

From Modality to Tonality:
an analytical survey of Allen Atlas' *An Anthology of Renaissance Music*

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Introduction

When studying music theory, most students focus on a nearly three hundred year span called the common practice period¹. Aptly named, the common practice period was a unifying period of time where composers used a similar set of governing principles that impacted the harmonic content of their music. The majority of the Western classical repertoire was written during this time, so it is logical that students who perform in this style study the theory that composers used. When focusing on this particular era, however, it is easy to neglect the music that preceded it. Despite being often glanced over, the music of the renaissance encompasses a nearly 300 year musical tradition that ultimately led to the development of the tonal principles followed by Bach and later generations². This leads to the question: how did the music of the renaissance lead to tonality? In this paper, three of the quintessential characteristics of tonal music will be tracked along the renaissance's musical time: the leading tone, the triad, and the chord progression. These three attributes are core to the identity of tonal music, and their respective developments can be traced back to the earliest musical examples from the renaissance.

About the Three Tonal Characteristics.

Before discussing the harmonic development of the music of the renaissance as it transitions into the music of the common practice period, it is important to establish a common understanding of the governing principles of tonality. Because the purpose of this paper is to trace the historical path from renaissance modality³ to baroque tonality⁴, terms from both

¹ Robert P Morgan, "Symmetrical Form and Common-Practice Tonality." (Music Theory Spectrum: 1998), 1–47.

² Lewis Lockwood, "Renaissance." (*Grove Music Online*: 2001).

³ Edward L. Kottick, "Flats, Modality, and Musica Ficta in Some Early Renaissance Chansons." (*Journal of Music Theory* 12: 1968), 264–80.

⁴ Brian Hyer, "Tonality." (*Grove Music Online*: 2001).

theoretical systems will be used as a comparative tool. The inability to conduct a tonal style analysis of a modal work is indicative of its historical distance from the musical style that succeeds it. As music of the renaissance develops so that it closer reflects the harmonic principles of the common practice period, the distance between the two periods will be easier to measure.

One of the earliest developments of the polyphonic music of the renaissance period is the use of the leading tone. Objectively, leading tones are tones that are a half step below a pitch center⁵. Leading tones are used by composers because of their resolving qualities. Because they have a tendency to move upwards by half step, leading tones have the effect of emphasizing the note they resolve to. In terms of the music of the renaissance, leading tones were most common in cadential situations⁶. In fact, composers would often go as far as using leading tones that did not occur naturally in the mode because of their ability to strengthen cadences. In most cases, leading tones were used to emphasize the root of the ultimate sonority; however, it was common for leading tones to emphasize the tone a fifth above the root, as well. Leading tones that naturally exist in relation to the final of the mode are relatively uncommon. Of the original eight Gregorian modes, Lydian and Hypolydian were the only two that had a natural leading tone⁷. This list would grow to include Ionian and Hypoionian when they started seeing more documented usage at the end of the fourteenth century. As tonality emerged from the music of the renaissance and modality began to be phased out as the most common organizational style amongst composers, major and minor scales naturally adopted the leading tone as one of the most important pitches in the tonal hierarchy.

⁵ Walter Piston, *Harmony* (Norton: 1987), 7-34.

⁶ Bonavia-Hunt, N. A. "Modal Cadences." (*The Musical Times* 91, no. 1291: 1950), 353.

⁷ R. Maloy, *Notes*, 644-646.

One of the starkest differences between music of the renaissance and music of the common practice period is harmonic organization. At the foundational level, composers from both eras had similar harmonic palettes. The key difference between the two is how each harmony was derived. In the renaissance, composers of polyphonic music concerned themselves with melodically driven textures called counterpoint⁸. The harmonic organization of this musical style was largely limited to the intervallic level. Composers at this point in history were most concerned with the reconciliation of dissonant and consonant intervals, and how they contribute to the independence of the voices. Generally speaking, the majority of the harmonic language is going to consist of thirds, sixths, and their compound relatives. This is largely due to their consonant nature, but also contributed to by the fact that other consonant intervals detract from the independence of the melodies. As a result of using thirds and sixths, sonorities begin to arise from the texture that are congruous with the harmonic language of the common practice period: triads. Triads are the foundation on which harmony is built in the common practice period⁹. Because the music of the common practice period becomes more and more vertically integrated over time, harmonies begin to be conceived as a complete unit, rather than a byproduct of intervals. At the most basic level, triads are a combination of two thirds that can be derived from the relevant scale. Triads can be derived from the modes as well, which provides another explanation for why seemingly triadic sonorities can be found throughout the music of the renaissance.

At the melodic level, tonal music is governed by two different scale types: major and minor. In contrast to modal theory, tonal theory organizes its pitches by transposing its two scales across all twelve tones. This creates a series of *keys* that each have their own harmonic content.

⁸ Peter Schubert, *Modal Counterpoint, Renaissance Style*. (New York: Oxford University Press: 1999).

⁹ Robert Hutchinson, "Music Theory for the 21st-Century Classroom. Introduction to Triads."

Each scale tone can have a triad built on top of it. Subsequently, each triad has an intrinsic tendency to progress to another triad. This imparts a particular function onto each triad, which drives the harmonic trajectory of a piece. Although there are exceptions, chords in tonal harmony have a tendency to resolve the triad a diatonic fifth below. The *falling fifth* relationship between chords brings attention to the most important relationship in tonality, five to one.¹⁰ Also called the *tonic-dominant relationship*, the propensity for the five to resolve to the one is the most important chord progression in the music of the common practice period.¹¹

Although the tonal music of the common practice period has a unique set of administrative properties that differentiate it from the modal music of the renaissance, both have similar core characteristics. For example, both theories make use of diatonic pitch material. Albeit, the modes are rotations and registral transformations of all of the natural notes¹², excluding B, each mode consists of seven pitches just like the diatonic scales of tonal theory. In fact, the major and minor scales are the last two modes that were written into modal theory: Ionian, and Aeolian. Another commonality between the two systems is pitch hierarchies. Both tonality and modality place emphatic weight on particular tones of their pitch collection. As mentioned earlier, tonal scales have emphasis on the first scale degree, called the *tonic*, and the fifth scale degree, called the *dominant*.¹³ Comparable to the tonic and dominant scale tones in tonality, each mode has a *final* and a *tenor*. The relationship between these two tones, however, is not always a fifth apart. Despite the fact that both of these styles have their own distinguishable sounds, both modality and tonality have organizational similarities that unite them... especially at the melodic level.

¹⁰ Lee Rothfarb, "25. Diatonic Descending-fifth Sequences. Fundamentals Function and Form."

¹¹ Tobey Forrest, "A Feeling for Harmony: 6A Tonic/Dominant/Predominant."

¹² Matthew Arndt, "Mode - Musicianship and Theory IV."

¹³ Stefan Kostka, *Tonal Harmony: With an Introduction to Twentieth-century Music*, (McGraw-Hill: 2013), 54.

The Beginning of the Renaissance: 1380 - 1420

In early polyphonic music of the renaissance, a development that begins to point in the direction of tonality is the implementation of the leading tone. In tonal music, the leading tone is the label given to the seventh scale tone due to its tendency to resolve upward to the tonic. Although language like *leading tone* and *tonic* was not accessible during the renaissance, this did not stop composers from using artificial leading tones to emphasize pitches. Used primarily in cadential situations, these chromatic alterations to the original mode are called *musica ficta*. Take, for instance, the phrase endings of John Dunstable's *Quam pulchra es*. Despite its somewhat modal ambiguity, due to possessing qualities of the Ionian mode and a transposition of the Mixolydian mode, the motet maintains a C pitch centricity throughout. In measures twenty-one and twenty-two, the F is raised a half step to F-sharp in preparation for a brief cadence on G in the uppermost line.¹⁴ This particular leading tone usage is acutely interesting due to the emphasis placed on a tone other than the final. The use of a leading tone in this context in tonal music is often called *tonicization*, which refers to the phenomenon that occurs when a non-tonic diatonic harmony is preceded by its dominant. In this instance, G, which is not the final of this mode, is anticipated by its leading tone. The use of leading tone support in voices other than the root of the cadential sonority can be found in many early renaissance works. Johannes Brassart's *Sapienciam sanctorum*'s final cadence includes C-sharp resolving up to D in the upper voice and G-sharp resolves up to A in the middle voice.¹⁵ *La plus jolie et la plus belle*, by Nicolas Grenon, measures eight and nine include a cadence identical in pitch to *Sapeinciam sanctorum*.¹⁶ In addition to being used almost exclusively in cadential situations,

¹⁴ John Dunstable, "Quam pulchra es." In *Anthology of Renaissance Music*. Edited by Allan Atlas. New York, (W.W. Norton: 1998).

¹⁵ Johannes Brassart, "Sapienciam Sanctorum." In *Anthology of Renaissance Music*.

¹⁶ Nicolas Grenon, "La plus jolie et la plus belle." In *Anthology of Renaissance Music*.

composers of the early renaissance used leading tones as a means of reconciling the end of each individual phrase. Because the music of the common practice period was organized largely by a combination of a less conservative harmonic language and emphasis on vertical organization, the leading tone was contextualized differently. This suggests that the leading has not yet fully developed its tonal identity. Nevertheless, the use of non-diatonic leading tones this early into renaissance suggests their liberal usage could be an early pre-tonal development.

One of the most distinguishable harmonic differences of early renaissance music and tonal music is triadic usage. Triads are the foundation of tonal harmony. After all, tonal harmony is ultimately governed by chord progressions that consist of triads whose unique functions propel a piece forward. As discussed earlier, triads do not have the same function in modal theory. Triads are a byproduct of contrapuntally conceived music. Because harmonic dissonances were treated cautiously by renaissance composers, triads would often be a part of the resulting texture. In cadential scenarios, however, it appears that renaissance composers actively avoided the use of triads. Generally speaking, composers arrived at a cadence on a harmony that consisted of two tones: the final and the fifth. In settings for three voices, such as Nicolas Grenon's *La plus jolie et la plus belle*, the harmony consists of two iterations of the final, and one instance of a fifth above the final.¹⁷ One occurrence of this is in the cadence that occurs over the span of measure two through five. The resulting sonority on the final downbeat of the cadence in measure five follows this rule. Spelling from the lowest voice to the highest voice: G, D, and G. This rule, despite being the most common voicing, it is not uncommon for the ultimate chord of a cadence to consist of two fifths and one final. One example of this can be found in Johannes Ciconia's setting of *O rosa bella*.¹⁸ In the cadence between measures ten and eleven, the harmony built on

¹⁷ Grenon, "La plus jolie et la plus belle."

¹⁸ Johannes Ciconia, "O rosa bella." In *Anthology of Renaissance Music*.

the final, C, is spelled from lowest to highest: G, C, and G. Although cadences most often consisted of sonorities that lacked a triadic third, triadic harmonies often occurred outside cadential moments. As was explained earlier, because the most common interval in renaissance counterpoint is the third and the sixth, the resulting sound of many contrapuntal textures is largely triadic. In Dunstable's, *Veni sancte spiritus, veni creator*, triads can be easily identified throughout the work. In the second phrase *et emitte celitus lucis tue eradium*, triads can be found on many of the downbeats¹⁹: F major in measure eleven, C major in measure thirteen, G major in measure sixteen, and A minor in measure seventeen. It is important to note, in this case particularly, that many of the triads are analyzable only when including the sustained note in the lowest voice. Despite actively avoiding accented triads in place of open fifths above the root, Ciconia's, *Ut te per omnes / Ingens alumnus Padue*, includes some interesting triads. The piece cadences on a G major triad in measure thirty, which, as was discussed earlier, is atypical of the period. Even more interesting is the B diminished triad in measure fifteen.²⁰ The occurrence of triads in the music of the early renaissance stark in contrast to the music of the common practice period. Ultimately speaking, composers succeeding the music of the renaissance thought in terms of chords, often triads, that were associated with a particular melody. It is clear, however, that triads have not yet adopted the same harmonic qualities shared with their usage in music of the common practice period.

In the music of the early renaissance, the idea of functional harmony is not present. Despite the presence of many homophonic textures, it is still evident that composers are concerned more so with the avoidance of accentuated dissonance and the independence of each melodic line. In order to prove that functional harmony has emerged, chord progressions that

¹⁹ John Dunstable, "Veni sancti spiritus, veni creator." In *Anthology of Renaissance Music*.

²⁰ Johannes Ciconia, "Ut te per omnes / Ingens alumnus Padue." In *Anthology of Renaissance Music*.

have a purposeful trajectory towards a cadence on the final or the dominant via a chain of related chords must be present. Even though chords can be identified in some of the music of the early renaissance, they are a byproduct of the compromise between homophony and the avoidance of dissonance. The use of the open fifth in place of the triad contributes to the difficulty of chordal analysis, as well. For the sake of reconciling the absence of contextual thirds, one could analyze a sonority as a triad consisting of only the root and the fifth. Although vertical analysis could be performed on a piece with a more highly contrapuntal texture, proving the absence of functional harmony would be more easily achieved by examining instances of textures that consist of similar rhythms across the voices. In Grenon's *La plus jolie et la plus belle*, the opening chord sequence, measures one to five, reveals a series of chords that does not possess the characteristics of a functioning harmonic progression.²¹ After applying roman numerals to the chords that can be retrospectively analyzed as triads, the progression consists of: G minor, A minor, G minor, D major, C major, G minor, F-sharp minor, and G minor. Although the progression cadences on a sonority built on the final, its means of arriving there are vastly different than what would be expected of a progression of the common practice period. The chords that present the most obvious red flags are the D major and F-sharp minor chords. D-major is the dominant of G, which would imply its resolution to G-minor in a functioning progression; however, because the piece is modal, D major is not bound to that same convention. The F-sharp of the chord resolves up to the melodic final, however that G is the fifth of C major. The F-sharp minor chord would be foreign to a composer of tonal music. Instead, a diatonic F-sharp diminished chord would be used.²² Ultimately, chord progressions of this part of the renaissance are developmentally distant from functional harmony.

²¹ Grenon, "La plus jolie et la plus belle."

²² Larry Konecky, Triads.

The Middle-Early Renaissance: 1420-1460

The use of leading tones does not change substantially in the music of the next forty years. This is largely due to the fact that composers who were active in the previous sub-era, namely Du Fay, were still composing into the mid fifteenth century. It's clear that, although Du Fay may have grown personally, his melodic vocabulary remained static. In his chanson, *Resvellies vous et faites chiere lye*, leading tone usage can be seen in measures twenty-one and twenty-two in anticipation for resolutions to D and A. There is one peculiar use of C-sharp in measure forty-four that does count as a use of leading tones outside of a cadential scenario. In fact, the C-sharp on beat three creates an accented tritone with the middle voice.²³ This instance, however, definitely falls into the exceptions category due to its uncommon usage. New composers did emerge; however, this period did not spark much musical development in terms of leading tone emancipation. Similarly to the case of Du Fay and other composers who transitioned into the mid-fifteenth century, although there are some key instances depicting leading tones in non cadential situations, they are still virtually used entirely in cadential situations. In the Gloria Lionel Power's *Missa Alma redemptoris mater*, the cadence between measures thirty-nine and forty includes a C-sharp in the upper voice resolving to D.²⁴ There is an argument in this case that, because this section of the piece is in mode five, C-sharp is not a leading tone that one would expect. This does not change the fact that the leading tone is being used in the same cadential fashion. In measure thirty-nine, F-sharp appears a leading tone following a cadence earlier in the measure. The use of F-sharp in this case is unusual for two reasons. One is that the piece is presently in mode five, which would imply F-natural as a final. Second is that F-sharp is not being used to avoid dissonance. If F-natural were to be used instead,

²³ Guillaume Du Fay, "Resvellies vous et faites chiere lye." In *Anthology of Renaissance Music*.

²⁴ Lionel Power, "Missa Alma redemptoris mater." In *Anthology of Renaissance Music*.

there would not be a harmonic conflict. The use of F-sharp could possibly be explained when looking at the rest of the phrase. Ending at forty-five it appears that this section is in transposed mode one due to the presence of F-sharps and B-flats. In summary, the use of leading tones has not yet seen major enough development to draw more parallels between modality and tonality.

Moving into the mid 1400s, composers appear to have a similar relationship with triads as they did in the previous century. Major and minor triads continue to appear in musical textures often because of their non dissonant interval compositions. However, it is not yet viable to argue that composers have begun to embrace the triad as a single harmonic unit, but rather a combination of consonances. It may be fair to say that, similarly to the increase in the number of exceptions that leading tones appear outside of cadential situations, triads may appear more commonly in cadences. This observation should be considered cautiously due to the fact that nearly all triads will occur outside of the cadence: especially in three part settings. In Gilles Binchois' *Magnificat tercii toni*, a pre-cadential C major triad can be found in measure seventy-six.²⁵ In the greater context of the piece, however, the triad's strength is undermined by both the longer cadence in measure seventy-eight and the fact that it is voiced in first inversion. This is clear evidence that triads are still a byproduct of combined contrapuntal consonances. In the Sanctus from *Missa Caput*, a purposeful cadential D major triad appears in measure forty-eight.²⁶ This cadence has a similar impact to what a half cadence would have in a piece of tonal music. Interestingly, the leading tone that occurs in the uppermost voice never resolves expectedly to G. It is most important to note that this instance of a cadential triad is found in a setting for four voices. Although this does not inhibit composers from doubling the fifth or even

²⁵ Gilles Binchois, "Magnificat tercii toni." In *Anthology of Renaissance Music*.

²⁶ Anonymous, "Missa Caput." In *Anthology of Renaissance Music*.

tripling the root in most cadential sonorities, the addition of a fourth voice gives the composer another ingredient to factor into the harmonic procedures of the time.

Trending similarly in the direction of the lack of evidence found in the late fourteenth century, the music up until the mid-fifteenth century does not appear to contain any harmonic organization remotely suggesting functional harmony. Music at this point in the renaissance is unquestionably modal, and composers are concerned more with the treatment of individual consonances and avoidance of improper dissonances. Even when examining the most homorhythmic textures in the repertoire, the music does not imply the same harmonic hierarchy that governs the music of the common practice period. In Du Fay's *Ave regina caelorum*, a phrase of acute homorhythm occurs from measure fifty until measure fifty-six. When analyzing the vertical sonorities, a vaguely tonal progression occurs.²⁷ Du Fay begins with an alternation between one and two and arrives at a five-one cadence in measure fifty-three. The minor five four one cadence in the following three measures, however, derails the idea of the piece having a proto-tonal organization. Although the progression appears to have tonal characteristics on paper, the absence of harmonic rhythm²⁸ detracts from the piece's functionally harmonic identity. In music of the common practice period, it is common for chords to occur on strong beats with some regularity. In this case, some of the chords occur on numbered beats, however a discernable progression is not felt because of this particular independent treatment of the voices. The coinciding of the melodies creates the chords, and because they occur on strong beats, it is expected for them to be rid of dissonance. This creates the illusion of a chord progression. It is undeniable, however, that there is a planned trajectory towards a dominant chord that resolves to the tonic. When conducting a vertical analysis of Binchois' *Dueil angoisseus*, one can clearly see

²⁷ Guillaume Du Fay, "Ave regina caelorum." In *Anthology of Renaissance Music*.

²⁸ Arnold Whittall, "Review of Harmonic Rhythm: Analysis and Interpretation," (*Music and Letters* 85: 2004) 140-141.

that functional harmony has not yet crystallized as a structural musical component. From measures one through fourteen, the chords seem like a progression one might find in a tonal work.²⁹ However, the progression, when compared to the tonal progressions of the common practice period, has unique characteristics that draw attention to its renaissance qualities. First, the piece is in mode five. Although composers have already conventionalized the use of the Ionian and Aeolian modes, the chords themselves reflect the tones of the Lydian mode. Albeit similar to the major scale, the raised fourth alters the qualities of the supertonic, subdominant, and leading tone chords. This is seen chiefly in measure eight which involves a cadential progression of E minor to F major. In a tonal progression, this cadence would involve a diminished triad, or even more likely a dominant triad, rather than a minor triad. The piece does, however, correct many of the modal B-naturals as B-flats which indicates that the composition is transitional in terms of favored pitch collection. Ultimately, a combination of modality, absence of harmonic rhythm, and avoidance of triad usage contributes to the lack of functional harmony in this period of the Renaissance. Music is still proven to be largely x-axis focused, with the primary vertical concern being intervallic treatment.

The Late-Early Renaissance: 1450-1480

As music approaches the end of the fifteenth century, leading tones begin to see more usage outside of cadential contexts. Although leading tones continue to see usage in cadential scenarios, leading tones can be seen rather commonly throughout melodic lines. It is important to note, however, that leading tones are still almost exclusively functioning as notes that resolve upward by half step, with the only exception being the seven-six cadence that is prevalent in Du Fay's music.³⁰ The next step towards tonal implication would be the introduction of leading tones

²⁹ Gilles Binchois, "Dueil Angoisseeus." In *Anthology of Renaissance Music*.

³⁰ Ron Newmann, "Medieval Cadences".

that can be used in descending scalar contexts as well. When examining the Agnus Dei of Antoine Busnoys' *Missa L'homme arme*, measure twenty-seven in the bass has a decorative F-sharp on the last beat.³¹ This leading tone does not belong to any cadential passage. Instead, it is contributing to a five-six suspension between the contra line above it. Leading tone usage in this new liberal fashion can be found in the *Christe* from Johannes Ockeghem's *Missa Prolationum*. In measure ten in the second lowest voice, B natural resolves up to C in the following measure.³² This moment is clearly not cadential because of what is happening in the text. There is an argument to be made that the B-natural is a non-leading tone *musica ficta* because the general modality of the piece is dorian. However, when looking at the section that this moment occurs, there are several B-flats in the uppermost voice, suggesting that there was not a factor preventing Ockeghem from using B-flat. It is without any doubt that leading tones are starting to manifest in the ordinary pitch vocabulary of renaissance composers, due to their appearances throughout melodies. Relative to their use in tonal music, however, the leading tone is still an instance of *musica ficta*. Until leading tones are a tone that belongs to the natural pitch collection used by composers, they will not have assumed their tonal identity.

As music develops into the late fifteenth century, triads begin to appear more frequently. Similarly to the previous decades, vocal settings that include more than three voices are more likely to have triads due to the desire to preserve the independence of each melodic line. Bearing that in mind, looking at three voice vocal textures would give the most accurate representation of the current value of triads and how commonly they might appear in a musical texture. In Hayne Van Ghizeghem's *De tous bien plaine*, in addition to triads being found throughout, sonorities that make use of thirds above the root are more common than ones that include a fifth above the

³¹ Antoine Busnoys, "Missa L'homme arme." In *Anthology of Renaissance Music*.

³² Johannes Ockeghem, "Missa Prolationum." In *Anthology of Renaissance Music*.

root.³³ Instead of using a triad in these cases, however, the root is still doubled. In tonal harmony, it is rather common to see triads substituted for a sonority that excludes the fifth. However, in tonality, this is generally a result of retaining the smoothness of the voice leading. Although Ghizeghem is not necessarily thinking in the same terms as a composer of the common practice period, he often achieves a comparable three-part texture. In another three voice setting from the period, John Bedynghe's *So ys emprentid*, triads can be found in cadential scenarios as well. In the cadential figure that appears in measures fifteen and sixteen, as well as forty-four and forty-five, the chord under the fermata is a minor triad.³⁴ To see a triad revered in this fashion is not common, if visible at all, in the previous periods. It is also important to acknowledge the prevalence of triads throughout the rest of the piece. Triads that consist of a root third and fifth can be found on fifteen of the forty-nine down beats, and chords that consist of at least a root and a third can be found on twenty-eight of the down beats. In summary, triads are beginning to see more common use. Although final cadences still exhibit composer's preference for the open fifth above the final, triads are continuing to see growing saturation in the texture, especially in pronounced fashions.

Some of the music of the late fifteenth century demonstrates proto-tonal chord progressions. Although functional harmony is difficult to pinpoint in the highly contrapuntal structures of many of the pieces written during this time period, compositions that demonstrate moments of homophony illustrate harmonic progressions that are seemingly tonal. It is important to keep in mind that the diatonic pitch material used by composers at this point in history is still modal, which makes an impact on the quality of chords that are seen in chord progressions. Looking back through a tonal lens, however, reveals harmonic sensibilities moving closer

³³ Hayne Van Ghizeghem, "De tous biens plaine." In *Anthology of Renaissance Music*.

³⁴ John Bedynghe, "So ys emprentid." In *Anthology of Renaissance Music*.

towards the tonal side of the tonal-modal spectrum. In Ghizeghem's *De tous biens plaine*, arguably tonal progressions can be observed throughout the piece. From the beginning of the piece until measure fifteen³⁵, the chord progression favors five-to-one and seven-to-three progressions, which outline the dominant tonic progressions that are ever prevalent in tonal music. Interestingly, Ghizeghem is rather obsessed with what in tonal terms would be called the deceptive cadence where five resolves to six rather than one. Looking at an example later into the sub-period, Serfino Dall'Aquila's *Sufferir son disposto*, there are a surprising number of devices found commonly in tonal music.³⁶ Despite being modal in pitch material, the opening progression that continues until measure seven illustrates a strong tonic dominant relationship. Albeit the dominant chords are minor, the harmonic rhythm is regular, and the bass moves in a tonal fashion. The piece has a compelling modulation to, using tonal vocabulary, F major. Surprisingly, Dall'Aquila achieves this through a secondary leading tone chord, leaving in the tritone between the contra altus and the uppermost line. Harmony is drawing harmonically closer to the common practice period. Composers are undoubtedly beginning to regard the harmonic axis in a stronger fashion than in period eras.

The Middle Renaissance: 1470-1520

Along with the turn of the sixteenth century came some developments regarding the placement of leading tones. Based on general observations, leading tones are used primarily in cadential situations. Granted, this is where they are likely to appear in tonal music as well. The two areas that have yet to be breached are regular usage of leading tones outside of cadential situations, and the usage of leading tones as a means of creating accentuated cadential dissonance, such as the diminished triad. In terms of melody, leading tones can be found

³⁵ Hayne Van Ghizeghem, "De tous biens plaine."

³⁶ Serafino Dall'Aquila, "Sufferir son disposto." In *Anthology of Renaissance Music*.

throughout mode eleven melodies throughout this period. For example, Josquin Desprez's, *Ave Maria... virgo serena*, B-naturals can be found throughout the piece. The uppermost voice during the phrase from measure twenty until measure twenty-seven is an instance of particular interest because of the density of B-naturals.³⁷ This, and in other pieces that are based on mode eleven, such as Ninot le Petit's *Et la la la* and Heinrich Isaac's *Innsbruck, ich muss dich lassen*, have a leading tone factored into the mode, which undermines any groundbreaking qualities it might have. However, in Isaac's case especially, seeing transpositions of the mode on C more commonly suggests that composers are becoming more comfortable with what will become a core pitch collection of their successors in the common practice period. Leading tones, however, see substantial developments in terms of their usage in cadential situations. First is in the popularization of what would become the half cadence, in tonal music. A rarity in the music of the previous forty years, leading tones making an appearance in the final sonority of a cadence can be found far more commonly in the sixteenth century; especially in the music coming from Spain. Not only does Juan del Encina's *Una sañosa porfia* contain several half cadences throughout the piece, the occurrence of half cadences is greater than cadences on the final.³⁸ The piece even concludes with a one to major five cadence. A half cadence can also be found in Pedro Escobar's *Passame por Dios barquero* at the first and second endings.³⁹ Leading tones can be found in sonorities outside of cadential harmonies as well. In Desprez's *El Grillo*, the second phrase, from the pickup to measure three until measure seven includes several functioning dominant sonorities, both primary and secondary.⁴⁰ The phrase begins with G major triads that include the leading tone. Surprisingly, they are followed by their dominant, D major, which

³⁷ Josquin Desprez, "Ave Maria... virgo serena." In *Anthology of Renaissance Music*.

³⁸ Juan Del Encina, "Una sanosa porfia." In *Anthology of Renaissance Music*.

³⁹ Pedro Escobar, "Passame por dios barquero." In *Anthology of Renaissance Music*.

⁴⁰ Josquin Desprez, "El grillo." In *Anthology of Renaissance Music*.

include F-sharps in their spelling. In an unprecedented moment, Alessandro Coppini includes a leading tone in measure seven of *Canto di zingane*. His spelling of a diminished triad in which will be discussed later.⁴¹ It is without question that leading tones during this period are seeing more liberal usage when compared to eras past, however composers have not fully separated from modal pitch organization. Pitch collections that are closer to the major and minor scales of the common practice period are emerging, but composers of imitative music in particular have not yet fully relinquished their ties to the modes, which implies that there is more development to undergo.

Triads continue to see much more consistent usage as music transitions into the sixteenth century. Usually a byproduct of voice leading in four part, and larger, textures of previous eras, triads are commonplace in the musical textures of the early sixteenth century. Perhaps one of the reasons why triads are seeing increased occurrences is due to the popularity of homorhythmic texture. What would be considered a chorale texture⁴² in tonal music is beginning to encompass the entirety of a piece, rather than a single section. In the introit of Pierre de la Rue's *Missa pro defunctis*, which has a fairly even distribution of homorhythm and polyphony, triads can be found throughout. In one of the more deliberate cases, which occurs between measures twenty and twenty-three, a chorale style chord progression appears which makes use of triads that include each voice as a chord tone.⁴³ In a similar fashion, Heinrich Isaac's Kyrie from his *Missa de Apostolis* includes a larger distribution of homorhythmic texture than what was seen in previous eras.⁴⁴ The most profound instance of homorhythm, measure seventy-six, until measure seventy-nine consists of a chord progression that decelerates the piece in anticipation for an

⁴¹ Alessandro Coppini, "Canto di zingane." In *Anthology of Renaissance Music*.

⁴² Ken Rumrey, "Choral Composition and Arranging."

⁴³ Pierre de la Rue, "Missa pro defunctis." In *Anthology of Renaissance Music*.

⁴⁴ Henry Isaac, "Missa de apostolis." In *Anthology of Renaissance Music*.

important cadence. Later composers of this era, however, use homorhythm as the primary texture of the entire piece. Coppini's landmark work, *Canto di zingane*, Escobar's *Passame por Dios barquero*, and Isaac's *Innsbruck, ich muss dich lassen* all consist of primarily homorhythmic textures akin to the chorales of the baroque period.⁴⁵ Even Desprez, a composer who primarily focused on contrapuntal and imitative composition wrote music in this style, which can be seen in *El grillo*. The popularization of homorhythmic texture is a large step in the direction of tonal music. Music that is harmonically driven while considering all voices as part of a single harmonic unit is becoming increasingly common, which suggests that the prevalence of triads, and even extended harmonies, can be expected in the not too distant future.

In, perhaps, a surprisingly early fashion, the foundation of function harmony appears as music continues into the sixteenth century. Although strict chord progressions are not adopted by all composers--after all, many composers continue to write in a pervasive imitative style--the homorhythmic music of the period exhibits compelling evidence that composers are beginning to think in terms of tonic dominant relationships at the chordal and trajectorial level. Discussed in prior paragraphs, Coppini's *Canto di zingane* is one of the strongest examples of early functional harmony. The first progression of the piece, measure one until measure four consists of an archetypal chord progression: one, four, five, five of five, five.⁴⁶ In addition to seeing an early example of secondary dominance, the progression has a clear harmonic trajectory towards the tonic. The rest of the piece follows this same general quality of cadencing on one or five. One of the most remarkable moments in the piece occurs starting in measure eleven and ending in measure fourteen. Coppini uses a falling fifths progression: three, six, two, five, one. The traversal of a scale by falling fifths, or ascending fourths, is prevalent in the music of the

⁴⁵ Peter Billiam, "Forty Bach Chorales."

⁴⁶ Henry Isaac, "Innsbruck ich muss dich lassen." In *Anthology of Renaissance Music*.

common practice period.⁴⁷ Ultimately, Coppini's writing suggests that harmony is guiding the formal organization of the piece, which is truly ahead of his time. Coppini, however, was not the only composer using proto-tonal conventions in their writing. Isaac, in *Innsbruck, ich muss dich lassen*, demonstrates a chord forward style. The progression from the pickup to measure sixteen up until measure seventeen, for example: five, six, seven, one, four.⁴⁸ This excerpt of a largely functionally harmonic piece has intriguing qualities. First is the use of deceptive progressions, five to six, being used commonly in place of five to one. Second is the use of a diminished triad in first inversion. It was already groundbreaking enough to include a sonority that consists of a tritone, however the inversion of the triad to avoid the doubling of the leading tone is a voice leading convention taught to students studying common practice period harmony. The cadence may be the most fascinating aspect of the progression. Cadencing on four is not the most common occurrence in functional harmony. However, preceding four with one is the equivalent of preceding it with its dominant. It would take the addition of the seventh to provide the further context needed to imply this tonic dominant relationship. Nevertheless, the progression from one to four follows the falling fifths pattern first seen in Coppini's work. It is important to note, however, that modal counterpoint is still a prevailing texture throughout this period, which is not as deliberately driven by harmony. It is difficult to debate, however, that functional harmony is not becoming a budding idea amongst composers.

The Late-Middle Renaissance: 1520-1550

The music of the mid sixteenth century demonstrates a moderate amount of leading tone development. The use of the Ionian mode leads to composers incorporating leading tones into melodic ideas far more frequently than in previous eras. This is due to two large contributions.

⁴⁷ Alessandro Coppini, "Canto di zingane."

⁴⁸ Henry Isaac, "Innsbruck ich muss dich lassen."

First is due to the Ionian mode having a leading tone included in its natural spelling. Second is the continuing popularity of homophonic texture. Because composers are, unquestionably, thinking in terms of chords at this point in the renaissance, leading tones emerge in three, five, and seven chords. As a result, the most interesting instances of non-cadential leading tones can be found in polyphonic contexts. Christopher Tye's setting of *Lord, let thy servant now depart in peace* is a perfect example.⁴⁹ Tye uses leading tones primarily as a passing tone in scalar melodic ideas. The first example of this can be found in the second countertenor in measure two. This occurs several times throughout the piece in each of the voices. Although it appears that the majority of the music composed in this period is influenced by the Ionian mode, the Aeolian mode does see some usage. It is important to note, however, the music that is beginning to assume a, in tonal terms, minor sound sees a different style of leading tone usage. Because they are not diatonic to the Aeolian mode, leading tones see far less usage. Generally speaking, leading tones are used almost exclusively in cadential situations. If not used in cadential situations, leading tones in pre-minor pieces are virtually always succeeded by the final of the mode. In most melodic contexts, however, the seventh scale degree retains its natural status. This reflects how the melodic minor scale functions in tonal music.⁵⁰ This can be seen in Julio Segni Da Modena's *Ricercar*. The first instance of a C-sharp leading tone is found in the altus in measure eighteen, however all Cs preceding this measure maintain their natural sign. This is a shared characteristic with the minor scale as well.⁵¹ This is also reflected in the minoresque homophonic music of the period. In the case of non cadential dominant sonorities, it is quite common to see them voiced with minor quality. Although this will be discussed later, examples

⁴⁹ Christopher Tye, "Lord, let thy servant now depart in peace." In *Anthology of Renaissance Music*.

⁵⁰ Barbara Murphy, "Major and Minor Scales."

⁵¹ Julio Segni da Moderna, "Ricercar." In *Anthology of Renaissance Music*.

of this can be found in Jacques Arcadelt's *Il bianco e dolce cigno*, Philippe Verdelot's *Madonna, per voi ardo*, and others. Looking forward, it is likely that leading tones are going to see more usage as a result of pitch material nearing its major-minor transformation.

In a similar fashion to the previous forty years, composers are continuing to write homophonically textured music in the early-mid sixteenth century. As was mentioned in the section detailing the music of the turn of the sixteenth century, composers not only are continuing to demonstrate that they are no longer thinking strictly in terms of intervals, but they are also presenting their preference for the triad over the open fifth in cadential situations. Claudin de Sermisy's *Je n'ay point plus d'affection* is a vertically conceived work with only cadences that actively exclude the fifth from the final sonority.⁵² Because the open fifth is traditionally found, if anywhere, in the final cadence of the piece, Sermissy makes a relatively forward thinking gesture by excluding the fifth entirely. In fact, the exclusion of the fifth from a cadential sonority becomes a frequently used voicing in tonal harmony because major and minor chords do not need a fifth to present their quality.⁵³ Triadic cadences can be found in Arcadelt's *Il Bianco e dolce cigno*, as well. Throughout the piece, Arcadelt uses voicings that are identical to Sermissy's, such as the cadence in measure fifteen. However, he also fully fleshes out triads in cadential situations as well, which can be seen in measure ten, and the final cadence in measure forty-six. Music sees a drastic and unpredictable shift in the 1550s, however. Late renaissance composers Orlande de Lassus and Carlo Gesualdo contribute truly bizarre chromatic music to the repertoire. Due to a new fascination with Greek music theory and the liberation of non-diatonic tones in the music of the first quarter of the sixteenth century, composers begin to use atypical pitch material that illustrates seemingly alien triads. In the prologue to Lassus' *Prophetiae*

⁵² Claudin de Sermisy, "Je n'ay point plus d'affection." In *Anthology of Renaissance Music*.

⁵³ Liliya Shamazov, "Preface to the Concise Manual of Harmony." (Newfound Press: 2014).

sibyllarum, the flurry of foreign accidentals is accompanied by a series of unapologetic triads.⁵⁴ Although the chord progression will be dissected later, the fact that Lassus is using triads on nearly every beat is indicative that the music is trending towards vertical organization. The example included is the first six measures of the piece. Using voice leading practices that are conventions of the common practice period, Lassus voices virtually every chord in a fashion that likely inspired the theory of the baroque. In a similar fashion, Gesualdo uses triads in his piece *Moro, lasso, al mio duolo*.⁵⁵ Even though he is marginally more experimental in his chromaticism when compared to Lassus, his voice leading illustrates an understanding of what would later be defined as functional harmony. Looking at measures fourteen through eighteen, for example, the homophonic sections of the piece used fully voiced triads. It is clear that composers, regardless of their time of activity during this period are triadically focused in homophonic scenarios. One can expect for further tonal developments to occur in the final decades of the renaissance.

As was probably expected based on the developments of the previous forty years, the tonal procedures of the common practice period are growing chronologically closer. Although the music of the mid sixteenth century is overwhelmingly tonal, the composers of the earlier part of this period demonstrate that there is still an active tether to modality. This can be seen in the occasional avoidance of cadential dissonance, and the use of the subtonic in certain scenarios. Nevertheless, the harmonies of this period are most likely conceived as part of a larger harmonic progression. In Sermisy's *Je n'ay point plus d'affection*, this transitional harmonic style is illustrated clearly.⁵⁶ In the opening progression, there is a series of, in tonal terms, atypical progressions. Not only are there minor dominant chords, but unusual progressions such as six to

⁵⁴ Orlande Lassus, "Prophetiae sibyllarum." In *Anthology of Renaissance Music*.

⁵⁵ Carlo Gesualdo, "Moro, lasso, al mio duolo." In *Anthology of Renaissance Music*.

⁵⁶ Claudin de Sermisy, "Je n'ay point plus d'affection."

three and flat seven to five are present. This can be somewhat rationalized by the fact that the voice leading is smooth, and the lowest voice's clear underpinning of the progression. Notice how there is root motion by fourth in measures two, three, and four. Although the harmonies are not moving in a tonally appropriate manner, the spirit of the tonic-dominant relationship is present. In a somewhat developmental fashion, Verdelot demonstrates moments of pre-tonality in his progressions. For instance, measures sixteen through eighteen of *Madonna, per voi ardo* shows his familiarity with the falling fifth pattern.⁵⁷ Beginning with the tonic, the progression follows with seven, three, and six. Although falling fifth patterns are speckled throughout the work, it is important to point out that the tether to this transitional style is still present. There are plenty of minor dominant sonorities, as well as tonally odd progressions throughout. Tonal progressions do begin to see refinement as composers write into the middle of this period. Sermisy displays stylistic development in his setting of *Tant que vivray*. The second phrase, measures five to eight is one of many tonally accurate progressions: one, two, six, four, and five.⁵⁸ In a fascinating manner, Sermisy includes a brief B-flat major seventh chord on the pickup to measure eight. Without question, the most fascinating contributions of this period come from the chromatic works of Lassus and Gesualdo. Although they are not known exclusively for their highly chromatic music, they did experiment with this trend, leading to, even by tonal standards, modern chord progressions. In the prologue to Lassus' *Prophetiae sibyllarum*, the chord progression appears to be largely defined by a chain of dominant-tonic relationships.⁵⁹ Illustrated in measures nine through seventeen, the majority of the chords can be analyzed as the dominant of their successor. G precedes C in measure nine. The progression of E major, A major, D major, and G major occurs over the span of measures ten and eleven. And the

⁵⁷ Philippe Verdelot, "Madonna, per voi ardo." In *Anthology of Renaissance Music*.

⁵⁸ Claudin de Sermisy, "Tant que vivray." In *Anthology of Renaissance Music*.

⁵⁹ Orlande Lassus, "Prophetiae sibyllarum."

culminating progression that leads to the cadence of the phrase: F-sharp major, B major, E major, A major, D major, G major, and C major. This is concrete evidence that, amidst the highly chromatic nature of the composition, Lassus knew of the circle of fifths. Gesualdo's *Moro, lasso, al mio duolo* presents an even more bizarre chord progression. Similar to Lassus, Gesualdo demonstrates his understanding of tonic-dominant relationships, however, in true experimental spirit, Gesualdo introduces new harmonic ideas.⁶⁰ The motivic descending half step progression that recurs throughout the piece, which can be seen first measure, is particularly modern. Gesualdo also experiments with parallel major and minor chords. First seen in measures fourteen and fifteen, Gesualdo juxtaposes B major and B minor adjacently. In a truly unpredictable fashion, chromatic compositions appear to share more harmonic qualities with post romantic music rather than the music of the baroque. Regardless of the anomalous chromatic music of the mid sixteenth century, it is clear that composers are thinking in tonal terms. Homophonic music, especially, is organized by a chordal hierarchy that leads to a tonic or dominant cadence.

The Late Renaissance and early Baroque: 1550-1600

As the turn of the seventeenth century approaches, composers begin to write the most tonally identifiable music of the entire renaissance. The vast majority of music that is written is either deliberately written in the Ionian or Aeolian modes, or accidentals are placed in the music to give the pitch material major or minor qualities. As a result, the style of leading tone usage is a heightened form of the developments from the early sixteenth century. Leading tones are regularly used outside of cadential situations as a reflection of their harmonic demand and their naturalization as part of the scale. Although they can be found throughout his catalog, the Gloria from Giovanni Pierluigi da Palestrina's *Missa dum complerentur* demonstrates the elevated use

⁶⁰ Carlo Gesualdo, "Moro, lasso, al mio duolo."

of leading tones aptly.⁶¹ In measures seven through twelve, not only do E naturals appear in both ascending and descending scenarios, but there are also B naturals which are used to ornament the dominant, C. This is indicative of the fact that leading tones are serving a greater purpose than the conclusion of an individual line. Leading tones are now being used to bring attention to changes in harmonic trajectory as well. As was mentioned in the previous section, music that embodied a proto-minor tonality were playing catch up in terms of leading tone usage. Leading tones would be used primarily in cadential situations, however subtonic sevenths would be used in both ascending and descending cases throughout. Whether the seventh was raised or left natural outside of a cadence was generally inconsistent, and it varied largely from composer to composer. In some of the later music of this period, however, the deliberate use of melodic minor can be found, which implies a significant leap in the direction of tonal pitch collections. One example of this can be found in John Dowland's *In darkness let me dwell*.⁶² Assuming that this piece was written in the Aeolian mode, the occurrence of not only G-sharps, but F-sharps as well, creates a sound world that is analogous to what would be heard in the next century and beyond. This demonstrates Dowland's avoidance of augmented melodic intervals, which is a convention of the common practice period taught in theory classes today. Ultimately, leading tones have practically assumed the same role they will play in the music of the baroque and beyond. It is clear that composers have adopted leading tones as more than just an ornament, but a diatonic pitch.

As one could probably expect, the music of the late sixteenth century includes triads in the closest-to-tonal fashion. Musical texture has developed to reflect what would be relevant in the early baroque period, a balance of homophony with harmonically driven counterpoint. Even

⁶¹ Giovanni Pierluigi da Palestrina, "Missa dum complerentur." In *Anthology of Renaissance Music*.

⁶² John Dowland, "In darkness let me dwell." In *Anthology of Renaissance Music*.

in contrapuntal textures, unison rhythms are far more common which allows for easier vertical analysis, which is unique when compared with the complex contrapuntal structures in the music of previous decades. Looking again at Palestrina, in his motet, *Nigra Sum*, one could easily discern the harmonies in even the most contrapuntal active sections.⁶³ One of the more melodically involved sections is the phrase over the text “sicut tabernacula Cedar” starting in measure twenty-two, and ending in measure twenty-seven. Even though there is independence between the voices, there are moments of first species counterpoint when analyzing vocal subsets.⁶⁴ In measure twenty three, for example, the first species texture allows for simple analysis of the triads: B-flat major, E diminished in first inversion, and F major. The phrase further elaborates to add and subtract voices, which further contributes to the contrapuntal nature of this piece. It is also worth noting that the use of not only a diminished triad, but one in first inversion, is indicative that composers are thinking about harmony in tonal terms by the mid-late 1600s.⁶⁵ In the music of the late sixteenth century, the continues to grow in popularity, which implies that triads are going to be the most common sonorities. In some extreme cases, such as Giovanni Giacomo Gastoldi’s *A lieta vita*, and Orazio Vecchi’s *Caro dolce mio bene*, the piece is virtually always in a state of homorhythm. This continues to be a trend for composers moving forward. Even into the baroque period, composers do not fully do away with counterpoint, however homophony, especially in the case of sacred vocal music, becomes the more common idiom.

Developments on the functional harmony front are, perhaps, the most interesting of the period. In the previous decades, Lassus and Gesualdo experimented with highly chromatic music that exhibited a mastery of tonic dominant relationships, and innovated with elements of modal

⁶³ Giovanni Pierluigi da Palestrina, “Nigra sum.” In *Anthology of Renaissance Music*.

⁶⁴ Barbara Murphy, “Counterpoint General Rules.”

⁶⁵ Robert Gauldin, “An intersection of Counterpoint and Harmony.”

mixture. However music that is almost entirely tonal is beginning to emerge, setting the stage for the music of the common practice period. With the exception of Coppini's *Canzone di zingane* composed forty years earlier, functional harmony has made its way to the mainstream. In the first example in the anthology from this period, Palestrina's *Dum complerentur*, primarily predominant, dominant, and tonic sonorities are used.⁶⁶ In the second phrase, measures six through eleven, there is an undeniably tonal chord progression over the incipit: one, five, one, four, five, one, five, six, five, five of five, five. not knowing Palestrina composed this, one could easily guess that Bach or Hayden harmonized one of their melodies with this progression. It contains only tonic, dominant, and predominant chords, it has a dominant trajectory with a cadence that includes a secondary dominant, and has a clear harmonic rhythm. The late renaissance, however, is a period of transition. Music is not yet exclusively tonal, but rather a reflection of the fact that composers are organizing their music harmonically using the modal pitch material they have used since the beginning of the renaissance. Most composers are writing in the Ionian mode or Aeolian modes, however there is music that is written using the traditional church modes. Lassus' *La nuit froide et sombre* is an example of a functionally harmonic composer applying their style to the Dorian mode.⁶⁷ The piece begins clearly with a D pitch center, with B-flats following shortly after. In the second phrase, measures four through seven, B naturals begin to appear. Contrary to Dowland's use of natural sixes in a melodic minor context, these B natural do not ascend to the leading tone to avoid an augmented second. Instead, the B natural changes the quality of the E triad from diminished to minor. When analyzed the progression up to this point is: five, five of five, six, five of two, two. In minor keys, the supertonic is not tonicizable because of its diminished quality. In the Dorian mode, however, the

⁶⁶ Giovanni Pierluigi da Palestrina, "Dum complerentur." In *Anthology of Renaissance Music*.

⁶⁷ Orlande Lassus, "La nuit sombre." In *Anthology of Renaissance Music*.

superfinal has a minor quality, which is tonicizable. Because Lassus' catalog up until this point has demonstrated his understanding of dominant tonic relationships and emerging tonality, this piece's Dorian quality does present a peculiar reconciliation of both modal and tonal soundworlds. Regardless of the transitional works written in early church modes, most music is written in what would develop into the major and minor scales of the next several decades. Thomas Weelkes' famous madrigal *As Vesta was from Latmos hill descending*, is a culmination of the tonal developments up until the late sixteenth century.⁶⁸ Looking at the opening chord progression: one, four, one, four, five, five seven of four, four, seven, one, one can see that this chord progression is tonic and dominant driven, it makes use of secondary dominants, includes cadential dissonance, and includes a seventh chord. This progression shares similar qualities with the harmonic content in the Palestrina example mentioned earlier while contributing its own innovations. In summary, it is without question that music has transitioned into a vertically conceived style. Chord progressions give the music a new energy and direction that is unique and fresh when compared to the modal counterpoint of years past.

Conclusion

Before I began my survey of Altas' anthology of renaissance music, I hypothesized that music would gradually transition from modality to tonality. I was not sure when this transition would begin, and how long the transition would take; however, it is clear that there was a gradual shift in style. Admittedly, the shift is not as neatly defined as I thought it would be. Based on the three "all encompassing" parameters I focused on when conducting my analysis, each period contributed its own developments across each of the parameters unevenly. Leading tones, for example, were used in similar fashions across a span of nearly two hundred years. Albeit,

⁶⁸ Thomas Weelkes, "As vesta was from latmos hill descending." In *Anthology of Renaissance Music*.

cadential styles changed from over the centuries, composers still revered the leading tone as a tool for indicating the end of a phrase. It was not until the growing popularity of homophony that leading tones started developing additional roles as a harmonic supplement. In a similar fashion, the emergence of functional harmony was not as gradual of a change as I would have expected. Although the general consensus of the dominant moving to the tonic has existed in some form since the beginning of the renaissance, seeing any music that could be convincingly described as chordally driven was not likely until the early 1500s. Perhaps the most gradual shift in tonal quality was the emergence of triads, and cadential thirds. When compared to the other tonal parameters, homorhythmic triads began to occur as a byproduct of composers using more and more instances of homophony. In the early renaissance, music was almost exclusively contrapuntal, but as time progressed, composers began to incorporate larger swaths of homophony. Eventually, it became common for entire pieces to have a homorhythmic texture, and through association, rhythmically unison triads. As a result of each attribute's own developmental path, tracking tonal development has turned out to be rather complicated. In some circumstances, modality and tonality are incredibly similar. Both use leading tones to create a sense of finality, and both use diatonic pitch material. However, the two theories, at the same time, are quite different. Tonality is a harmonically driven style that uses chord progressions to create a sense of movement and narrative, which embraces dissonance as a tool for creating suspense. Whereas modal music was originally a contrapuntal style that honored intervallic consonance, and generally avoided accentuated dissonance. Despite the unique paths each of the parameters took over my survey, it is factual that tonality is a byproduct of generations of development.

Contrary to how music history and theory is often synthesized, tonality did not appear out of thin air, nor did it come about over a short transition. Tonality's gestation was nuanced, lasting the entirety of the renaissance in some cases, and seeing more rapid development in others. When considering all of the tonal parameters I kept track of in my survey, alongside the vast catalog of renaissance repertoire that I did not interface with in my analysis, I believe that music students are done a substantial disservice when Western theory curriculums neglect to emphasize early music. The renaissance was a period of great music growth that was objectively longer than the common practice period. It is undeniable that the majority of the repertoire was composed during the common practice period, and, as a result, should be focused on in a classically composed curriculum; however, learning about tonality before learning about modality and all of the Western music that predates the renaissance is akin to a doctor learning how to perform a surgery before learning about the anatomy of what they are performing surgery on. Hypothetically speaking, it does not make sense, and conducting my research has strengthened my position. Although the scope of my paper was limited to tonality's prenatal development in the renaissance, one can easily connect the currently relevant issue of equality and inclusivity in music education to my research. This is not an attempt to reappropriate the original intention of the movement, which is to spur the idea of higher education's de-eurocentrization of the curriculum. After all, the renaissance is a period of Western history, and not necessarily conducive to the implementation of an international and cross cultural education plan. Nevertheless, a significant portion of the history that institutions prefer to teach is missing in theory curriculum, which is antithetical to the idea of a university or conservatory producing an informed musician... even if limited to knowledge of the Western repertoire. Although I cannot help but feel that my experience as a university student who has engaged in music theory classes

at the undergraduate and graduate level have not prepared me sufficiently for this level of research. Needless to say, my research has been enjoyable, rewarding, informative and largely conclusive.

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