

*D: Essay on Modality
and Tonality*

Re Modality/Tonality

Attached is a draft of an essay on modality and tonality.

I was moved to write this essay as a response, long held within me, to the continual misuse of these terms, particularly, the commonly held view that tonality in western music occurred at the beginning of the seventeenth century, signaling the beginning of the Baroque Era. The more generous view one finds is the acknowledgment of some "forerunners" in the sixteenth century. The general view, however, is that the Middle Ages and Renaissance are dominated by the "system" of modality.

I knowingly entered into a compromising position in submitting a proposed paper to Edward Lowinsky for the International Conference on Josquin, with the title, Tonality in the Music of Josquin. Rising to a height of generosity, E.L. had me change the title to "Tonal Tendencies.....etc." Anyway, he was supportive, I must say with fondness for his acceptance and kind remarks of genuine approval of a paper with Schenkerian orientation and graphs throughout. Since then the musicological community has gone far in the examination of modality, but it has not revised the basic notions of the modality/tonality issue.

The attached draft is not a systematic historical representation from Gregorian Chant to the beginning of the 17th c. It is intended as a semantic and broad-based inquiry.

I plan to add examples at various points, to include those places which I have marked with an asterisk (*), and a number of referential or commenting footnotes, particularly at points marked FN.

References to my own printed examples will be marked FN EX SN or to others, FN EX followed by name.

Memo re the use of the term, Pre-tonal

Modality is generally regarded as the system governing the music of the Middle Ages and the Renaissance. The description of the modes is well established in the theoretical tracts. Further, we are guided by the identification of liturgical chant by mode.

While there are a number of features that differentiate the modes, one from another, there are several that stand out. The identity of a mode is given in terms of that tone upon which the diatonic members of its octave species is based. In Gregorian chant this governing tone generally is the last tone of the chant, i.e., the finalis. The two possibilities of octave species of a mode, with the same final tone constitute the authentic and plagal forms of the mode.

While the above is a simplified representation, no further details are necessary at this point. Within any given mode there are characteristic features of the relationship of the tones to one another in the octave species. Essentially, mode is a description of the diatonic tone-relationships within the octave species of the mode. Finally, it must be emphasized that the features of mode apply to a monophonic setting, e.g., liturgical chant. In the continuing development of polyphonic music throughout the Middle Ages, the identity of mode as a condition of all the participating voices in the polyphony becomes an increasing problem. Thus, Glareanus, the sixteenth century theorist, places emphasis on the mode of the cantus firmus! This identity cannot be applied to a non-cantus-firmus setting, or to most secular genres. While the theorists attempted to grapple with this problem, conditions of multi-linearity were unique to the compositional concepts, and theoretical concern placed a new emphasis on explaining the relationships of the tones primarily in terms of intervallic relationships on the most immediate levels, thus developing various "rules" for counterpoint. While other factors of composition were brought into the sphere of theoretical writing, the phenomenon, mode, rested basically on its monophonic origins.. These were transferred to the polyphonic environment, with resultant problems.

How do we approach a liturgical piece of the Renaissance? If we look at one work of Josquin, the contradictions of the monophonic implications of mode and the organizing forces within polyphony become patently evident. In Missa L'Homme Arme super voces musicales, the cantus firmus is stated throughout the Mass on different tones successively of the hexachord, thus projecting the well-known melody in different modes. Yet each of the movements within the Mass terminates polyphonically on the tone, D. Thus, there is no doubt that the Mass is a "D" piece, securely set through the final cadences of each of the movements, with D in the lowest voice firmly supporting the polyphony above. It would be simplistic to rest the case of the sense of "D-ness" as a condition created by the final tone, or to concentrate on the cadence phenomenon as the sole creator of the importance of D as a centrality of tone. Further, if we enumerate the internal cadences, we are describing rather than applying a process of analysis. In the larger sense; we tend to identify the mode in a polyphonic setting by the final tone, taking into account the signature and its relationship to the final cadence. Frequently, such identifications take into account the condition of mode transposition, e.g., a "G" piece, with a signature of B \flat , is considered as transposed Dorian. There are several difficulties. Polyphonic settings of the Lydian mode, i.e., modes 5 and 6, on its inherent tone, F, carry a signature of B \flat , not only because of the contrapuntal difficulties involving the tritone, but certain melodic conditions as well. This is a condition frequently encountered in liturgical chant, e.g., the use of the flat in the signature in the Solomes editions. The transposition of this form of setting to the tone, C, thus without any signature, theoretically becomes a transposition of the F mode. We recognize,

monophonic
problems in
polyphony -

Polyphony
dependent on
"counterpoint"

Analytical
approach to
L'Homme
Arme

Lydian
Mixolydian
Dorian
partial signatures

reference
the identification of mode
by name or number identifies

however, that these polyphonic settings contradict the diatonic purity of the Lydian mode.

modifications

Long before the Renaissance, the diatonic purity of the mode in polyphony has been invaded by hostile forces in the form of stipulated chromatic alteration and musica ficta. There is no doubt that the modes were altered in various ways, as a result of which they lost some degree of their original identity. Thus, for example, the frequent use of the lowering of the sixth degree in modes 1 and 2, both for contrapuntal and melodic reasons so well known that examples are not needed, transformed this mode in both authentic and plagal forms so that they resembled the modes which Glareanus ultimately recognized as modes 9 and 10. The Lydian mode, with its stipulated lowering of the fourth degree to B \flat , in the signature, became the model for the theoretical formulation by Glareanus as modes 11 and 12. These modes became the prototypes of minor and major, respectively. Further, the use of the leading-tone in cadences, both internal and final, intensified the primary linear ingredient which drove the cadence to its resolution in one of the upper voices in a polyphonic setting. This use of the leading-tone was a marked facet of the practice of musica ficta. The music of Josquin's time reveals a rich array of flats and sharps in polyphonic compositions, even to the extent of different signatures among the voices, as in the well-known example by Josquin, the motet, Absolon, fili mi. While each of the voices can be explained within the system of the time, the composite polyphony becomes a rich expression of B \flat minor! Thus, from the Middle Ages through the early part of the sixteenth century, the diatonic purity of the modes had been weakened considerably.

The importance of the cadence has been recognized traditionally as an event that defines the resolution of activity leading to a goal. Such resolutions became commonplace in music at the time of Machaut and Landini. Particular formulae of coordinated linear motions characterized the cadences of fourteenth and fifteenth century polyphony. In most cases, the attainment of goals of motion give importance to the final tone. Most often these final tones convey to our ears a confirmation of the events that precede the resolution. Internal cadences, i.e., other than final ones, likewise confirm preceding events, tending to establish the conclusion of a section. Further, in all cases it is the lowest tone of the simultaneity of the final tones, i.e., the chord of arrival, that identifies the primary tone. How can we describe this tone in itself? What name can be given to the chord, which may be either a complete triad, or octave and fifth, or octave alone?

Granted that there is general acceptance of the importance of the final chord that has been attained in a manner that leads into it convincingly, and frequently with anticipation, is this chord by itself the sole determinant for creating the primacy of that tone? Surely, the events that precede the final chord have some relevance to it, and play some role in defining the primacy of the final tone. Further, as we examine the polyphony, we are aware of melodic motions which seem to define activity within triads, outlining the filling in of fifths, as well as moving stepwise within fifths. Octaves melodically are outlined as well, the fifth within an octave span playing a primary role. Simultaneously, are we not aware of the presence of triads in 5/3 position at first, and later, in 6/3 position? Both in simultaneity and in successivity, polyphony is expressed in triadic terms.

While harmonic motion, particularly the dominant-tonic chord succession, is regarded as THE essential ingredient of tonality, its presence is not required to arrive cadentially at the primary final chord. The leading-tone, a well established practice by the fifteenth century, generally functioning at the cadence in the uppermost voice, was accompanied

by other linear activity which in a combined fashion fulfilled the cadence. Simultaneously, the second degree moved to the first degree. In three-voice settings, 7-8 (above) and 2-1 (in the lowest voice) were accompanied by an inner voice motion of 4-5; in the so-called "Burgundian" cadence, #4-5, thus emphasizing the singular importance (other than the first degree) of the fifth degree. The Landini cadence also practices the leading-tone motion, but in its unique and formulaic motion, long observed on occasion by other composers after the Trecento, seems to observe the principle of avoiding the direct motion from the interval of the sixth in the penultimate chord of the cadence, hence a motion of 6-5 intervallically above the lowest tone, preceding the resolution to 8, the octave above the final tone. These linear factors apply to internal cadences as well.

In discussion of the relationship of the voices, one to another, the concerns of theorists well into the sixteenth century center on the principles of counterpoint. The contrapuntal factors, as applied to cadences are described briefly above. By the middle of the fifteenth century, however, a new principle of motion begins to assert itself at both internal and final cadences, namely, harmonic motion, in which the lowest voice, in a root-position chord, descends by leap a fifth below to the lowest tone of another chord in root position (not necessarily a complete chord). We recognize this succession as the V-I harmonic motion that governs the music of several centuries beyond the Renaissance. But it is present throughout the Renaissance, with increasing use. It is associated with internal cadences, with special significance at the close of sections created by divisions of text or by outer form.

Finally, we must acknowledge our awareness of sense of "key" in this music. While it is most obvious in the finality of the closing chord, the chord frequently is preceded by a number of measures in which there is a sustained prolongation of the sense of the chord, sometimes intensified by the prolonged root of the chord in the lowest voice. While such examples are the most immediately recognized form of prolongation, we easily note others which occur internally. Thematic-melodic activity is frequently tied to these prolongations, thus intensifying the feeling of "key." Added ingredients likewise begin to enrich the harmonic palette. The progression ii-V-I is used occasionally in the fifteenth century. Associated with cadences is the linear approach to them, already cultivated in fourteenth century music, both French and Italian, one sees stepwise motions in the lowest voice, descending to the "tonic" of the cadence. Likewise the uppermost voice frequently descends stepwise in its approach to the second degree or to the leading-tone (*musica ficta* or stipulated). In a sense, such motions are prolongations of "direction" towards the goal.

There are problems, of course, in applying analytical tools to the examination of this literature. Although the modes are in a constant state of alteration or modification in varying degrees, each one retains certain unique features that condition the polyphonic setting. While the Dorian becomes at times identical to the Aeolian mode, and the Lydian and Mixolydian modes to the Ionian mode, the Phrygian mode, in which the primary characteristic feature is the half-step between the second and first degree, retains its individuality. It cannot be altered without destroying the essence of that mode. The Phrygian mode, therefore, is incapable of using a diatonic consonant triadic chord on the fifth degree, thus eliminating the possibility of a dominant. The leading-tone in itself is not available for obvious contrapuntal reasons. Therefore, the prolongation of the Phrygian tonic has a unique character, dependent on diatonic contrapuntal means for cadences. By the time of Josquin the solution to the Phrygian "problem" has been mastered by prolonging internally two of its diatonic chords which do not impinge upon the sacred second degree of the mode, i.e., the chord built on the fourth degree (IV) and the chord on the sixth degree (VI). For that reason E Phrygian pieces reveal sections--

sometimes of considerable length --that are in A Aeolian and C Ionian, both with their own internal motions and cadences (with ficta) that strengthen the sense of "key" for either one. Ultimately E Phrygian as a finality regains the supremacy of E, but in a manner that challenges ears oriented to major-minor conditions. We have yet to examine systematically the nature of polyphonic settings in each of the modes in order to determine the features of prolongations within each one. Are there tendencies to move to certain internal prolongations within a particular mode? Cantus-firmus settings offer separate problems, but that facet deserves study in itself.

The major and minor modes offer an advantageous basis for examining terminological criteria. The so-called "natural, melodic and harmonic" forms(!) of the minor are bizarre. There are no compositions in any one of these forms in later literature. Rather, the minor is a mode that is a mixture, involving frequent alterations outside the signature, principally the raising of the sixth and/or seventh degree, depending on the context. Further, on occasion another mixture occurs: the lowering of the second degree in the penultimate position of arrival at the first degree, i.e., the primary feature of the Phrygian mode. The major likewise very frequently lowers the sixth degree, thereby attaining a stronger motion to the fifth degree. One form of this alteration is in the polyphonic expression recognized as the diminished-seventh chord leading to the tonic; also, as the lowest tone in the augmented-sixth chord leading to the dominant. As a further extension in the harmonic vocabulary is the use of harmonic chords that are internally not diatonic, e.g., a major III chord in a major mode harmonic progression, or are not as a triad diatonic to the mode, e.g., bVI in the major. Compositions shift from one mode to the other, sometimes very briefly, other times for long periods. These are changes in mode, not in key. C major and C minor are in the same key, but the tones used to define the key are different.

The application of the term, pre-tonal, to pre-seventeenth century music is misleading. It tends to distort the entire historical process in the development of musical structure. The above brief exposition does not consider significantly the nature of tonal prolongation in the music of the Middle Ages and Renaissance, nor does it take into account the full significance of the triad, obvious, of course, as the central simultaneity but not as immediately apparent as the basic structure of the motion of the uppermost melodic line. At the other end of the spectrum is the use of the term, "tonality" for a considerable literature of the twentieth century. While it is true that much of composition in the twentieth century is non-tonal, we immediately recognize the sense of "key" in a significant amount in the works of important composers. Examples are not necessary. One can note that a well-known composer and theorist chose to write a text with the title, Twelve-tone Tonality.. The music of this composer and other tonal composers do not have the ingredients, contrapuntal and harmonic, that characterize the triadic tonality of the past. They use other means, each in his own characteristic way. Just as we recognize tonality in Bartok, just as readily we must acknowledge it in Josquin. Modality and tonality have completely different meanings. The presence of modality does not and cannot exclude tonality as the essential identification of the organic whole.

The primary ^{remaining} task ^{is} remains the critical, analytical examination of the polyphonic literature of Western music, to determine the progressive changes that occurred in projecting through time the ways in which compositions were unified through tonality. We recognize, of course, that other facets of unification are involved in various ways and styles, for example, through rhythmic and thematic inventions, or fusions with text. Even in the background to the beginnings of early polyphony, liturgical and secular monophony must be examined from this point of view. ~~While we have shied away from the notion of tonality other than the defining finalis in the liturgical chant of the Middle~~

~~monophony must be examined from~~ this point of view. While we have shied away from the notion of tonality other than the defining finalis in the liturgical chant of the Middle Ages, we have the responsibility of applying an appropriate analytical procedure to a sufficient and representative selection.

Central to the analysis of so-called "early music" is the discovery of the concept of the triad as a primary factor. Does it exist in the earlier monophony? Further involved in attempting to realize the triad's coming of age, we must ascertain the roles of the fifth and the fourth, and how ~~did~~ the critical third, not regarded as a consonance, came into use. These intervallic appearances in monophonic melody precede their polyphonic activities, in which they exist in a much more complex environment, intervals revealed both in simultaneity of two or more levels, and in multi-melodic activity. Counterpoint and harmony constitute the essential factors which explain the principles of simultaneity and successivity. The task of explaining the gradual unfolding of polyphonic music, that is to say, its history, is a formidable one. In effect, however, we must face the task as an inquiry into the history of tonality. The explanation of modality as the governing organic force in monophony and polyphony through the Middle Ages and the Renaissance, followed by tonality coming into being in the Seventeenth Century, supposedly a new era of clarity, is a most unfortunate distortion and misconception of the historical process. The development of tonality, deeply rooted in the liturgical and secular monophony of the Middle Ages, gradually moves through a continual activity in different styles in which modality plays an essential role.

taking them by
the hand towards understanding

The musical examples provided (Mozart and
Brahms included).

I have the feeling that the author (and
his devoted colleagues) proceed step by step
with their students and colleagues ~~to~~
thus surmounting the difficult barriers of
~~devising~~ divination presented solely in the
printed text.

Also, it will not appeal to a wide audience,

It is a masterpiece of achievement, if not
meaning, and deserves to remain available through
reprinting. It would seem to me that its scholarly
quality would motivate Yale Univ Press to
print an ^{modest} additional number of copies (in cloth!)
to continue availability for a handful of years.

~~As for a paperback~~, seemingly destined for
a wider circulation, is therefore not appropriate.

David Lewis is occupies a distinguished chair at Harvard University, ~~where~~ and is highly regarded as a leading exponent of the field. Roughly ~~what~~ tied ~~down~~ principally to formal logic, especially ~~two~~ ^{three} - tone ~~and~~ ^{and} procedure. I think have that ~~from the outset~~ ^{from the outset} Although Lewis' writings have been known to me, I had never ventured to tackle seriously any of his writings. Having browsed the response, bits to review this study, I ~~extend~~ ^{extend} it with the expectation that I would be able to read significant portions, ~~and therefore~~ ^{and therefore} to be able to judge its appropriateness for representing.

Please know that I had spent a fair amount of time understanding the text. The preliminary ~~chapter~~ ^{chapter} itself ~~was~~ ^{was} slow going, but the preceding chapters did not follow ~~the~~ ^{the} logical conclusion.

This is truly "innocent reservation", an abstract model of "mathematical" symbols, ~~providing~~ ^{providing} offering a very complex connection with actual music. The various diagrams did not yield to me a significant analysis of the meaning of

This was an important book, highly regarded by those who followed ~~as~~ ^{as} the game or parallel paths of intellectual inquiry.

via diagrammatic ~~representations~~ ^{representations}

Harmonic: successive 5th-6.
Ochreator,
Absolon to g_b!

prolongations: cite VI in
Pange Lingua.

Carton - from 14

Harmonic / Contrapuntal -
Palestrina.

Paraphrase.