong only to the notes following right after the *fa*'s, and not to the other notes; for as soon as the same note is over, then the *fa* no longer concerns the other notes lying on that line or in that space. A separate *fa*, then, is written for each. I shall also draw that *fa* for you later in the table, and write it next to the other letters, and add which kind of letter you must write if one [*fa*] appears to you in transcribing.[98]

The notion that a *fa* occurs within a song but "not at the beginning" indicates an inflection for either modulation to a local center that contradicts the global or initial tonal

[95] Pierce, "Hans Gerle [Diss.]," 107.

[96] Pierce, "Hans Gerle [Diss.]," 105-106.

[97] Pierce, "Hans Gerle [Diss]," 195-196.

[98] Pierce, "Hans Gerle [Diss]," 229.

center or adherence to a rule of counterpoint or *musica ficta*. I agree with Pierce that Gerle does not explicitly mention to "raise leading tones," but I think a case could be made that he indicates the need for inflection. Opposing the notion that Gerle's directions would inform inflecting the *cantizans*, and Pierce's claim that Gerle inflected leading tones, is a statement by Paul Hessen that claims that "in his…observation on the intabulations by Hans Gerle…[he was] able to conclude that unnotated semitones, apparently the norm in most of Europe, were not accepted in Germany."[99]

Melchior Neusidler and Intabulations for the Lute

Apart from intabulations, Melchior Neusidler included in his own publications, Arthur Ness discovered in 1984 that Neusidler likely contributed a substantial number of intabulations, including Mus ms. 266, N$^{os.}$ 1-14; Mus ms 1627, N$^{os.}$ 1-12; Mus ms 2987, N$^{os.}$ 37-38 to the Bavarian State Library (The Herwarth Lute Manuscripts); and Paris Res 429, N$^{os.}$ 2-7 and 9-13 to Paris, Bibliothèque national.[100] Apart from a detailed handwriting analysis, Ness used six factors for determining the etymology of a certain "Scribe A," including: common realization of *musica ficta*; similar or obvious encrustation of embellishment; unique or unusual ciphers (unusual position of tablature, i.e., fingerings); the tuning selected for intabulation; differences found when made from models having variant readings; and the ways later arrangers may have misinterpreted the version from which they are working,[101] and concluded that "there can be little doubt that Scribe A and Melchior Neusidler are one and the same."[102] Ness argues that "since

[99] Genov, "The arrangements of Motets in *Wurstisen lute book*," 30.

[100] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 23-46 [V2].

[101] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 238-242.

[102] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 273.

[Neusidler] made so many intabulations, these supply abundant models for further examination of *musica ficta* as lutenists applied it to vocal music,"[103] which Genov later pursued.

Genov analyzed four of Neusidler's intabulations found in the *Wursisen Lute Book*, which were written down by Wurstisen but published first in Neusidler's *Il Primo [-Secondo] Libro*, by the rules governing *musica ficta*, outlined by Lowinsky, to examine:

> How the usage of sharps and flats is applied to his versions: Were there any specific tendencies reflected by them and how did the guidelines of *necesitatis* and *pulchritudinis* eventually come to be involved? Could it be traced out which of his intabulations were copied and which might be Wurstisen's own arrangements? Were there any particular differences in approaching the originals evident in the intabulations written down by him? Did his intabulations reflect in any form the German custom [no unnotated semitones]?"
>
> Word-painting. Whether the intabulator specifically treated the texts of the composition: Was any particular attention paid to the poetic texts and how was it eventually interpreted by the lute version?
>
> *Passaggi* and coloraturas. The cases in which passages and coloraturas were applied to the main structure will also be the subject of examination as well as whether they referred to specific points in the texts aiming to highlight particular places/words.[104]

Through his analysis, Genov articulates a few tendencies governing Neusidler's approach towards alterations, which I have summarized:

> Compliance with *subsemitonium modi* [inflected *cantizans*]; Adherence to propinquity, unless the altered noted would "result in a strong dissonance;" strict adherence to the *mi-contra-fa* rule "in order to escape the vertical tritone;" Lasso [who authored three of the pieces Genov analyzed] "almost never makes the triad of intermediate cadences major…[and] Neusidler follows the original closely," whereas "the final cadences in all observed cases are raised to major triads by Lasso and respectively Neusidler;" "the usage of sharps and flats…makes clear that Neusidler did not stay behind the aforementioned German custom;" given the choice between vertical or

[103] Ness, "The Herwarth Lute Manuscripts at the Bavarian State Library, Munich," 273-274.

[104] Genov, "The arrangements of Motets in *Wurstisen lute book*," 31-32.

> horizontal dissonances, "*fa-super-la* is applied with highest priority," meaning that when given "the choice of raising a leading note to the goal one, thus having a melodic tritone, he gave preference to dissonance prevention;" "Apart from *causa necessitatis* the alterations of sub metrical notes occasionally have the function of strengthening some harmonic centers;" there are "some examples which suggest that the intabulator considered the importance of the verbal text…[but] his application of embellishments and passages underlining the meaning of a word or phrase in the text is not a constant but rather occasional feature."[105]

Genov summarized that Neusidler's intabulations are:

> In conformity with the main rules and guidelines for making arrangements of vocal music for lute pieces…tend to follow the intention of the composer with respect to the original structure, voice-leading, and often even key…the usage of shaprs and flats is applied in accordance with both *causa necessitatis* and *causa pulchritudinis*…[and the ornamented figures] do not violate the form of the original composition, but rather stress an important place, fill long notes in the motet, or highlight a significant moment of the text.[106]

Certainly, some abstractions levied by Genov suggest Neusidler's adherence to the original vocal score. However, I must imagine that if Neusidler is following specific rules governing counterpoint and *musica ficta* in his intabulations, which involves a deliberate alteration from the composer's original notation, then it seems reasonable to assume that he might follow similar procedures in his original compositions. Perhaps Neusidler, rather than altering notes to accommodate the *mi-contra-fa* rule, would instead write in such a way as to avoid the issue altogether. For this reason, I believe Genov's study will offer insights into my own investigation into Neusidler's cadential practices governing his own compositional approach.

[105] Genov, "The arrangements of Motets in *Wurstisen lute book*," 41-44.

[106] Genov, "The arrangements of Motets in *Wurstisen lute book*," 45.

Conclusion

Musica ficta, as it relates to cadences, involves most typically the inflection of the *cantizans* to the subsemitone, except only in Phrygian cadences. We can accept Bent's claim that intabulations cannot function as the litmus test for contemporaneous vocal performance practice but agree with Ness's claim that intabulations offer a window into how *musica ficta* was realized within a composer's *oeuvre* and in the intabulations of their contemporaries. I argue that intabulations can offer a glimpse into how composers might adhere to their priorities concerning counterpoint and *musica ficta* in their original compositions. From Genov's analysis, we can extrapolate that Neusidler's approach towards *musica ficta* may fall more closely in adherence with Lowinsky's parameters governing *causa necessitas* and *causa pulchritudinis*. Rather than abiding by Urquhart's strict adherence to the horizontal line, i.e., the allowance of cross-relations for the sake of voice-leading, Genov contends that Neusidler preserves the *mi-contra-fa* and *fa-super-la* rules and compromises melodic beauty to avoid vertical dissonances. Neusidler, as the intabulator, is claiming Urquhart's role of "all-knowing musician" rather than assuming the role of sight-singing vocalist. Does Neusidler write cadential structures that preserve the *cantizans-tenorizans* inflections dictated by counterpoint rules, or does his cadential writing prioritize vertical coherence at the expense of horizontal inflection? If Neusidler subverts the contrapuntal cadential paradigms, what is the nature of the vertical coherence he substitutes? How does this vertical coherence relate to the bass-triadic formulae governing cadential writing in common practice tonality? Suppose Neusidler's cadential writing resembles bass motion and triadic progressions comparable to *subdominant-to-dominant-to-tonic* or *dominant-to-tonic* harmonic progressions found

later. In that case, it is reasonable to claim that Neusidler may have influenced the shift towards bass-triadic writing in the subsequent lute traditions—especially given his historical relationship and proximity to lutenists as influential as John Dowland and Jakub Reys.

Chapter 4 A Case for Analyzing Vertical Structures

Analytical Philosophy

Formulating an analytical lens through which to view music from the sixteenth century requires contention with the competing ideals of "modalism." Modalism describes music by the underlying linear features defined by mode, whereas "tonalism" describes music by its ability to emphasize a pitch center, typically through vertical, harmonic structures, which can often resemble Schenkerian analysis. Benito Rivera contends that "the issues that have been occupying scholars of Renaissance theory may be summed up in three interrelated questions: To what extent can we rely on early theoretical treatises to teach us about the structural design of Renaissance music? How profitable can modern systems of analysis be applied to early music? What real influence did modal theory bring to bear on the actual practice of musical composition?"[107] While it is outside the scope of my study to make an objective claim on any of Rivera's questions, investigating them may provide insights into an appropriate methodology that will both assess the Melchior Neusidler's prioritization of vertical coherence at cadence points and avoid an anachronistic analytical approach.

[107] Rivera, "Studies in Analysis and History of Theory," 24.

To what extent can we rely on early theoretical treatises to teach us about the structural design of Renaissance music?

Scholarship such as Bernhard Meier's *The Modes of Classical Polyphony*, Karol Berger's *Musica Ficta*, or several studies by Benito Rivera, for example, suggest that analytical abstractions in treatises written by sixteenth-century theorists offer a lens into thought held contemporaneously with sixteenth-century compositional practices. The first issue in the efficacy of making abstract claims from reading sixteenth-century theory treatises is that not all contemporaneous theorists agree on what structures are most important, or even present, in sixteenth-century music. Karol Berger claims that "though sixteenth-century theorists will not tell us how to evaluate the tonal coherence of a composition, they will tell us which kinds of pitch events were heard and understood by their contemporaries as belonging together in a single work and which were not." Berger concludes that "sixteenth-century modal theory as applied to polyphonic music will undoubtedly provide us, and actually already has provided us with the best insight into the ear's understanding of coherence."[108] In contrast, Bonnie Blackburn claims that The New *Harvard Dictionary of Music* definition of harmony: "The relationship of tones considered as they sound simultaneously, and the ways such relationships are organized in time; also a particular collection of pitches sounded simultaneously, termed a chord" is a definition that "would be comprehensible to a fifteenth-century theorist…[despite the fact] that the terminology would not," which she defends by introducing "evidence from fifteenth-century theorists that the concept did exist, and there were various ways to

[108] Karol Berger, "Tonality and Atonality in the Prologue to Orlando di Lasso's 'Prophetiae Sibyllarum:' Some Methodological Problems in Analysis of Sixteenth-Century Music," *The Musical Quarterly*, Vol. 66, No. 4 (Oct. 1980): 487.

describe a chord."[109] The notions that fifteenth- and sixteenth-century composition practices could be defined by modal theory or chordal theory are not mutually exclusive claims. When arguing which "best defines" sixteenth-century compositional practices, we must select theorists who advocate one lens or the other or who advocate for both.

Further, Benito Rivera distinguished the etymological purpose behind sixteenth-century theory treatises as defined by two camps of scholars: "Those who contend that the treatises were designed for beginners or at best for students still in their formative years," which means that the treatises may not adequately define compositional practices, and "those who insist that the treatises do reveal a basic conception of the music, shared by students and professionals alike."[110] Even if we can contend with the fact that making an absolute claim on modal or tonal theory could be argued through an exploration into sixteenth-century theory treatises, we must then address the fact that an overwhelming majority of treatises offer theoretical, not compositional, directives.

Peter Schubert questions the ability of modern scholars to interpret theoretical treatises accurately: "Are writings contemporaneous with a given repertoire privileged for the analysis of that repertoire? What is the nature of that privilege? [if] the music has been misread for so long, how can they be sure that the treatises can be read correctly?"[111] Schubert offers a retort to the claim made by Robert Luoma, who said that "at present the shelves in our music libraries are sagging under the weight of writings

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[109] Bonnie J. Blackburn, "The Dispute about Harmony c. 1500 and the Creation of a New Style," Ed. Anne-Emmanuelle Ceulemans and Bonnie J. Blackburn, *Théorie et analyse musicales, 1450-1650, Actes du colloque international, Louvain-la-Neuve, 23-25 septembre 1999* (2001): 2-3.

[110] Rivera, "Studies in Analysis and History of Theory," 25.

[111] Peter Schubert, "Authentic Analysis," *The Journal of Musicology*, Vol. 12, No. 1 (Winter, 1994): 4.

viewing sixteenth-century music from a modern angle…they are loaded with analyses which would not be understood by sixteenth-century musicians," by stating that scholars would instead "basically recreate Zarlino, à la Pierre Menard."[112] Schubert provides a relevant excerpt from Jorge Luis Borge's story, "Pierre Menard, Author of Don Quixote," about a French writer living in the early twentieth century who tries to 'write' Don Quixote:

> The initial method he conceived was relatively simple: to know Spanish well, to re-embrace the Catholic faith, to fight against Moors and Turks, to forget European history between 1602 and 1918, and to *be* Miguel de Cervantes. Pierre Menard studied this procedure…but rejected it as too easy…To be, in some way, Cervantes and to arrive at *Don Quixote* seemed to him less arduous—and consequently less interesting—than to continue being Pierre Menard and to arrive at *Don Quix*ote through the experiences of Pierre Menard.[113]

Schubert offers another anecdote from Thor Heyerdahl, who "Set out to prove that prehistoric Incas could have sailed from Peru to Polynesia on a balsa raft:"

> We did not mean to eat aged llama flesh or dried kumara potatoes on our trip, for we were not making it to prove that we had once been Indians ourselves. Our intention was to test the performance and quality of the Inca raft, its seaworthiness and loading capacity, and see whether the elements would really propel it across the sea to Polynesia with its crew still on board.[114]

Finally, Schubert cites Thomas Christensen, who "treats the problems of the 'presentist' vs. the historicist' in music theory and concludes by proposing a middle ground:"

> It is in the mutually defining relation between the past and present that the hermeneutic process of dialogue can take place…By means of the hermeneutic circle, we see that real historical interpretation involves neither the domination of the historian over the past nor his submission to it. Rather it occurs by means of a dialogue carried on through the pathway of

[112] Schubert, "Authentic Analysis," 10-11.

[113] Schubert, "Authentic Analysis," 11.

[114] Schubert, "Authentic Analysis," 12.

> tradition…By virtue of the foliations of tradition and community of language that connect us to the past, a text can still have a common meaning for us.[115]

Schubert concludes his paper by claiming that "historical evidence in the analysis of early music is privileged only in that it provides a backdrop that happens to be chronologically consistent with the music whose portrait is being painted…It has been dusted off and may freshen up the music for us; it may inspire an idea for the portrait, and it gives local color and a 'feel' for the period, but it has no meaning except that which we give it by its specific arrangement in the painting."[116] The crux of Schubert's argument has nothing to do with the efficacy of a study built around agreeable theory treatises or the conflation of didactic texts to compositional practice but with the inability of scholars to separate themselves from their respective traditions. The premise that one can interpret a sixteenth-century composition through the lens of sixteenth-century theory treatises is doomed to fail on the grounds that we cannot interpret and apply sixteenth-century theory directives to analysis in the same manner that a sixteenth-century theorist could analyze sixteenth-century compositional practices.

How profitable can modern systems of analysis be applied to early music?

One major criticism levied against Renaissance music scholars who analyze sixteenth-century compositional practices through what David Hamrick claims "follows the scarlet thread of tonality through various regions and genres, regardless of verifiable

[115] Schubert, "Authentic Analysis," 15.

[116] Schubert, "Authentic Analysis," 18.

historical connections."[117]Aligning with Hamrick's sentiment, Harold Powers argues that "any evolutionist model of a historical succession from modality to tonality…fails on two cardinal points: as the sixteenth century wore on interest in and evidence for modality of any kind in the polyphonic repertory increased rather than lessened; the major composers of the second half of the century, notably Palestrina and Lasso, followed the old system of eight church modes when they followed any modal system at all."[118] Powers does not argue against the notion of applying modern analytical techniques but distinguishes them as *etic* (*a posteriori*) rather than *emic* (*a priori*) procedures and states that "any question as to how or whether 'modality' evolved into 'tonality' is therefore really a non-question, since they are of different orders."[119] Powers contends that "in this evolution, from etic sixteenth-century tonal type to etic eighteenth-century tonality, emic Renaissance modality can play no direct part, however indispensable our proper understanding of it may be to our proper understanding of polyphonic music in the Renaissance."[120] Leeman Perkins argues that it is possible to view "the theoretical apparatus of traditional tonality…[as] a truly radical reinterpretation and rectification of the conventions of harmonic usage…[out of] conventions that came to be firmly established…in the vocal polyphony of the fifteenth and sixteenth centuries"[121] but that it is significant to note the

[117] David Russell Hamrick, "Cadential Syntax and Mode in the Sixteenth-Century Motet: A Theory of Compositional Process and Structure From Gallus Dressler's *Praecepta Musicae Poeticae*," (PhD. Diss., University of North Texas, 1996), 20.

[118] Harold S Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," Journal of the American Musicological Society, Vol. 34, No. 3 (Autumn, 1981): 468.

[119] Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 468.

[120] Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 470.

[121] Leeman L. Perkins, "Mode Structure in the Masses of Josquin," *Journal of the American Musicological Society* Vol. 26, No. 2 (Summer 1973): 190.

distinction "between the conceptual and compositional process by which the composer worked in the fifteenth or sixteenth century, on the one hand…[and] the degree to which the results will lend themselves…to a reinterpretation in tonal terms."[122] Perkins concludes that "in the musical conception of the eighteenth century, harmony was held to govern musical structures on all levels, while in that of the fifteenth and sixteenth centuries, the possibilities for vertical combinations were…subordinate to the character and direction of the melodic motion."[123] Don Randel prefaces his argument by noting that "the term 'triadic tonality' has a generally accepted meaning with respect to musical compositions dating from around the beginning of the eighteenth century until the present day…[and] if in a given composition we observe enough of these properties, we then decide to apply the term to this new composition too…[but] there will…be widespread differences of opinion over just which properties are necessary and sufficient."[124] Randel retorts, "surely we are not obliged to hold that none of the features of triadic tonality can be present in a composition unless all are present."[125] The discussion need not be centered around whether the modal system "evolved" into the tonal system but whether composers, who seemingly considered modality as the systematic basis for their compositions, created, whether deliberately or incidentally, vertical structures that resemble and potentially inform later tonal practice. It is also worth noting that we need not wait until tonality is the *modus operandi* held by some majority of composers to analyze vertical structures as resembling triadic tonality, but only that we need to

[122] Perkins, "Mode Structure in the Masses of Josquin," 191.

[123] Perkins, "Mode Structure in the Masses of Josquin," 196.

[124] Don M. Randel, "Emerging Triadic Tonality in the Fifteenth Century," *The Musical Quarterly*, Vol. 57, No. 1 (Jan. 1971): 73.

[125] Randel, "Emerging Triadic Tonality in the Fifteenth Century," 76.

demonstrate that some faction of sixteenth-century composers may have been departing from the modally-driven, imitative, linearly-focused, vocal polyphony towards something triadic and vertically-conceived in nature—that is, we need not make a claim on the sixteenth-century musical tradition, as a whole, but rather the compositional practices employed by Melchior Neusidler and those he influenced.

Randel's notion that music can display elements of tonality without being entirely governed by tonal principles contrasts Hamrick's claim that Saul Novak conflates V-I motion and cadences in Josquin to an "expression of tonality" but that, though "the existence of structures resembling V-I cadences is indisputable…their existence, alone, does not equate to tonality…[and] the long-range triad projection, a nominally Schenkerian idea, does relate interestingly to Renaissance cadence-tone theory, but nonetheless does not account for the greater part of the musical events—the uncharted regions between cadences."[126] Hamrick concludes that "any tonality-based approach to Renaissance analysis seems fated either to isolate particular aspects without addressing the whole, or to address the whole in such general terms as to become something other than tonality-based."[127] Randel does surmise that "the only historically justified interpretation of a composition is that of the composer himself…[which means] that these cadences are not V-I because the composers did not think of them in that way," but notes that "operating under such a principle, we would never be able to employ any new concepts in our discussions of the past…[and] how can we say that one cadence is a V-I

[126] Hamrick, "Cadential Syntax and Mode in the Sixteenth-Century Motet," 23.

[127] Hamrick, "Cadential Syntax and Mode in the Sixteenth-Century Motet," 28.

and another is not when they are indistinguishable in the score?"[128] Luca Bruno defends his application of Schenkerian analysis to sixteenth-century music by noting that "in sixteenth-century repertories, what differs most from 'common-practice' tonal music are the elaborative procedures and the syntactical functions that create their actual 'tonal' space…[and] aspects of vertical as well as linear elaboration of a scalar system clearly appear in polyphonic music well before the eighteenth century."[129] Again, we arrive at Power's distinction between the modal structures, which are *emic*, and the tonal observations, which are *etic*. How closely a composition must resemble tonality before we describe the music as "tonal" is mistaking the premise of describing analytical features found in the music—we are not making the claim that Melchior Neusidler composed tonally, but instead that he prioritized vertical structures, *a priori*, which resulted in a resemblance between his cadential writing, and tonal cadences, *a posteriori*. It is also important to note that "the space between cadences" in Neusidler's music lends itself to triadic analysis, but not tonal analysis, in the Schenkerian sense of tonic prolongation. However, we are not claiming that Neusidler is writing tonally, so this observation does not contradict the resemblance between his cadential writing and the cadential writing of succeeding tonal composers.

[128] Randel, "Emerging Triadic Tonality in the Fifteenth Century," 76.

[129] Luca Bruno, "Chapter Three: Toward a Theory of Harmony in the Renaissance: Historical-Analytical Inquiry into Harmonically-Oriented Genres of Sixteenth-Century Secular Polyphony," in *Histories and Narratives of Music Analysis*, Ed. Miloš Zatkalik, Milena Medić, and Denis Collins (Cambridge: Cambridge Scholars Publishing, 2013), 6.

What real influence did modal theory bring to bear on the actual practice of musical composition?

There is no question that analyses depicting modality and its relationship to sixteenth-century theoretical discourse are abundant. The question of whether modality informed compositional practice in the sixteenth century is an *emic* question typically supported by *etic* evidence. Did modality inform how a sixteenth-century composer wrote their music? If so, did modality govern compositional structure, or did modality inform how sixteenth-century theorists categorized music? Hamrick writes that "it would be hard to imagine a composer not writing with a mode in mind; it was necessary, after all, to select starting pitches, but qualifies that "being 'in' one mode and not another caused by specific compositional choices is a different matter."[130] Perkins is less cautious when it comes to defining modality as a pre-compositional feature that governs compositional structure:

> [The quantity of contemporaneous theory treatises centered on modal theory coincides with the trend that] musicians of the period turned more and more to modal theory and its embodiment in the chant in a search for principles of order and coherence capable of binding together their more extensive compositions…In the same sense that our notions of 'tonality' are grounded in the musical repertories of the eighteenth and nineteenth centuries, so were the fifteenth- and sixteenth-century concepts of 'modality' rooted in and shaped by the enormous corpus of liturgical melodies that formed the daily fare of the musicians of that period.[131]

Powers claims that the conflation of "modality as a theory" to "modality of compositional practice" is not necessarily supported by contemporaneous theory treatises. Powers notes that "even after modal theory had been fully accepted as the way to account for tonal

[130] Hamrick, "Cadential Syntax and Mode in the Sixteenth-Century Motet," 41.

[131] Perkins, "Mode Structure in the Masses of Josquin," 198.

relationships in polyphony, its essential separateness continued to be reflected in the design of music-theoretical treatises…[and] the chief stimulus to the introduction of modal theory into the world of polyphonic musical composition in a fully systematic way was not originally a desire for understanding of long-range tonal relations."[132] Powers contends that "several prior conditions of general musical experience are given as necessary to a composer of polyphony; the last is a knowledge of the modes…[as] a list of eight modes, with a set of affects of medieval origin…[which was the basis for] the highest voice…[which was] a freely invented melody to be composed with not only modal structure but also modal affect in mind."[133] Powers depicts the significance of Pietro Aron's modal theory but explains that:

> Aaron was by no means merely reporting how things were generally understood to be, how music was being composed 'in' modes…[but] rather, he was trying to reconcile a given repertory…with a given system (the eight church modes of Gregorian chant theory)…[and] he was not telling his readers that such-and-such piece had been composed in such-and-such a pre-compositionally selected mode…rather, he was telling them that such-and-such a piece should be assigned to—should be classified under—such-and-such a mode.

Powers concludes that:

> it is only during the very period when modal theory was first beginning self-consciously to be assimilated to polyphony—say from Aaron (1525) to Galus Dressler (1561)—that the repertory itself begins to provide hard evidence of a systematic interest on the part of composers and editors in the question of 'modality'…[and] this evidence…tends to indicate that 'modes' were originally thought of more as a posteriori categories for grouping items in a repertory than a priori pre-compositional choices or assumptions.[134]

[132] Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 430.

[133] Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 431.

[134] Powers, "Tonal Types and Modal Categories in Renaissance Polyphony," 435.

Powers asserts that mode only became a pre-compositional decision because of the advent of modal theory as a theoretical system for categorization, which better represents the late-sixteenth century and not uniformly. Though the liturgical melodies used by composers as a foundation for *cantus firmi* often could be categorized 'in' a mode *a posteriori*, and though the composers composed music onto melodies that can be categorized by mode, does this mean that modality occupied an *emic* role in compositional structure any more than Charles Ives writing atonal or bi-tonal music built on tonal or modal melodies defines Ives as a "tonal" or "modal" composer? The fundamental doctrine that governed compositional pedagogy and practice during the sixteenth century is counterpoint, not modality. Further, Powers' claim that modality became a "self-conscious" foundation for composition in the mid-to-late sixteenth century begs the question: Is all music during the mid-to-late sixteenth century written with this sense of "self-conscious" modal adherence, or is there music that rejects the modality as *a priori* pre-compositional foundation?

The Triad: How Can We Name Vertical Structures?

The premise that Melchior Neusidler prioritized vertical consonances in cadential writing leads to an investigation into appropriately defining vertical structures and functionality in analysis. Traditionally, vertical structures are defined using triadic or harmonic language, which begs the questions: Can we define vertical structures using triadic language when analyzing mid-sixteenth-century lute music? Is there a precedent on how to define the interrelationship between subsequent triads? Were sixteenth-century theorists mentioning triadic structures, and if so, did this theoretical tradition persist?

The Triad

The discussion surrounding the use of triadic language in describing vertical musical phenomena in sixteenth-century compositions is not a discussion on whether triads existed, but rather whether, or not, triads occur incidentally from counterpoint as composers began to write in three-, four-, or even five- and six-voice textures, or if triads existed as pre-compositional objects that composers deliberately incorporated. Berger, when describing Lowinsky's analysis of Lasso's *Prophetiae Sibyllarum*, indicates that "one cannot disagree with Lowinsky's characterization of the texture of the piece as 'triadic,' at least as long as the term remains purely descriptive…consonant 'triads,' almost all of them full, in root position, and with the prime doubled," but he disagrees with the notion that the triads are self-referential, continuing that "the result of this single-mindedly austere texture is that modal species are articulated locally primarily in vertical rather than horizontal terms…[and] since a consonant triad is a harmony consisting of the three most important steps of a mode, each triad emerges locally as the main event defining the mode in its immediate area."[135] Berger concludes his argument by suggesting that "a triadic harmony…has the power of defining a mode by emphasizing its most important steps and consequently, of projecting its own prime as the central point of reference for all intervals, analogous to the final of the mode,"[136] which essentially defines each triad, or set of triads, as some version of a local tonality centered around a temporarily emphasized focal pitch. Randel also hesitates to define a triad as self-referential, inquiring "whether the concept 'triads' adds anything significant to our

[135] Berger, "Tonality and Atonality in the Prologue to Orlando di Lasso's 'Prophetiae Sibyllarum,'" 492-493.

[136] Berger, "Tonality and Atonality in the Prologue to Orlando di Lasso's 'Prophetiae Sibyllarum,'" 493.

discussion;" to which he concludes that "the concept 'triad' adds nothing except a kind of shorthand…[and] the major and minor triads and their inversions happen to be the only structures of more than two pitches which can be derived from our list of [contrapuntal] consonances."[137] Randel holds that triads are a consequence of counterpoint rather than mode, noting that "if we were unable to distinguish major and minor thirds from other kinds of intervals, we could not distinguish major and minor triads from other kinds of triads."[138] Whether we subscribe to Berger's 'mode-defining' triads or Randel's 'counterpoint-resultant' triads, both authors denote 'triad' as a descriptive, rather than prescriptive, measure. We can contend with the challenge of defining a triad as an *emic* feature if, and only if, we can find triads or something resembling triads described *a priori*.

Triadic Progressions

Suppose triads can only be defined by their relationship to either mode or counterpoint but can still be described. In that case, we arrive at the questions: Should we define triads as a compilation of vertical intervals (i.e., C-major denoting the pitch collection C-E-G)? Or can we define triads as interrelated vertical structures? Furthermore, if we can define triads as interrelated vertical structures, should we use Roman numerals (denoting a centralized focal pitch, around which the other structures are defined) or *tonic*, *sub-* or *pre-dominant*, and *dominant* indicators (which suggests an interrelationship between triads predicated upon a linear and hierarchical progression)?

[137] Randel, "Emerging Triadic Tonality in the Fifteenth Century," 79.

[138] Randel, "Emerging Triadic Tonality in the Fifteenth Century," 80.

On one end, Perkins states that Richard Crocker accurately indicates that sixteenth-century treatises "identify the intervals that are considered concordant…distinguish between the perfect and the imperfect consonances, and catalogue dissonances…[and] indicate…the contexts in which each can be appropriately employed and provide rules to regulate movement from one sonority to the next," but argues that "nowhere is there definition of the goals toward which the voices being combined should flow or discussion of the manner in which the direction and termination of internal divisions could be made to relate to the conclusion of a composition to another."[139] To Perkins, sixteenth-century theorists could not designate an interrelationship between sonorities because they do not define the direction or termination of these sonorities. On the other end, Bruno argues that with triadic motion, "what must be thoroughly examined is the function of individual chords and their influence in both local and a broader context…[and] what is usually attributed to the dominant or the subdominant (or pre-dominant) in tonal harmony could instead be attributed to other constructs that possess 'dominant' or 'sub/pre-dominant flavor.'"[140] He continues to define triadic interrelationships by analogy, claiming that composers of the Classical and Romantic eras "more or less consciously, chose to use various means of organizing the musical structure in addition to harmonic construction…keeping the dominant as a means for more local connections to the tonic…[which] can also be said of the Renaissance 7-chord, for example in the music of Guillaume Dufay, Josquin, Willaert,

[139] Perkins, "Mode Structure in the Masses of Josquin," 193.

[140] Bruno, "Toward a Theory of Harmony in the Renaissance," 11-12.

and Orlando di Lasso."[141] Bruno makes the abstractions that, based on his analysis of Willaert's *O dolce vita mia*, he contends that:

> The chord built upon a bass note a whole-step below the tonal center, Arabic numeral 7, seems to retain the 'subdominant' role in its broader significance: the role of composing out the tonal space driving the tonal path away from the 'tonic,' but also foreshadowing the return to a tonal center in concomitance with a modulation…in contrast, the chord build upon a bass note a fifth above the tonal center seems to perform the tonal path away from and back to the tonic in a narrower span of music.[142]

The distinction between the positions expressed by Perkins and Bruno is not so dissimilar to our discussion concerning triad labeling. Perkins contends that it is unlikely that an organization of triadic ordering or function was conceived *a priori* by sixteenth-century composers due to the lack of theoretical precedent. However, Bruno is not making the *emic* claim that the triadic function was a pre-compositional intention incorporated by Willaert, but rather the *etic* claim that Willaert's triadic writing can be described by analogy to tonal indicators. If I am making the claim that elements of Melchior Neusidler's writing resemble, and likely influence, later tonal composers—whose compositions can appropriately be analyzed through triadic function and hierarchies—using an analogy to functional indicators when describing Neusidler's cadential writing seems appropriate.

The Theoretical History of the Triad

Though theoretical discourse during the fifteenth and sixteenth centuries was relegated mainly to the topics of counterpoint and, to a lesser degree, modality, music theorists have discussed vertical structures resembling triads

[141] Bruno, "Toward a Theory of Harmony in the Renaissance," 12.

[142] Bruno, "Toward a Theory of Harmony in the Renaissance," 13.

since the late fifteenth century. Making an expository *emic* claim on Melchior Neusidler's interaction with triad-resembling structures may not be possible. However, it is worth noting that their observation predates Neusidler and that they are a facet of his music, whether the consequence of counterpoint or deliberate incorporation. The first theoretical treatises that describe triad-resembling structures were Gafori's *Practica Musicae* (1496) and Guillermus de Podio's *Ars musicorum* (1495), in which they do so through circumlocution. Gafori describes triads as:

> The fifth, produced by *sesquialtera* (3:2) proportion from an integral *diapente* (interval of a fifth) of three tones and one semitone, takes a concordant middle note together with its outer notes. For it is a combination of two simple primary intervals, namely, a minor third and a major third, ensuring a concordant mediation. Thus it renders the concord of the two outlying notes more pleasing, since by some kind of imitation it corresponds to a harmonic mediation.[143]

Guillermus de Podio creates a distinction between what we now call a 'major triad' and a "minor triad:'

> But if the unchanging [perfect] fifth is built together with its mediating third, then this third, being in the middle of the outer notes of the fifth, will necessarily be twofold and will vary in its quantitative nature according to the position of the intervals. If the major third lies in the lower part while the minor third is above, for example, C-E-G, or G-B-D, then all these notes, taken simultaneously, will produce the best consonance, **as is clearly manifest in instrumental music**. For in this way the imperfect interval is next to the upper note of the perfect, as is fitting. But if on the other hand the distribution is as follows: D-F-A, then the consonance shall not be as good. For the minor third shall occupy the lower and the major third the upper position, and thus it will be unnecessarily further removed from the perfection of the fifth. Therefore the middle note, namely, F, must be

[143] Benito V. Rivera, "Harmonic Theory in Musical Treatises of the Late Fifteenth and Early Sixteenth Centuries," *Music Theory Spectrum*, Vol. 1 (Spring, 1979): 93.

> changed to the chromatic genus (F-sharp), so that it will become closer to the fifth by changing the major imperfect [third] to minor.[144]

Though it is not possible to make the claim that triads have, in 1496, usurped the role of the dyad in defining vertical structures in music, Benito Rivera notes that "the handful of forward-looking treatises that we have considered constitute a minority in theoretical literature…[but] their very existence is sufficient proof of an underlying current of harmonic innovation which we know eventually achieved recognition in the course of history."[145]

Bonnie Blackburn makes a remarkable claim that Giovanni Spataro, in his treatise titled *Bartolomei Ramis honesta defensio* (1491), uses the term 'harmony' as "not talking merely about harmony but functional harmony, that is, the propensity of chords through the artful use of dissonance, to resolve in certain ways." [146] Spataro argues against Niccolò Burzio's definition of harmony, which claims that "a chord of two notes is a consonance; chords of three or more notes are called harmony" is incorrect:

> According to you, when one sings or plays a work for two voices, it is not harmony but consonance, unless, as you say, it has three of four voices. This is a patent falsehood and in this you show the limit of your knowledge, because you ought to know that consonance is only the consideration of the interval between a low and a high note and vice versa, but it is called harmony when considering the process they make by concording together, because if they do not move, even if there are four voices, it is not called harmony but consonances…Let harmony be defined as the mixture of consonances and dissonances in a composition, because it is quite true that good composers exert themselves to make dissonances marvelously consonant in harmony. But I don't want others to understand that which you the ignoramus understand, that is that these are the major and minor sixth and their compounds because these sound very good by themselves. But I

[144] Rivera, "Harmonic Theory," 95.

[145] Rivera, "Harmonic Theory," 95.

[146] Blackburn, "The Dispute about Harmony c. 1500 and the Creation of a New Style," 35.

> mean the tone and semitone and the fourth and tritone and major and minor sevenths. That is called good mixture and good harmony.[147]

The notion that a four-voice structure is not harmonic, but harmony defines the progression of consonances, which are artfully juxtaposed against dissonances, does not explicitly define harmony in the eighteenth-century sense. However, we see harmony defined as a deliberately *emic* compositional ordering of vertical structures.

After Melchior Neusidler's publication of *Il primo [-secondo] libro*, we see a paradigmatic shift in the way triad-resembling structures become defined as triads. In Johannes Avianius's *Isagoge* (1581), he seems to describe triadic inversion:

> Given the Basis A B C D E F G, to build a perfect harmony of three notes. If counting from the basis one omits the second, fourth, sixth, and seventh, and employs the remaining notes, the harmony will be perfect…Given the basis A B C D E F G, to build an imperfect harmony. Omit the second, fourth, fifth, and seventh notes, and from the remaining three an imperfect harmony will arise.[148]

Rivera notes that "perhaps for the first time in the history of music theory the three notes of the triad receive the labels: *basis*, *media*, and *summa*…[which] marks the beginning of a trend which leads towards a more codified concept of triadic structure."[149] Rivera leads us through the codification of triadic inversions by citing Otto Siefried Harnisch's *Artis musicae delineatio* (1608), wherein "he made a very brief reference to the concept of triadic inversion…[when] he observes that in an 'imperfect composite consonance' the basis yields its place to the *sonus medius*; and if the *sonus medius* yields to the next note

[147] Blackburn, "The Dispute about Harmony c. 1500 and the Creation of a New Style," 34-35.

[148] Benito V. Rivera, "The 'Isagoge' (1581) of Johannes Avianius: An Early Formulation of Triadic Theory," *Journal of Music Theory*, Vol. 22, No. 1 (Spring, 1978): 50 & 53.

[149] Rivera, "The 'Isagoge' (1581) of Johannes Avianius," 54.

above it, a dissonance results," about which Rivera contents "one can see, therefore, that for Harnisch the term basis no longer pertains to the lowest sounding note of any chord but has become synonymous with the modern term root."[150] Finally, Rivera argues that the triad becomes "a unified whole capable of various arrangements and inversions that do not alter its basic identity"[151] in Johannes Lippius's *Musical Synopsis* (1610 & 1612), wherein: "The triad is a complete harmonic unit; It can be inverted and dispersed; [and] Its members can be doubled."[152]

Suppose we accept the premise that practice tends to precede theory. In that case, we can observe a shift in triadic theory, which closely aligns with the emphasis on vertical structures in contemporaneous lute treatises and begin to observe that compositional practice in the mid-sixteenth century seems to have cultivated a paradigmatic shift in the way that lutenists and theorists were conceptualizing music. The driving force behind the compositional desire to organize vertical coherence seems to coincide with two major factors: Composers have increased the number of individual musical voices in compositional textures, creating a need to address vertical coherence; The tenor-cantus pairing the held primacy over the supportive bassus and altus voices appears to be breaking down, in favor of a bassus-cantus hierarchy.

[150] Rivera, "The 'Isagoge' (1581) of Johannes Avianius," 59-60.

[151] Rivera, "The 'Isagoge' (1581) of Johannes Avianius," 60.

[152] Benito V. Rivera, "The Seventeenth-Century Theory of Triadic Generation and Invertibility and Its Application in Contemporaneous Rules of Composition," *Music Theory Spectrum*, Vol. 6 (Spring, 1984): 64.

The Bassus

Sol-Ut Cadences: Deliberate or Incidental?

A conflicting narrative exists regarding cadential structure as compositional textures expanded to include a register below the tenor. Many Renaissance scholars believe that, despite the addition of the bassus, the cadential formulae still center around the *cantizans* and *tenorizans* motion, defining the contrapuntal expansion of a major sixth to an octave. Others propose that the expansion of music to a four-voice texture eroded the supremacy of the tenor-cantus pair in favor of the eventual primacy of the bassus and the bassus-cantus pair.

Perkins notes that "some scholars have attached a good deal of significance to the manner in which a third and fourth voice came to be treated in the cadential formulas…it is this feature of cadential formations that seems to point to the beginnings of 'tonal' harmonic thinking…[implying] functional relationships of tonic, dominant, and sub-dominant," but describes the bass progressions as 'incidental.'[153] Judd contends that in sacred vocal polyphony from around 1500, "the bassus…is a complement…, and not a structural determinant: it is generated as part of the counterpoint rather than a harmonic source that directs and shapes that counterpoint."[154] Urquhart initially claims that "bass motion of these sort (*sol-ut*) is by no means a necessary aspect of the final cadence when the bass can continue its motion, but is merely one of a number of possible counterpoints to the essential structural pair of voices (*cantizans-tenorizans*),"[155] but later in his

[153] Perkins, "Mode Structure in the Masses of Josquin," 195-196.

[154] Cristal Collins Judd, "Modal Types and 'Ut, Re, Mi' Tonalities: Tonal Coherence in Sacred Vocal Polyphony from about 1500," *Journal of the American Musicological Society* Vol. 45, No. 3 (Autumn 1992): 439.

[155] Urquhart, "Contrapuntal and Cadential Aspects," 201.

description of cadences by harmonic character, "in cadences for four or more voices, the bass tends to move to the fifth scale-degree below the *tenorizans* just before the framework pair moves to the final on 1…We can consider this approach in harmonic terms for the purpose of analysis, as the 'penultimate harmony'…It is no surprise to learn that the most common form for this penultimate harmony in late fifteenth- and sixteenth century music is a triad on 5."[156] Steven Krantz initially notes the difficulty in divorcing our perception of bass motion in cadences from "tonal cadences and tonal harmony in general," explaining that Renaissance cadences are "dictated by external environment than by internal structure," and claims that the effect of the bass moving by a leap of a fourth or a fifth at cadences:

> Is not the same as in tonal music…[but] still, the leaping bass motion found at the end of various homophonically set text phrases, and similar articulations in which the two-voice framework (*cantizans-tenorizans*) is absent or obscured, is sufficient to demonstrate that the effect exists and that it may be of some use in identifying cadences even in works from the beginning of the sixteenth century and earlier.[157]

Finally, Bernhard Meier notes the similarity between "the leap of a fourth or a fifth present in a cadence" and cadential motion in "the chord progression V-I" and claims that the use of the *basizans* as the lowest voice, moving by ascending fourth or descending fifth, is "almost the only type used for the final cadence of a whole work," which he indicates Gallus Dressler calls "the 'perfect' way to form a cadence," and Joachim Burmeister refers to as "the 'best and most perfect' way to cadence."[158]

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[156] Urquhart, "Contrapuntal and Cadential Aspects," 234.

[157] Steven Charles Krantz, "Rhetorical and structural functions of mode in selected motets of Josquin des Prez. (Volumes I and II)" (PhD. Diss., University of Minnesota, 1989), 116.

[158] Bernhard Meier, *The Modes of Classical Polyphony*, trans. Ellen S. Beebe (New York: Broude Brothers Limited, 1988), 93.

Whether the bass motion of *sol-ut* is an *emic*, pre-compositional facet of cadential writing during the sixteenth century or an *etic* observation of a phenomenon generated out of compositional necessity only defines whether we subscribe to the narrative that *sol-ut* bass motion indicates the eventual primacy of the bass-soprano pair in eighteenth-century compositional structures, or that it is an unintended consequence of a fundamentally distinct modal tradition. Suppose cadential structures were commonly designated through counterpoint formulae, and the formulae mainly were comprised of *sol-ut* bass motion, and the cadential formulae lay indistinguishable from V-I cadence structures in eighteenth-century music. Then, from an *etic* analysis, it appears reasonable to investigate influence, whether intended by sixteenth-century composers or not. The only cases that the absence of an *emic* argument excludes are: That sixteenth-century composers established *sol-ut* motion in the bass as a means of deliberately elevating the primacy of the bass voice. Since this study investigates Melchior Neusidler's cadential writing as a means toward understanding the primacy of the bass and increasingly triadic and tonal practices of the subsequent generation of lutenists, an *etic*, *a posteriori* interpretation does not contradict the notion that Neusidler may have intended neither bass primacy nor tonality.

A History Depicting the Rise of Bass Primacy

An investigation into sixteenth-century lute instructions is only one place to observe the bass gaining primacy over the tenor in favor of the bass-soprano hierarchy governing eighteenth-century music. While analyzing madrigals written by Jacques Arcadelt, Rivera concludes that "if we continue along this path of analysis, we find that all the homophonic, non-imitative sections in Arcadelt's *First Book of Madrigals* are built

on a soprano-bass rather than a soprano-tenor framework."[159] Rivera's argument stems from Arcadelt's adoption of 'concomitant sixths' between the soprano and tenor, which is only interrupted when the sixths would create a counterpoint issue with the established bass-voice, thus demonstrating the priority given to the bass at the expense of an 'awkward' fifth that replaces the expected sixth. Rivera concludes his study by claiming that Arcadelt's madrigals include "the two-voice framework, which normally resides in the soprano and bass…[upon which] the harmony is made complete by what we have termed the 'concomitant sixths'…[wherein] we step beyond the threshold of intervallic counterpoint and enter the complex realm of the three-note chord," about which Rivera claims that "the Renaissance musicians may not have had an abstract, sophisticated theory of chordal harmony, but the compositional process that we have outlined in this study seems to suggest that he must have heard chordal sonorities as unified elements."[160] Here, Rivera is not only making the claim that Arcadelt prioritized the bass voice but also that prioritizing the bass voice leads to implicitly harmonic structures with his general adherence to 'concomitant sixths,' which suggests that the bass-soprano framework implicitly leads to an increased organization surrounding vertical structures, whether, or not, this was an intentional outcome. Recall that Neusidler intabulated several of Aracdelt's pieces and would have been aware of his compositional process.

Rivera demonstrates that the primacy of the bass also can be observed in late fifteenth- and early sixteenth-century theory treatises. Rivera contends that in Simon de

[159] Benito V. Rivera, "The Two-Voice Framework and Its Harmonization in Arcadelt's First Book of Madrigals," *Music Analysis*, Vol. 6, No. 1/2 (Mar. – Jul. 1987): 64.

[160] Rivera, "The Two-Voice Framework," 81-82.

Quercu's *Opusculum musices* (1516), Johannes Singer's *Ein kurtzer ausszug der Music/den jungen die singen und auff den intrumenten lernen wöllen gantz nutzlich* (1531), and Ornithoparchus's *Necessarium erit artis huius Tyronibus*…(1517), the counterpoint examples incorporate the establishment of intervals from the bass or the tenor and bass, about which Rivera claims:

> After centuries of dependence on the tenor and discant, could never rid itself of its past history, even after it was emancipated…it continued to proceed in the same disjunct motion as before…because of these peculiar situation, every bass-tenor duet necessarily implied the harmonizing notes of a discant, just as later, every bass-discant duet necessarily implied the harmonizing notes of a tenor…[or] in other words, sixteenth-century bass-oriented music is by force of its ancestry implicitly triadic…[and the] dominant-to-tonic leap in the bass normally implies a dominant-tonic harmonic progression.[161]

Rivera also notes that "in non-theoretical books the quantity of early sixteenth-century bass-tenor *bicinia* is even greater," where he cites "outstanding examples [which] occur in the tablature books of [Hans] Newsidler, Judenkünig, [and] Hans Gerle."[162] Given the relationship between Newsidler, Judenkünig, Gerle, and Neusidler, it does not seem unreasonable to assume that he would have taken influence in, or at least been aware of, a shift towards bass-centric writing.

Observing theoretical treatises written after Neusidler, we can observe, as we did with the triad, a codification of the relationship between the bass and harmonic practice. Rivera highlights the governance of the bass over harmonic structure in Avianius's *Isagoge* extracting:

> We call *basis harmoniae* that voice which at any given moment has the lowest note….and since the bass voice can sometimes become silent, it follows that the basis is not always to be found in the same voice…the basis

[161] Rivera, "Harmonic Theory," 91-92.

[162] Rivera, "Harmonic Theory," 91.

> rules the entire harmony and is not ruled by any other. Therefore, no matter which voice sings the basis, no matter how many other voices are omitted, the harmony will be more tolerable [with a basis] that if you had ten or more parts but did not have a basis.[163]

Rivera shows the final codification between the bass and harmonic procedure in a quote from Lippius's Synopsis *musicae novae*:

> The bass, because it must always lay the foundation for the triads, is allowed to proceed slowly by such leaps. In this was various kinds of triads will more elegantly, more easily, and more wonderfully be mixed, combined, and arranged in proper order. Thus also, the upper melodies will be able to flow forth, as it were, with a more natural and more even gait.[164]

Between Avianius and Lippius, we can observe a trajectory between the hierarchy of the *basis* and its "rule over the entire harmony" and a relationship between the bass and the intentional establishment of harmonic progression. There appears to exist a paradigm shift between the early sixteenth-century theorists who are describing bass-centric, and incidentally triadic, music, and music that intentionally organizes triads and the relationships between triads in accordance with a structurally foundational bass voice, which begs the question: What facets of Neusidler's writing exhibit a structurally foundational bass that relates to an organized vertical, triadic structure?

Don Randel's V-I Cadence from Contrapuntal Necessity

Don Randel's article "Emerging Triadic Tonality in the Fifteenth Century" will predicate my analytical approach because he cultivates an *emic*, counterpoint-focused method toward describing triadic and bass-centered cadential practices. Randel begins his argument by summarizing the counterpoint axioms that will govern the parameters of his

[163] Benito V. Rivera, "The 'Isagoge,' "47-48.

[164] Benito V. Rivera, "The Seventeenth-Century Theory," 71.

analysis: “Every composition must end with a perfect consonance; Contrary motion is to be cultivated, and parallel perfect intervals are to be scrupulously avoided; Finally, a perfect interval should be approached from the nearest imperfect interval; that is, an octave should be approached from a major sixth, and the like.”[165] He begins his discussion by defining that “we may begin by imagining a composition for three voices…[wherein] the goal of the cadence will be a perfect consonance, say an octave with a fifth above the lower pitch.”[166]

After reviewing various options, when we remove the cases where a voice must jump by an octave or the fifth must be omitted, the perfect fifth between C and G can be approached by the nearest imperfect consonance, the major third, by incorporating an F-sharp. Adding an F-sharp avoids any parallel perfect intervals against the *cantizans-tenorizans* pair. We can also harmonize the major sixth with a G, but to avoid a perfect fourth from the *tenorizans*, a dissonance, we would need to place the G below the D and jump the octave, which is to say, the F-sharp is the preferred option.

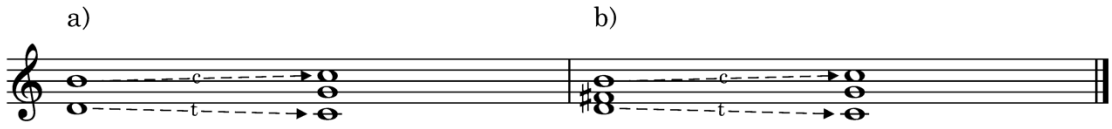

Figure 4.1 A reduction of Randel's chart showing a) the cantizans-tenorizans framework and b) the resultant three-voice confinal and final.

[165] Randel, “Emerging Triadic Tonality in the Fifteenth Century,” 77.

[166] Randel, “Emerging Triadic Tonality in the Fifteenth Century,” 78.

Randel notes, “if we turn now to the possibilities of cadence in composition for four voices, we shall see that they are even more limited.”[167] Randel notes that “we have already noted that the major sixth can be harmonized with F-sharp and G, but obviously cannot be harmonized with both at once…[considering that] in writing a cadence for four voices, we shall have to double one of the pitches in our first sonority…this eliminates the possibility of using the harmonization with F-sharp , for it would either create parallel perfect intervals or improperly resolve a major-third or major-sixth,” which means that “the only possibility is the harmonization with G, in which we may double the G.”[168]

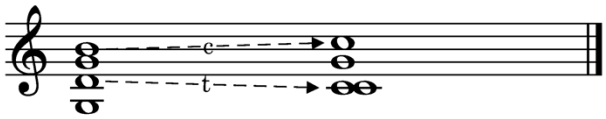

Figure 4.2 Forced bass in four-voice cadence.

With doubling the G, we observe the *sol-ut* motion logically arises from the rules of counterpoint as applied to four voices, and as Randel states, with “cadences which at least look and sound to us like V-I cadences…why may we not call them V-I cadences?”[169] From an *etic* vantage point, there is no issue in naming a cadence as it appears. Afterall, with this study, I, like Pierre Menard, do hope not to forget my language, history, culture, and experience to become Melchior Neusidler. I want to understand why his cadences appear structurally harmonic, and I believe the historical precedent I have established

[167] Randel, “Emerging Triadic Tonality in the Fifteenth Century,” 79.

[168] Randel, “Emerging Triadic Tonality in the Fifteenth Century,” 79.

[169] Randel, “Emerging Triadic Tonality in the Fifteenth Century,” 79.

about the triadic organization and their relationship between triads and the rising primacy of the bass support, at very least, an *etic* investigation into his *fa-sol-ut*, IV-V-I cadences.

Chapter 5 Melchior Neusidler's Bass-Triadic Cadential Schemata

An investigation into the ways Melchior Neusidler prioritizes the bass voice and triadic structures in *Il primo [-secondo] libro* first requires the division of his writing into two groups: polyphonic writing, emblematic of sixteenth-century vocal polyphony and homophonic writing. Neusidler's polyphonic writing generates incidental triadic structures, which arrive because of coinciding lines, whereas, in his homophonic writing, triadic structures appear to be organized intentionally—especially around cadences. Focusing solely on cadential structures in Neusidler's homophonic writing cannot generate results that represent his entire oeuvre. However, it can provide insights into structures that may have influenced subsequent composers. This chapter will be broken into two main sections: An analysis of 125 cadences found in homophonic sections of Neusidler's original compositions found in *Il primo [-secondo] libro* based on bass progression, the role of the *cantizans* and *tenorizans*, how Neusidler preserves the triadic third at cadential finals, and a commentary on the nature of the antepenultimate triad; and A look into how Neusidler applies and subverts his bass-triadic schemata through secondary function and deceptive motion.

Bass Motion in Cadences

Recall from Chapter 4 that, according to Benito Rivera, the bass voice is inextricably linked to triadic organization and function. Analyzing the bass motion in 125 of Melchior Neusidler's cadences found in *Il primo [-secondo] libro* leads to a result that expands on Don Randel's observation of V-I motion in late fifteenth-century music. Not

only was *sol-ut* motion present in all but one cadence in Neusidler's homophonic writing, but 78 cadences are all built upon *fa-sol-ut* bass motion. Considering that E-flat, B-flat, D, A, and E are pitch centers that provide small data sets, focusing on the more populated F, C, and G cadences, we can observe an interesting stratification.

Table 5.1 Distribution of bass paradigms between different cadence finals.

	E-flat	B-Flat	F	C	G	D	A	E
Fa-Sol-Ut	0	0	13	21	35	3	1	5
Le/La Sol Ut	0	0	2	9	0	2	1	1
Ut-Sol-Ut	1	4	2	8	1	0	3	1
Sol-Ut	0	1	0	0	0	0	0	0
Re-Sol-Ut	0	0	0	7	1	0	0	0
Re-Ut	0	1	0	1	0	0	0	0
Mi-Sol-Ut	0	0	0	0	2	0	0	0

In Table 5.1, observe that 13 of the 17 cadences on F and 35 of the 39 cadences on G follow *fa-sol-ut* bass motion, but cadences to C are written on *fa sol-ut* bass motion in 21 out of the 46 cases. A more robust comparison can be made if we observe the frequency of bass motion compared to the total number of cadences on a given final.

Table 5.2 Bass paradigm distribution compared to total cadences with a given final.

	E-flat	B-Flat	F	C	G	D	A	E
Fa-Sol-Ut	0.0	0.0	76.5	45.7	89.7	60.0	20.0	71.4
Le/La Sol Ut	0.0	0.0	11.8	19.6	0.0	40.0	20.0	14.3
Ut-Sol-Ut	100.0	66.7	11.8	17.4	2.6	0.0	60.0	14.3
Sol-Ut	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0
Re-Sol-Ut	0.0	0.0	0.0	15.2	2.6	0.0	0.0	0.0
Re-Ut	0.0	16.7	0.0	2.2	0.0	0.0	0.0	0.0
Mi-Sol-Ut	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0

Even though cadences to C built on *fa-sol-ut* bass motion represent the most significant frequency when compared to other bass patterns, only 45.7% of the cadences use this motion when compared to 76.5% and 89.7% represented cadences to F and G,

respectively. After *fa-sol-ut* bass motion, cadences to C are built on *le/la-sol-ut*, *ut-sol-ut*, and *re-sol-ut* bass motion with approximately equal frequency distribution. Why would Neusidler subvert his *fa-sol-ut* bass paradigm only on cadences to C? Consider the tuning of the lute: G, C, F, A, D, G, from the sixth to first course, and the possibility of using *fa*. Neusidler could write *fa* on the open fourth course, which would require a minor seventh skip back to the open sixth course, should he want to use the lower G-*sol*, which he does occasionally. When Neusidler writes G-*sol* as the open sixth course, he more commonly subverts his paradigm than when he writes G-*sol* on the second fret of the fourth course. With cadences to G, Neusidler can use the open fifth course for C-*fa*, the second fret of the fifth course for D-sol, and finish with either the open sixth course G-*ut* or the second fret of the fourth course G-*ut*. With cadences to F, he can write B-flat-*fa* on the third fret of the sixth course, move to the open fifth course for C-*sol*, and finish on the open fourth course for F-*ut*. Therefore, it is more reasonable to assume that Neusidler prioritized the *fa-sol-ut* bass paradigm underneath cadences but was willing to alter the paradigm to adhere to motivic demands, but more relevantly, demands of the lute.

The *Tenorizans, Cantizans*, and the Triadic Third

To define Neusidler's cadential writing as "triadic" simply because triads describe vertical structures ignores the possibility that triads arrive incidentally. The more salient argument must center on whether Neusidler seems to have written triads intentionally, definable through observing cases where he writes triads when he could otherwise not and instead adhere to the common cadential framework governing his generation: the *tenorizans-cantizans* major sixth to octave, or minor third to unison motion. Neusidler's cadences fall into six main categories: Cadences without the *tenorizans*; Cadences with

both *tenorizans* and *cantizans*; Cadences with a 'delayed' *tenorizans*; Cadences where a doubled, upper *sol* resolves to *mi/me*, while *cantizans* and *tenorizans* are preserved; Cadences with five-voice texture, allowing *re* to resolve to both *ut* and *mi/me*, preserving both the *canztizans-tenorizans* pair and the triadic third; and Cadences with *tenorizans* present, but no *cantizans*. Only in the category "Cadences with both *tenorizans* and *cantizans*" is the triadic third absent. Before investigating the distribution of the six different cadence archetypes, looking closely into those archetypes that juxtapose the standardized *cantizans-tenorizans* framework will be helpful. The figures depicting the various cadence archetypes are not score excerpts but voice-leading diagrams designed to indicate the progression of voices. The subjective nature surrounding the reduction and interpretation of linear relationships is implicit in providing voice-leading diagrams. Additionally, the voice-leading diagrams are not reductions from the original tablature but are from Charles Jacob's critical edition of Neusidler's original music from *Il primo [-secondo] libro* in which Jacobs makes transcription decisions based on a composite reading of subsequent publications of each piece in the collection.

No Tenorizans

In the cadences with no *tenorizans* present, most commonly, *re* will resolve upwards by step to either *mi* or *me*, depending on whether the resultant triad is major or minor, rather than resolve down by step to *ut*. Figure 5.*1* provides three examples wherein the *tenorizans* is omitted in favor of the triadic third.

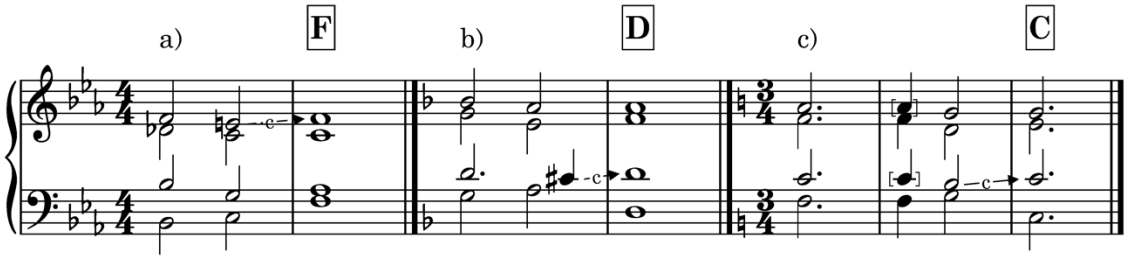

Figure 5.1 Cadences with "no tenorizans" from: a) Ricercar Secondo (Libro Primo) mm. 32-33; b) Ricercar Primo (Libro Primo) mm. 69-70; and Pass'e mezo La Paranzino mm. 77-79.

In 5.1a, the cantus voice preserves standard *cantizans* motion, which mirrors common practice in sixteenth-century vocal polyphony. Neusidler, as is the case in all cadences with a *cantizans* present, inflects E-flat to E-natural to create the subsemitone. Ordinarily, the G in the tenor voice would descend by step to F, but instead, Neusidler resolves up by step to A-flat, adding the triadic third to the final F-minor triad. In 5.1b*,* the *cantizans* is found in the tenor voice where C-sharp resolves up by step to the D final; however, in the altus voice, the E also moves up by step to F rather than following the *tenorizans* motion to D. Finally, in 5.1c. *S*imilarly, the *cantizans* is in the tenor voice, and the D in the altus voice, which would ordinarily resolve to C, resolves instead to E, the triadic third of the C-major triad that concludes the cadence.

Delayed Tenorizans

A slight alteration to the cadences where there is no present *tenorizans* are cadences where there is no *tenorizans* present in the first instantiation of the cadence final, but where the voice that articulates *re-mi/me* motion moves immediately to *ut after that*. When the *tenorizans* are delayed, the triadic third is given priority, but Neusidler does not entirely omit the *cantizans-tenorizans* framework.

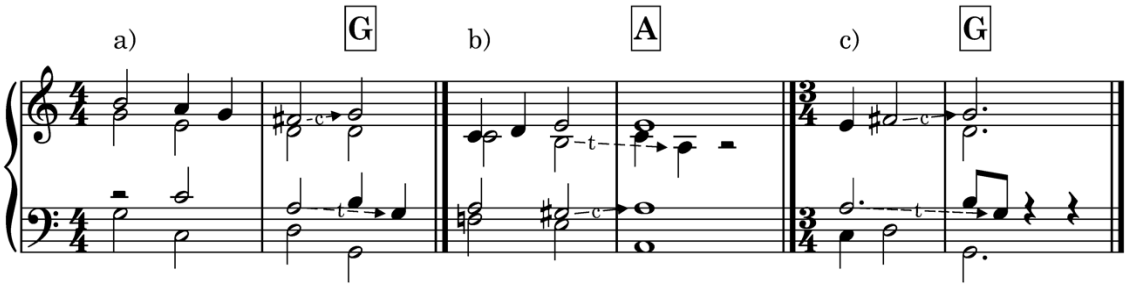

Figure 5.2 Cadences with delayed tenorizans from: a) Recercar Secondo (Libro Secondo) mm. 63-64; b) Recercar Quarto (Libro Secondo) mm. 24-25; and c) Pass'e mezo mm. 56-57.

In 5.2a, the *cantizans* appears, inflected, in the cantus voice. Still, the A in the tenor, which ordinarily would resolve to G, instead first moves up by step to B, forming the triadic third of the G-major triad, then immediately leaps by third down to G, compositely moving down by step. In 5.2b, the *cantizans* is in the tenor voice, while the B resolves up by step to C, forming the triadic third of the A-minor final, before moving to A. Finally, in 5.2c, the *cantizans* is in the cantus voice. In contrast, the A in the tenor voice moves up by step to B before moving to G. Neusidler circumvents the choice between resolving *re* to the mediant, *mi/me,* or the final *ut* by essentially having the voice split. Neusidler could have opted to present the *tenorizans* with the *cantizans* at the onset of the final but instead preferred the vertical sonority.

Sol-Mi to Preserve Tenorizans and Triadic Third

In some cases, Neusidler opts to resolve the *cantizans-tenorizans* framework at the onset of the cadence final but still wants to incorporate the triadic third in a four-voice texture. Since *re* cannot resolve to both *mi/me* and *ut* without expanding the texture, he occasionally moves the doubled *sol* (that is, the *sol* that is not articulating the *sol-ut* motion in the bass) down by step to *mi/me* rather than articulating the triadic fifth in the cadence final. More commonly, composers prioritized ending on *ut* and *sol* rather than incorporating the triadic third when incorporating the *cantizans-tenorizans* framework.

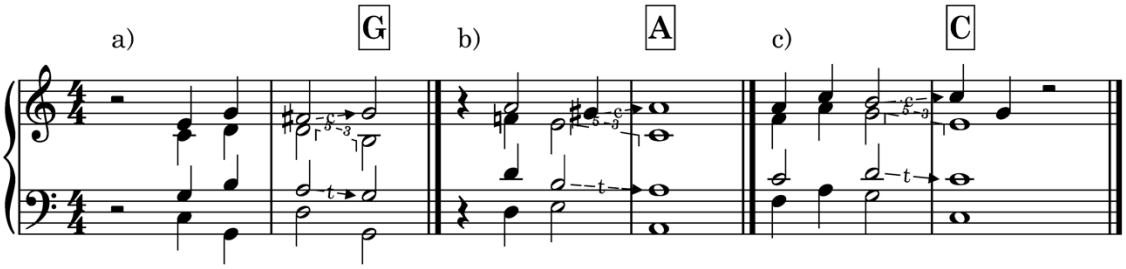

Figure 5.3 Cadences with sol-mi motion, preserving the cantizans-tenorizans framework from: a) Recercar Secondo (Libro Secondo) mm. 17-18; b) Recercar Quarto (Libro Secondo) mm. 10-11; and c) Pass'e mezo La Paranzino mm. 23-24.

In 5.3a, the *cantizans-tenorizans* pair is found between the cantus and tenor voices, but the altus D does not maintain to form the *ut-sol* relationship in the final but rather descends by third to *mi*. In 5.3b, the *cantizans-tenorizans* pair is found between the cantus and tenor, but the E in the penultimate sonority descends by a third to the triadic third. Finally, in 5.3c, the *cantizans-tenorizans* framework can again be found in the cantus and tenor. Still, the G that moves by step to the triadic third E returns to G, rearticulating to complete the C-major triad. In these examples, Neusidler prioritizes the *cantizans-tenorizans* framework but is unwilling to omit the triadic third. Rather than moving *ut* to *mi/me* after the onset of the final, as he did, in essence, with the delayed *tenorizans,* Neusidler opts to sacrifice the *ut-sol* conclusion to articulate the third on the onset of the final, which demonstrates the priority he places on the verticality of the final sonority.

Five Voices to Preserve Tenorizans and Triadic Third

Neusidler cultivates a five-voice texture on rare occasions, allowing him to circumvent the decision between incorporating the triadic third and the *cantizans-tenorizans* framework. Though five-voice writing is uncommon in Neusidler's original compositions in *Il primo [-secondo] libro*, much can be learned from investigating how Neusidler takes advantage of the additional voice when writing cadences.

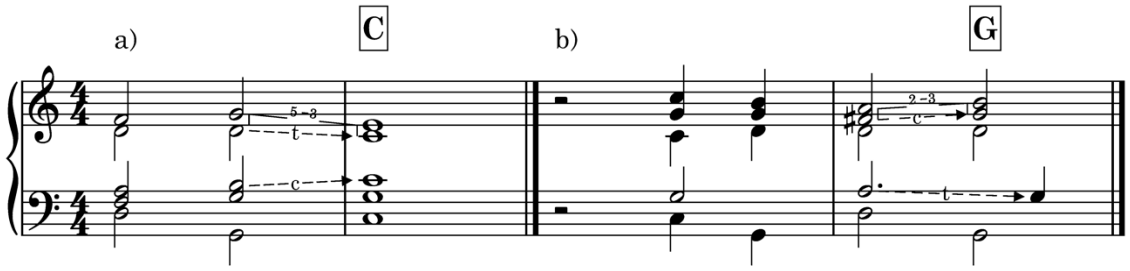

Figure 5.4 Cadences with five-voice textures, preserving cantizans-tenorizans framework from: a) Pass'e mezo La Paranzino mm. 3-4; and b) Recercar Secondo (Libro Secondo) mm. 27-28.

In 5.4a, Neusidler preserves the *cantizans-tenorizans* framework but utilizes the tripled G in the penultimate sonority to move the top voice from *sol* to *mi* while maintaining G in the second lowest voice. Instead, in 5.4b, he utilizes a doubled A in the penultimate sonority to cultivate the *tenorizans* and construct the triadic third by moving them contrarily. Interestingly, Neusidler delays the *tenorizans*, even though he could have the *tenorizans* coincide with the *cantizans* at the onset of the final sonority.

The Distribution of Cadences by Type

Analyzing the 125 cadences from *Il primo [-second] libro* provides an understanding of the types of cadences Neusidler writes and the frequency of their distribution. Stratifying the six cadence types and organizing them by focal pitch yields Table 5.3.

Table 5.3 Cadence frequency by category and final.

	E-flat	B-Flat	F	C	G	D	A	E
No *Tenorizans*	1	6	16	35	16	3	1	4
Tenorizans & Cantizans	0	0	1	2	5	0	0	0
Delayed *Tenorizans*	0	0	0	0	11	2	2	0
Sol-Mi	0	0	0	5	4	0	2	3
5-Voice	0	0	0	3	1	0	0	0
No Cantizans	0	0	0	1	1	0	0	0

Neusidler most commonly abandons the *tenorizans* in favor of the *re-mi/me* motion to incorporate a triadic third, which occurs in 82 of the 125 total cadences. Looking at Table 5.3, F and C cadences demonstrate his preference for re-mi/me cadential motion, but though G cadences show a similar importance, it is less pronounced. Table 5.4 breaks down each category as a percentage compared to the total number of cadences to each final.

Table 5.4 Frequency of cadences from each category compared to total cadences ending on a given final.

	E-flat	B-Flat	F	C	G	D	A	E
No *Tenorizans*	100.0	100.0	94.1	76.1	42.1	60.0	20.0	57.1
Tenorizans & Cantizans	0.0	0.0	5.9	4.3	13.2	0.0	0.0	0.0
Delayed *Tenorizans*	0.0	0.0	0.0	0.0	28.9	40.0	40.0	0.0
Sol-Mi	0.0	0.0	0.0	10.9	10.5	0.0	40.0	42.9
5-Voice	0.0	0.0	0.0	6.5	2.6	0.0	0.0	0.0
No Cantizans	0.0	0.0	0.0	2.2	2.6	0.0	0.0	0.0

With cadences to F and C, *re-mi/me* primacy over *tenorizans* retention demonstrates a substantial majority, describing 94.1% and 76.1% of total cadences, respectively. Cadences to G, however, show the absent *tenorizans* as the most frequent scenario, explaining 42.1% of the total cadences, but does not represent most of all cadences to G. Also noteworthy is the fact that cadences with a G final also represent the highest distribution of cadences with the triadic third absent, which describes 13.2% of all cadences to G. Almost as significant as the cadences to G with no *tenorizans* are those with the delayed *tenorizans*. When considering the similarity between an absent *tenorizans* and a delayed *tenorizans*, significantly as they contribute to the sound of the final sonority, it is not unreasonable to combine them. Compositely the absent *tenorizans*

and delayed *tenorizans* categories for G cadences describe 71% of the total cadences, which more closely resembles the distribution for cadences to F and C. Regarding those cases where the triadic third is omitted in favor of the *cantizans-tenorizans* framework, it is essential to note that three instances are found in a single composition, "Ricercar primo" (*Libro Primo*), and occur at major structural points in the composition. It is not unreasonable to assume that Neusidler was trying to adhere to the *cantizans-tenorizans* framework to evoke an antiquated sound or that he was experimenting with different cadence structures. Since cadences where the triadic third is sacrificed in favor of the *cantizans-tenorizans* framework only serve as structural markers in one composition, these cases seem to be best described as an anomaly to Neusidler's broader compositional practice.

Neusidler does not attempt to replace the *tenorizans-cantizans* framework with the triadic third, but rather that Neusidler tries to incorporate the framework, when possible. He does not tend to sacrifice the incorporation of the triadic third in favor of the framework. Therefore, Neusidler prioritizes finishing a cadence with a complete root-position triad over maintaining the *cantizans-tenorizans* framework that governs the contemporaneous discourse on cadential writing. The extent to which Neusidler preserves root position triads for the cadence final and confinal caused him to subvert basic contrapuntal guidelines. Observe Figure 5.5, where Neusidler writes consecutive perfect consonances to keep intended vertical sonorities.

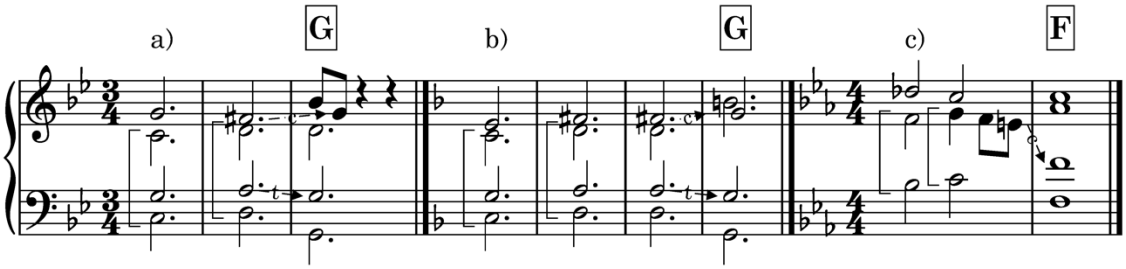

Figure 5.5 Parallel perfect motion used to preserve root position triads from: a) Pass'e mezo antico mm. 85-87; b) Pass'e mezo La Milanese mm. 100-103; and c) Ricercar Secondo (Libro Primo) mm. 51-52.

In 5.5a, the antepenultimate sonority moves to the penultimate sonority through parallel perfect fifths and octaves to preserve the motion between a C-minor triad and a D-major triad. In 5.5b, Neusidler moves from the antepenultimate sonority to the penultimate sonority through parallel perfect fifths and octaves to maintain root position C- and D-major triads. Finally, in 5.5c, he moves through parallel perfect fifths between a B-flat-minor to C-major triad. Considering the importance Neusidler gives the bass in his homophonic cadential writing, it seems unusual that he would place parallel perfect consonances between the lowest-sounding voices. Neusidler avoids parallel perfect consonances in cases where the antepenultimate sonority built on *fa* is an inverted triad, wherein *fa* operates as the triadic third.

The Antepenultimate Triad

Randel's assertion that *sol-ut* motion closely resembles V-I cadential motion is reflected in Neusidler's cadences. Neusidler builds root position triads for the confinal and final, cultivating *dominant*-to-*tonic* appearing formulae. When the paradigm expands to include *ut-sol-ut* cadences, the triad built upon the antepenultimate *ut*, as is the case with the final, is in root position, which propagates I-V-I cadential motion resembling *tonic*-to-*dominant*-to-*tonic* appearing formulae. This begs the question: Will *fa-sol-ut* and *la/le-sol-ut* bass paradigms similarly resemble *subdominant*-to-*dominant*-to-*tonic* cadence

formulae, or does the resemblance to common practice end with the confinal and final? This study will exclude the *re-sol-ut* bass paradigm because it exclusively builds II-V-I or V/V-V-I cadences but does not comprise a significant data set. Unfortunately, given the lack of prescription governing counterpoint formulae between the antepenultimate and penultimate intervals in a cadence, Randel's methodology no longer serves as a helpful approach to answering this question, necessitating a descriptive analysis.

The Antepenultimate Fa

The preference towards root position triads that appears to describe triadic discourse in the sixteenth century and Neusidler's cadential writing, so far, leads to the assumption that the *fa-sol-ut* bass paradigm will lend itself to IV-V-I motion. The investigation into *fa-sol* motion includes 80 cases, the 78 *fa-sol-ut* cases analyzed in the previous section, and two additional cases where the resultant sonority is built on *la/le* rather than *ut* and distributes the corresponding triads based on three potential cases: A root position IV triad; A first inversion II triad; and Cases where Neusidler appears to be writing contrapuntally, rather than triadically, and where no coherent triad is present. Table 5.5 shows the distribution of *fa*-based triads, organized by cadence final or intended final.

Table 5.5 Distribution of triads build on fa bass, sorted by cadence final.

	E-flat	B-Flat	F	C	G	D	A	E
IV	0	0	11	18	28	3	1	6
II (1st Inv.)	0	0	2	3	7	0	0	0
No Triad	0	0	0	1	0	0	0	0

Overwhelmingly, in 67 of the 80 cases, Neusidler writes root position IV triads on the *fa* bass note, which seems to support the position that *fa-sol-ut* progressions resemble IV-V-I, *subdominant*-to-*dominant*-to-*tonic*, tonal cadences. There was only one scenario where there was no triad present, and many cases where Neusidler opted to incorporate a first-inversion II triad, which does not subvert resemblance to tonal cadences given the frequent substitution of II triads for IV triads in tonal cadences. Table 5.6 shows the data presented in Table 5.5 as percentages compared to the total number of *fa*-based sonorities within a given expected final.

Table 5.6 Distribution of triads compared to total triads on fa bass by cadence final.

	E-flat	B-Flat	F	C	G	D	A	E
IV	0%	0%	84.6%	81.8%	80%	100%	100%	100%
II (1st Inv.)	0%	0%	15.4%	13.6%	20%	0%	0%	0%
No Triad	0%	0%	0%	4.5%	0%	0%	0%	0%

Notice that root position IV triads build on *fa* describe 84.6, 81.8, and 80 percent of cases for the statistically significant F, C, and G categories, which shows uniform distribution. There is no expected final with a stratification that contradicts the 83.8% of total cases where a *fa* bass note indicates a root position IV triad.

The Antepenultimate La/Le

Cadential motion built on the expected *la/le-sol-ut* bass paradigm does not offer a statistically significant body of cadences upon which a substantiative claim could be made. However, an investigation into *la/le-sol-ut* cadences can offer a point of comparison with *fa-sol-ut* cadences to see if Neusidler preferred an IV triad for the antepenultimate sonority, or if he continues to write root position triads, regardless of the

underlying bass note, as is reflected in *re-sol-ut* cadential motion. The *la/le-sol-ut* bass paradigm commonly leads to a *la/*le-based triad rather than the expected *ut*-based final, which means that 22 cases, rather than the 15 cases indicated before, will be considered. Table 5.7 shows the distribution of *la/le*-based triads among the following categories: A root position VI triad, A first inversion IV triad, A second inversion II triad, and Cases where no triad is present.

Table 5.7 Distribution of triads on la/le bass, by cadence final.

	E-flat	B-Flat	F	C	G	D	A	E
VI	0	0	1	10	0	1	1	0
IV (1^{st} Inv.)	0	0	0	3	1	0	0	1
II (2^{nd} Inv.)	0	0	1	1	0	0	0	0
No Triad	0	0	0	0	1	1	0	0

Of the 22 observed cases, 13 reflect that Neusidler preserves root position over a preference towards IV triads, representing 59% of the total cases. In contrast, the first inversion IV triads represent a slight elevation compared to the first inversion II triad for *fa*-based antepenultimate sonorities at 22.7% of the total cases. The data set is too small to claim that Neusidler slightly preferred the first inversion IV triads to the corresponding first inversion II triads. Therefore, Neusidler incorporates root position triads in antepenultimate sonorities somewhat less than in the *sol*- and *ut*-based confinal and final. Still, it can be expected that the predominant *fa-sol-ut* bass paradigm will support IV-V-I triadic motion resembling *subdominant-to-dominant-to-tonic* tonal cadences, occasionally substituting with II^6-V-I cadential motion.

Reflections

Considering the priority Neusidler places on *fa-sol-ut* motion in the bass voice and root position triads (or first-inverted in some cases with the antepenultimate sonority), at the expense of the *cantizans-tenorizans* framework, in homophonic cadences, it is difficult to ignore the resemblance to eighteenth-century *subdominant, dominant, and tonic* harmonic function. To demonstrate that the *fa-sol-ut-*, *la/le-sol-ut*, and *ut-sol-ut*-based cadence schemata are intentional triadic progressions rather than incidental, the subsequent investigation will focus on how Neusidler interacts with these schemata by applying them as secondary functions, and subverting them, as they appear in deceptive motions. If it can be demonstrated that Neusidler interacts with his bass-triadic cadential progressions as codified musical objects, then it logically follows that they are intentional rather than incidental.

Secondary Dominant as an Application of the Schemata

Though secondary functioning triads are not endemic to Neusidler's writing, at least to the degree they appear in eighteenth-century compositions, the few circumstances where he writes secondary functions illuminate the *fa-sol-ut-* and *ut-sol-ut*-based triadic formations as codified, intentional structures. Suppose fa-sol-ut- and ut-sol-ut-based triadic patterns establish a cadential effect. In that case, it seems reasonable to assume that Neusidler uses these patterns as a method of emphasis outside the cadence final. Generally, Neusidler uses secondary functions to establish and codify a shift between tonalities or to establish the parameters for a plagal extension he often writes to conclude his pieces. In Figure 5.6, the *ut-sol-ut* paradigm is subverted in what appears to be the cadence, only to be realized in the actual cadence final.

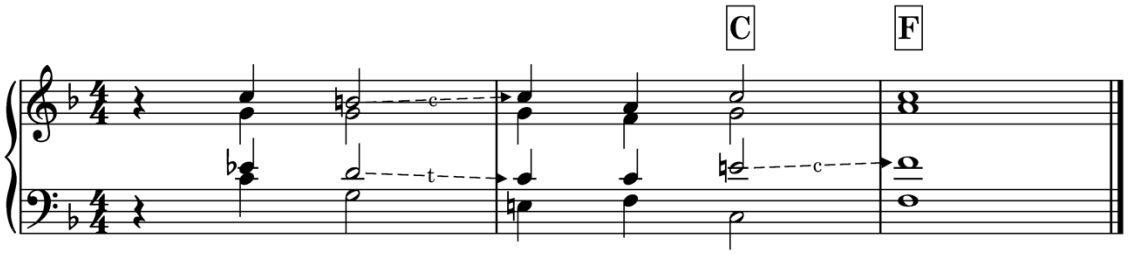

Figure 5.6 Secondary motion from Ricercar Quarto (Libro Primo) mm. 50-52.

The expected landing point for the beginning of m. 51 would be a root-position C-major triad, but instead, Neusidler writes a C-major triad in first inversion. Only on the third beat of m. 51 does Neusidler resolve to the root-position triad but in the middle of an *ut-sol-ut* bass paradigm leading to the F cadence final. The initial motion to C resembles the *sol-mi* cadential motion often applied by Neusidler to the doubled *sol* in the cadence confinal. Still, to preserve the *cantizans-tenorizans* framework, Neusidler maintains the doubled *sol* at the expense of the expected bass progression. The *mi* in the bass almost serves as a pre-*cantizans* motion that foreshadows the eventual cadence to F. The final cadence follows the "no *tenorizans*" descriptor in favor of a complete root-position triad on F. Consider Figure 5.7 where Neusidler uses the *ut-sol-ut* bass paradigm later in "Ricercar Quarto" (*Libro Primo*), in sequence, to establish the final plagal cadential extension used to complete the piece.

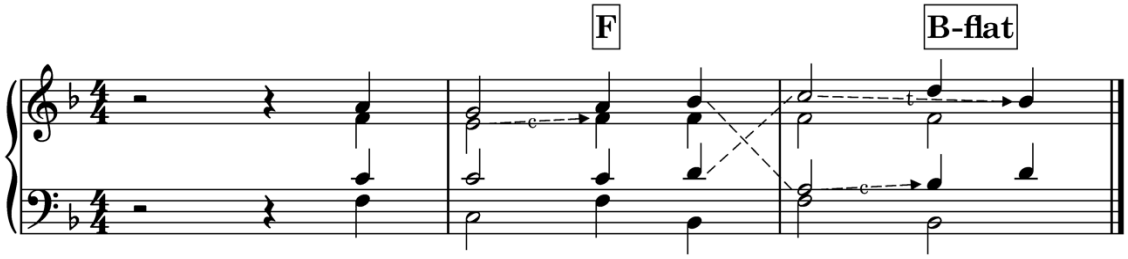

Figure 5.7 Secondary motion from Ricercar Quarto (Primo Libro) mm. 63-65.

The *ut-sol-ut* paradigm that emphasizes F as a potential final in mm. 63-64 becomes immediately subverted by what appears to be plagal motion, reiterating F in m. 64. The

reinstated F immediately resolves to the B-flat cadence final in m. 64, repurposing the F as a secondary function. Notice that the cadence to B-flat follows the *ut-sol-ut* bass paradigm established by the initial motion to F. The cadence to B-flat uses voice exchange between the tenor and cantus, allowing for the delayed *tenorizans* in the cantus. However, the initial cadence to F omits the *tenorizans* in favor of articulating the triadic third. In Figure 5.8*,* Neusidler writes the eventual cadence goal as a cadential extension.

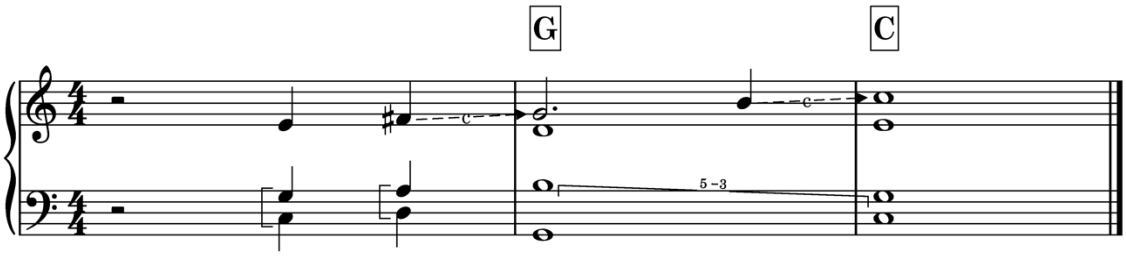

Figure 5.8 Secondary motion from Pass'e mezo mm. 8-10.

Neusidler establishes a *fa-sol-ut cadence* to G, preceding a cadential extension to the final C in m. 10. Though a case could be made that the voice exchange in the G sonority is implicit due to its resemblance to Figure 5.9, it is possible to also view the motion to C as following the "*sol-mi*" scheme. An argument against this classification is that Neusidler does not preserve the *cantizans-tenorizans* framework as he often does in "*sol-mi*" cadences, which would re-classify the cadence as "no *tenorizans*." Given that "no *tenorizans*" is the most common scheme for C cadences, this re-classification would further support the notion that Neusidler regularly sacrifices the *tenorizans* voice in favor of the triadic third. Also, notice the parallel perfect consonances between the first two sonorities, which show Neusidler's preference towards vertical coherence over counterpoint guidelines in homophonic textures. Later in "Pass'e mezo," Neusidler reiterates the progression shown in Figure 5.8 with slightly deviating voice-leading, as shown in Figure 5.9.

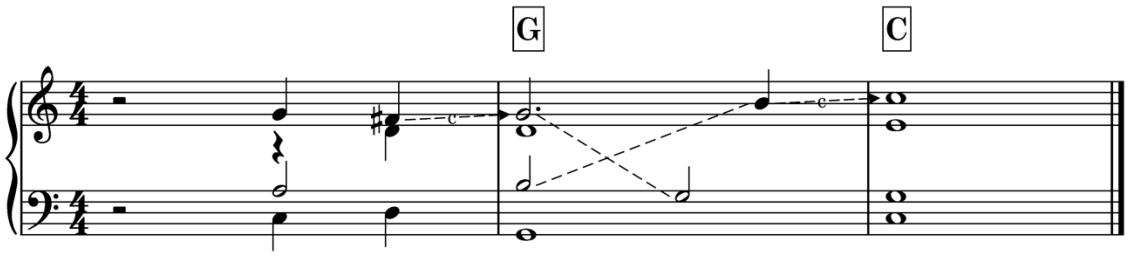

Figure 5.9 Secondary function in Pass'e mezo mm. 33-35.

In mm. 33-34, Neusidler establishes a *fa-sol-ut* cadence to G that resembles the "delayed *tenorizans*" paradigm. The unusual vertical clash between A and G in the first sonority is worth noting. Viewing the A as the root of an inverted minor seventh sonority may be easy. Still, the A is more likely anticipating the motion to the following D-major triad, given its relationship to the corresponding position in Figure 5.8. This cadence has been categorized under the "no *tenorizans*" group because of the voice exchange between the tenor and cantus. Despite the finality in the initial G cadence, Neusidler immediately recycles the G sonority as a secondary function to the C final in m. 35. The cadence to C similarly follows the "no *tenorizans*" scheme in favor of sounding the triadic third. Figure 5.10, also from "*Pass'e mezo*," displays the secondary function between G and C in its most developed form and operates as a sectional divider between thematic entrances.

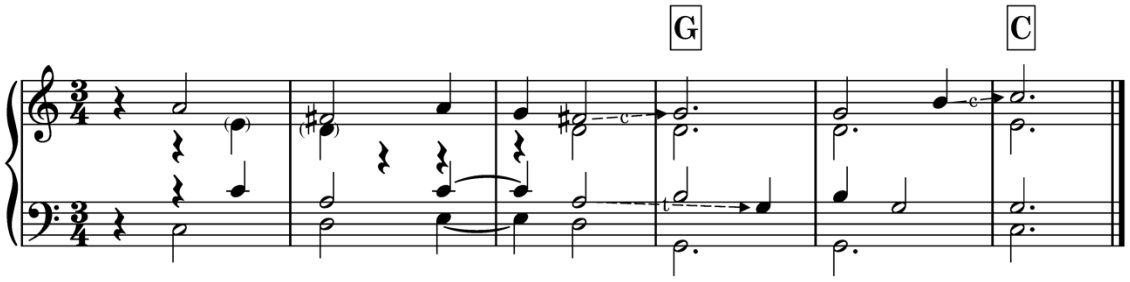

Figure 5.10 Secondary function from Pass'e mezo mm. 110-115.

In mm. 110-112, Neusidler establishes the *fa-sol-ut* bass paradigm but embellishes the D-major triad with a hemiola and motion to a *la*-based sonority, which seems to function either as deceptive motion or as a "neighbor chord." Contradicting the interpretation that

the A placed in the C sonority is the predominant A in m. 110 seems more likely to function as an inverted triad, especially given the motion to F-sharp in the following D-major triad. The cadence to G in m. 113 follows the "delayed *tenorizans*" scheme, and the voice exchange between B and G is delayed to m. 114 in the re-instantiation of the G-major triad. What is not apparent from the voice-leading diagram is the shift between the F-sharps in m. 113 and the F-natural in m. 114, which emphasizes the shift between a G final and a G confinal, leading to a C final. In m. 114, Neusidler incorporates a new motive and musical texture, which concludes with a C cadence in mm 129-132, codifying the C final, which persists through the remainder of the piece. The cadence to C in m. 114-115 represents the "no *tenorizans*" categorization that preserves the triadic third. Finally, in "Recercar Primo" (*Libro Secondo*), Neusidler uses the secondary function to establish the conditions for a conclusive plagal cadence that ends the piece, shown in Figure 5.11.

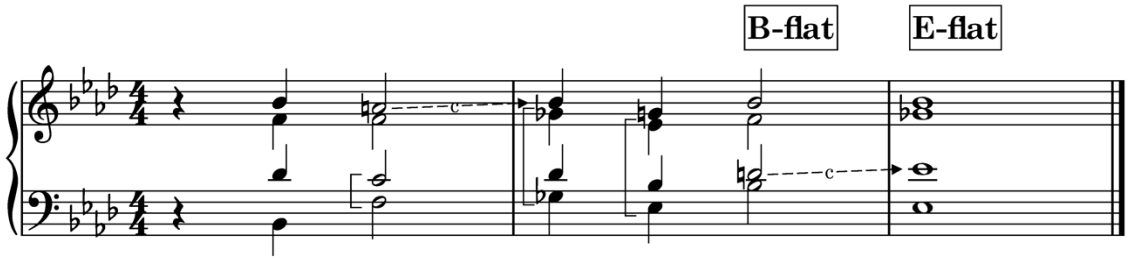

Figure 5.11 Secondary function from Recercar Primo (Libro Secondo) mm. 61-63.

Neusidler immediately interrupts the *ut-sol-ut* bass paradigm, which is most common in cadences to B-flat, through the deceptive motion *ut-sol-le*. Once the B-flat triad is finally realized midway through m. 62, Neusidler has already established the antepenultimate E-flat triad that begins the *ut-sol-ut* motion in mm. 62-63, leading to an E-flat final. An interesting dichotomy between the first E-flat triad and the E-flat cadence final is the difference in triadic quality. Dissimilar to convention, rather than raising the triadic third

at a cadence in favor of the preferred major triad, Neusidler lowers the triadic third after intentionally raising it in m. 62. Neusidler seems to be preparing the E-flat final but subverts the finality by establishing a minor triad to prepare his final plagal cadence to B-flat in mm. 63-66. Neusidler does not intend for E-flat to usurp B-flat's role as the final but temporarily uses B-flat as a secondary function.

In Figure 5.6, Neusidler subverts the *ut-sol-ut* bass paradigm in sequence to establish a secondary function relationship between C and F. He uses a secondary function to show the shift in the tonal center between C and F. In Figures 5.7 and 5.11, Neusidler utilizes secondary functions to establish the parameters for a plagal extension when concluding a piece. In Figure 5.7, the ut-sol-ut bass paradigm is transposed, but in Figure 5.11, the initial ut-sol-ut bass paradigm is subverted through deceptive motion to establish the *ut-sol-ut* motion to E-flat more concretely. In Figures 5.8, 5.9, and 5.10, Neusidler expands on a cadential extension between G and C that eventually culminates in a shift in the tonal center that begins a new section in m. 114, which establishes C as the final tonal center for the composition. In the cases where secondary functions are used to establish a plagal extension, as in Figures 5.7 and 5.11, it is challenging to support the claim that the relationship between sonorities serves an intentional role that resembles eighteenth-century secondary functions. It would be just as easy to view secondary functions with a plagal role as I-IV rather than V-I motion. However, in Figures 5.6, 5.8, 5.9, and 5.10, secondary functions establish a distinct tonal center, closely resembling the role these functions often play in eighteenth-century music and certainly reflect V-I motion. Regardless of the secondary functions' role, Neusidler applies and occasionally subverts his established cadential formulae, which suggests that

they are established and intentional musical objects rather than incidental triadic sequences.

Deceptive Motion as a Subversion of the Schemata

Investigating instances of deceptive motion in cadential structures can provide insights into how composers subvert cadential expectations. In many cases, Neusidler writes cadence-like figures that conclude with deceptive motion. Still, scenarios where deceptive motion defers, rather than subverts a cadence formula, better reflect the intentional desire to interact with a codified musical object. In cases where deceptive motion does not generate an eventual bass paradigmatic cadence, it could be assumed that the bass motion follows counterpoint rather than some vertically coherent structure. For this analysis, only scenarios where deceptive motion generates an archetypical cadence, even when this result is delayed, demonstrate that Neusidler was using deceptive motion as an intentional interaction with his established cadential paradigms. Figure 5.12 shows *fa-sol-ut* bass motion interrupted by an inverted triad built upon *le*.

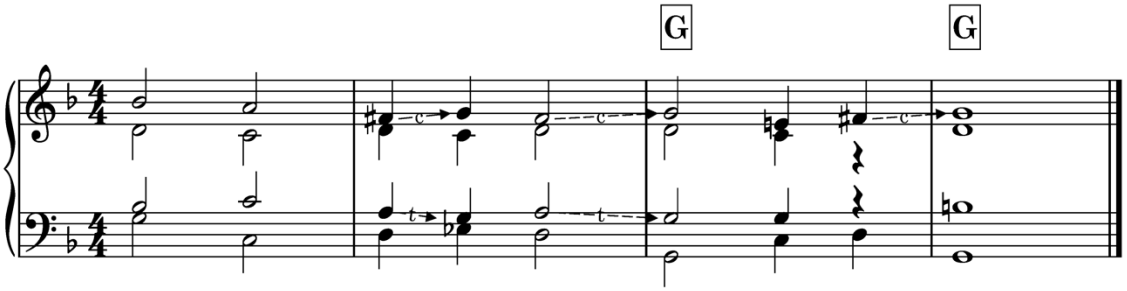

Figure 5.12 Deceptive motion from Pass'e mezo La Milanese mm. 29-32.

In mm. 29-30, the bass E-flat interrupts a *cantizans-tenorizans* pair between the cantus and tenor voices. It is not until m. 31 that Neusidler finally provides a root-position triad on G while reiterating the *cantizans-tenorizans* framework. Neusidler writes another fa-sol-ut cadence to G in mm. 31-32 to strengthen the aural perception of the motion to G,

including the triadic third in the final. It is possible to interpret the deceptive motion as a neighbor chord, which Neusidler uses to reiterate the D-major triad. Still, the intentionality behind including a conventional cadential framework with a neighbor chord elevates the effect of the motion beyond simple embellishment. Even if one were to accept the inverted C-minor triad as an embellishing chord, it begs the question: Why is the D-major triad so structurally significant to merit reiteration before a cadence to G? A similar circumstance wherein the deceptive motion/embellishing chord ambiguity presents can be observed in Figure 5.13.

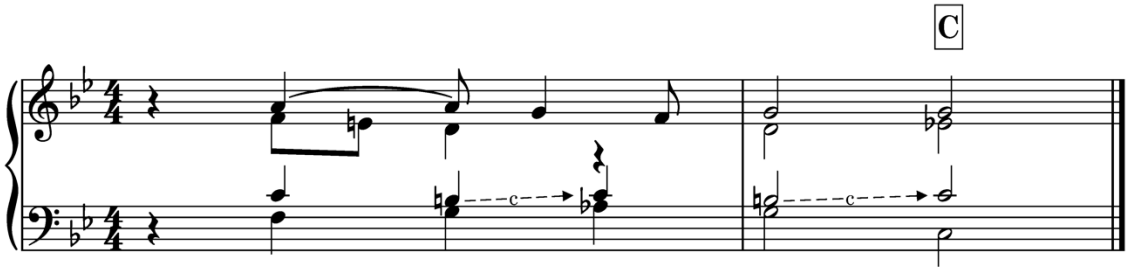

Figure 5.13 Deceptive motion from Ricercar Terzo (Libro Primo) mm. 21-22.

The bass motion, *fa-sol*, in m. 21 immediately depart to a first inverted F-minor triad with A-flat as the bass *le*, forming *fa-sol-le* deceptive motion and considering that the F-minor triad allows Neusidler to incorporate a more robust iteration of the confinal on the downbeat of m. 22, it could be perceived again as an embellishing chord. The *cantizans-tenorizans* framework is not present, or at least not explicit, as shown in Figure 5.12. Still, at the very least, the motion strengthens the effect of the penultimate triad, which supports the case for Neusidler intentionally writing triadic progressions in homophonic cadences. The motion in Figure 5.14 does not share the same ambiguity as the previous two examples.

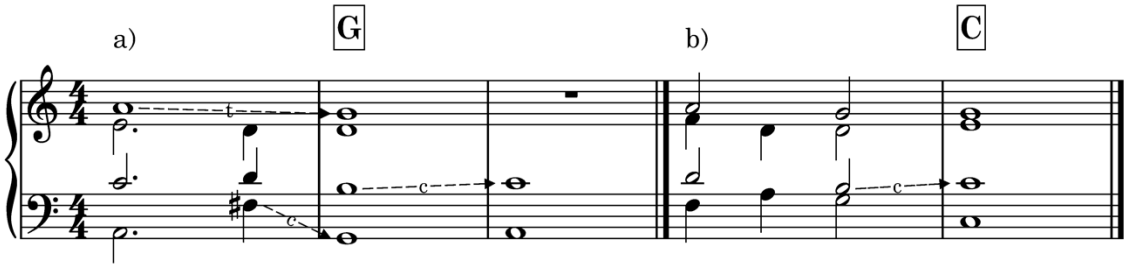

Figure 5.14 Deceptive motion from Pass'e mezo La Paranzino: a) mm. 15-17; and b) mm. 19-20.

What is most interesting about the motion in 5.14a is that not only does the deceptive motion serve as the end of the progression, but the confinal G is emphasized strongly by the secondary function in the antepenultimate triad. In mm. 15-16, Nuesidler writes the *cantizans-tenorizans* framework between the cantus and bass, omitting the expected D bass note in analogous secondary function examples. The F-sharp must be displaced to the higher octave simply because the lower F-sharp was not available on a six-course lute. Due to the strengthened penultimate harmony, a characteristic implicitly shared with the previous examples, it establishes the expectation that m. 17 will bring a root position C-major triad to finish the cadential *la-sol-ut* paradigm standard to cadences with C finals. It is only in mm. 19-20 that Neusidler concludes with a C final within a *fa-sol-ut* paradigm, as indicated in 5.14b. Note that the confinal structure in 5.14a and 5.14b share the same voicing and *cantizans*. Neusidler presents this relationship several times in "Pass'e Mezo La Paranzino," making it integral to the "B section" of the composition. Finally, in "Recercar Primo" (*Libro Secondo*), Neusidler uses deceptive motion to maintain ambiguity surrounding the nature and focal pitch of the final. B-flat and F are local tonalities through the composition, often subverted and redirected through deceptive motion. Figure 5.15 shows how Neusidler uses sequential deceptive motion to play with the notion of an F-final, which he finally codifies in the middle of the piece.

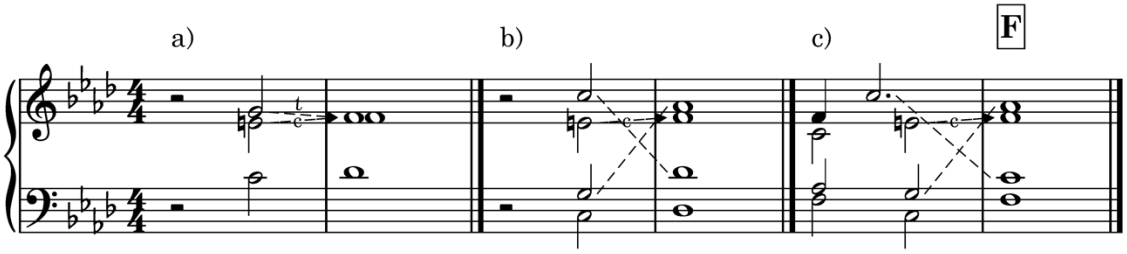

Figure 5.15 Deceptive motion from Recercar Primo (Libro Secondo): a) mm. 18-19; b) mm. 21-22; and c) mm. 25-26.

In mm. 18-19, Neusidler writes the *cantizans-tenorizans* framework over *sol-le* motion only to build tension by expanding the triadic texture in mm. 21-22 and by lowering the bass voice to its typical register and again deceptively moving to a D-flat-major triad. It is only in mm. 25-26 that Neusidler grants the conclusion to an F final over the *ut-sol-ut* bass paradigm. Neusidler echoes the deferred F final by writing deceptive motion in mm. 28-29 and mm. 34-35 before concluding with a *le-sol-ut* "no *tenorizans*" cadence in mm. 39-40, which ends the importance of F over B-flat for the duration of the composition. What is clear from Figure 5.15 is Neusidler's ability to incorporate a reflection of deceptive motion and, more significantly, the spirit of the eighteenth-century deceptive cadence.

Whether Neusidler uses deceptive motion to embellish and strengthen the effect of the confinal or cultivate deceptive motion that delays the onset of the final, he makes conscious decisions to interact with the bass-triadic paradigms he so regularly establishes in his homophonic writing. The ability to delay or enhance an object is predicated on the intentionality of that object. As such, Neusidler could not deceive his listeners if he did not establish an expected paradigm. This leads to the conclusion that Neusidler intentionally cultivated bass-triadic cadence structures because if he did not, what would be left to subvert or enhance?

Results

Neusidler most commonly writes *fa-sol-ut* bass motion, especially in cadences to G and F. In cadences to C, Neusidler is limited by his inability to write an F adjacent to the open sixth-course G, causing a greater stratification in bass paradigms, including *le/la-sol-ut*, *ut-sol-ut,* and *re-sol-ut*. The penultimate and ultimate triads are typically root position triads built on the confinal and final. Contrary to the popular *cantizans-tenorizans* framework that governs cadential motion in polyphonic textures, Neusidler often excludes the *tenorizans* or delays the *tenorizans* in favor of incorporating the triadic third, subsequently yielding a complete triad. In cases where Neusidler preserves the *cantizans-tenorizans* framework, he will move the penultimate, doubled *sol* down to *mi/me* or in rare cases, add a fifth voice to the texture to maintain the triadic third still. There are few cases where Neusidler prioritizes the *cantizans-tenorizans* framework over incorporating a complete final triad, a significant portion of which can be found in "Ricercar Primo" (*Libro Primo*). The cadential paradigm distribution indicates that Neusidler prefers a complete final triad over the *cantizans-tenorizans* framework and represents a prioritization of vertical coherence. Neusidler seldom excludes the *cantizans* motion and always raises it to the subsemitone when necessary. Neusidler often raises the triadic third in the cadence final to articulate a major triad but regularly preserves minor triads instead. Neusidler's preference for bass paradigms and cadential schemata force the triadic third to generate bass-triadic structures resembling *subdominant*-to-*dominant*-to-*tonic* and *tonic*-to-*dominant*-to-*tonic* progressions from eighteenth-century compositions. Neusidler did not consider harmonic functional indicators to be an *emic* compositional

practice. Still, it is not unreasonable to assume that Neusidler helped to influence the preference towards bass-triadic coherence found in the subsequent lute traditions.

Neusidler not only establishes cadential schemata by frequency, but he also applies and subverts his schemata through secondary functions and deceptive motion. Cultivating secondary functions requires Neusidler to acknowledge that his schemata are emphatic and demonstrates an elevation in the relationship between triads built on *sol* and *ut*. Neusidler incorporates *fa-sol-la/le* motion to either delay progression to the local or global final or possibly emphasize the triad built on *sol* through reiteration. Though harmonically functional indicators cannot be shown as, what Powers would define as *emic* qualities, the notion that Neusidler constructs bass-triadic schemata in homophonic cadences and applies, subverts, and emphasizes them leads to the conclusion that they are not only identifiable *etic* qualities but also *emic* qualities that reflect a shift towards harmonic coherence through the course of sixteenth-century lute music.

Chapter 6 Conclusion

When introducing this study, I claimed that I would contextualize Melchior Neusidler within the broader sixteenth-century to early seventeenth-century lute traditions, define the parameters for the realization of *musica ficta*, especially as the practice relates to lute intabulations, articulate the historical and philosophical precedent for analyzing Neusidler's music through what Harold Powers defines as *etic* (objective, and removed from the cultural milieu), bass-triadic lens, and extrapolate and analyze the bass-triadic paradigms that Neusidler used in his cadence formulae. From this study, I contend that Neusidler intentionally wrote homophonic cadences that follow bass-centric triadic paradigms, adhering to the rule of propinquity by incorporating and inflecting the *cantizans*, which fills the gap between the linear polyphony of the preceding generation of German lutenists and the vertically coherent harmonies of the French Baroque.

A comparative analysis of Hans Judenkünig's, Hans Gerle's, and Hans Newsidler's lute treatises from the early sixteenth century and Mattheaus Waissel's and Jean-Baptiste Besard's lute instructions from the turn of the seventeenth century, shows a paradigmatic shift in right- and left-hand technique during Neusidler's lifetime. In the late sixteenth to the early seventeenth century, lutenists departed from the 'thumb-under' right-hand technique in favor of a right-hand position where the thumb falls outside the index finger, accommodating growth in musical textures and vertical structures. Seventeenth-century lutenists abandoned an absolutist application of thumb and index finger alternation for *coloratura* passages in favor of middle and index finger alternations

that free the thumb for increasingly active bass motion. Also, due to the increase in vertical structures, there came a departure from thumb and index execution of sonorities in favor of incorporating the middle and ring fingers. Finally, seventeenth-century lutenists prioritized holding bass notes—or, for Besard, bass and treble notes—over inner voices in vertical structures if they could not maintain the whole sonority. Seventeenth-century lutenists developed new right- and left-hand techniques to grapple with the transition from linear polyphony to bass-triadic structures. These observations led me to the question: "Where does Melchior Neusidler's compositional approach fall in the trajectory between linear and vertical conceptions of music?" From analyzing Neusidler's homophonic cadences, he embraced a vertically coherent and triadic compositional approach following a limited collection of underlying bass paradigms, contrasting his polyphonic writing. The shift towards bass-triadic musical structures coincides with the elevation of homophonic textures, which Neusidler embraced.

Comparing scholarship on *musica ficta* and lute intabulation shows that, while an intabulation differs from the realization of *musica ficta* in performance practice, it does show one possible realization and illuminates a lutenist's preferences toward linear or vertical coherence. Despite the differences in analytical approach by Berger and Urquhart, they arrive at the same conclusion that the inflection of the *cantizans* to the subsemitone, when necessary, except only in Phrygian cadences, was the expected performance practice for sixteenth-century musicians. With exception to a few circumstances, Neusidler inflected almost all *cantizans* that required elevations to the subsemitone. Genov makes the argument that Neusidler preserved the *mi-contra-fa* and *fa-super-la* rules, compromising melodic beauty to avoid vertical dissonances, stating that

Neusidler would refrain from inflecting a *cantizans* if it led to a cross-relation. Would Neusidler refrain from inflecting a *cantizans* to preserve the *mi-contra-fa* rule, or would he compose in such a way as to avoid the issue altogether? The two cases where Neusidler omitted a *cantizans* from his cadences did not serve the purpose of evading a cross-relation, and in all other cases, the *cantizans* was inflected. Also, Neusidler regularly inflected notes preceding the inflected *cantizans* to evade vertical dissonance. Consider, for example, Figure 5.11, which shows that the G-flat in m. 62 is inflected to G-natural to avoid friction against the D-natural in the following sonority or Figure 5.13, which shows that the E-flat from the signature is raised to E-natural to prevent friction against the following B-natural inflection for the *cantizans*. Neusidler avoids cross-relations by evading the conditions for a possible cross-relation rather than omitting inflected *cantizans*, which would be more challenging to achieve in his intabulations, and which shows that he wishes to maintain the subsemitone and vertical coherence.

Establishing the parameters for an analytical approach defining bass-triadic structures amongst the breadth and depth of discourse centered around modality in sixteenth-century music and claims of anachronism requires two primary distinctions: The distinction between *emic* and *etic* musical discourse made by Powers, in conjunction with the Schubert's claim on the futility of an authentic interpretation of contemporaneous theory treatises; and A partition of bass-triadic, homophonic music away from the presiding polyphonic modality as a musical undercurrent. When an analytical approach tries to define compositional intent as a means towards achieving authenticity or when theorists make expository claims on the intent behind sixteenth-century music theory treatises, it is impossible to separate the modern theorist from their

experience and tendencies. Making what Powers would describe as an *etic* claim on an *etic* musical feature, that is, claiming that bass-triadic cadence formulae resemble tonal cadences, regardless of whether the composer intended this, allows access to musical trends that arise from influence. Further, suppose a composer incorporates a structure supported by an undercurrent in contemporary musical theory discourse and prioritizes this structure in cases where it is unnecessary in a robust majority of cases. In that case, claiming intent seems more potent than assuming modality, *a priori*, and defining musical structures solely through this lens. Considering the prevalence of treatises written in the late sixteenth to early seventeenth century that discuss the importance of triadic structures and the bass voice and that theory typically follows practice, it seems reasonable to assume that some composers, like Neusidler, were writing triadic structures and elevating the bass voice before the late sixteenth century.

The analysis of 125 of Melchior Neusidler's homophonic cadences from his original music in *Il primo [-secondo] libro* yielded a few key observations: The prevalence of the *fa-sol-ut* bass paradigm; Neusidler's prioritization of the triadic third over the *cantizans-tenorizans* framework, which usually came at the expense of the *tenorizans*; Neusidler's preference towards root position triads in antepenultimate sonorities, most prevalently the relationship between a *fa* bass note and an IV chord; The application of the bass-triadic cadence formulae through secondary function; and The subversion and enhancement of the bass-triadic cadence formulae through deceptive motion. Considering these observations, it seems reasonable to assume that Neusidler intentionally wrote bass-triadic cadence formulae due to the contrapuntal necessity underlying bass motion in confinal to final relationships, his preference towards root

position triads, and his preference towards the *fa-sol-ut* bass paradigm. Neusidler was not intentionally writing *subdominant*-to-*dominant*-to-*tonic* tonal cadences. Still, he was writing cadences that reflect an increasing trend towards homophony and vertical coherence, which closely resemble tonal cadences.

Future Research

Though collecting and categorizing cadences is not a novel analytical technique, there needs to be more analytical literature centered around the lute traditions in the sixteenth century. A comparison between the cadence profiles of different lutenists from different lute traditions could create a comprehensive picture, reinforcing the trend identified in Neusidler's music or offering insights into contrasting or similar undercurrents. Related more specifically to my study, an investigation into the cadence profiles of John Dowland and Jakub Reys could be fruitful in understanding how Neusidler influenced subsequent lutenists. Similarly, an inquiry into the cadence profiles of Hans Judenkünig, Hans Gerle, and Hans Newsidler could prove equally fruitful. Further, Neusidler's music merits further study from different analytical perspectives. I only investigated a small component of Neusidler's music—his homophonic cadences—but what about the music between the cadences, his polyphonic writing, or different interpretations of his cadence profiles? Generally, I hope my paper inspires further analytical discourse into the compositional practices of sixteenth- and seventeenth-century lutenists. Within the overt beauty of the late Renaissance- and early Baroque-lute traditions is a robust conversation on musical progression waiting to be had.

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