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Leading to Tonality

WESTERN MUSIC'S TRANSITION FROM
MODALITY TO TONALITY

Understanding Pitch Relationships

- ▶ Each note has an aural relationship to all other notes:
 - ▶ Overtone Series
 - ▶ Consonant or Dissonant
- ▶ Pythagoras of Samos
 - ▶ Sixth century BCE Greek philosopher
 - ▶ Experiment with tones produced by a string
 - ▶ $1/2$ = Perfect 8th
 - ▶ $2/3$ = Perfect 5th
 - ▶ $3/4$ = Perfect 4th
 - ▶ Less simple ratios
 - ▶ Imperfect Consonances: Major/Minor 3rd and 6th
 - ▶ Dissonances: Major/Minor 2nd and 7th, Tritone

Understanding Modality vs. Tonality

▶ Modality

- ▶ Medieval (5th-15th century) and Renaissance (1300-1600) eras
 - ▶ 8 church modes
 - ▶ Hierarchy of notes within the mode
 - ▶ Melody using modes
 - ▶ Harmony based on rules of counterpoint

▶ Tonality


- ▶ Baroque (1600-1750) Development
 - ▶ Major and minor scales
 - ▶ Hierarchy of chords within the scale
 - ▶ Melody using scales
 - ▶ Harmony based on chord structures

Understanding the Leading Tone

- ▶ A note that implies the note a semitone above it.
 - ▶ Creates a gravity or drive towards the cadence
- ▶ In Modality: Less prevalent
 - ▶ Chromatic manipulation
 - ▶ Modes 5 and 6: Lydian and Hypolydian modes.
 - ▶ Final on F, with E natural as leading tone.
- ▶ In Tonality: More prevalent
 - ▶ Major and Harmonic Minor Scales
 - ▶ Scale degree 7
 - ▶ Chromatic manipulation
 - ▶ Imply new key or emphasize a scale degree other than 1

Understanding the Cadence

- ▶ End of a phrase or piece.
 - ▶ A moment of repose in music.
- ▶ Dissonance to Consonance
 - ▶ Often uses the leading tone to provide stability and finality.

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- ▶ “Within the intellectual framework thus established, music seems to make itself up out of rational principles that exist independent of human invention.” Susan McClary

My Question:

- ▶ How is the Cadence and Leading Tone used in Medieval and Renaissance Modal music as opposed to Baroque Tonal music?
 - ▶ Is there a correlation?



Medieval Music

Modality

Viderunt Omnes: Mode 5

- ▶ Most Gregorian Chants do not utilize leading tone to the final.
- ▶ Gradual: *Viderunt Omnes*, from the Mass for Christmas Day
 - ▶ Mode 5
 - ▶ Leading tone used to emphasize final
 - ▶ Not used in cadences

Grad.
5.
V
Idérunt ó- mnes * fínes tér- rae sa-
lu- tá- re Dé- i nóstri : jubi- lá- te Dé- o
ó- mnis tér- ra. ¶. Nó- tum fé- cit Dó-
mi- nus sa- lu-
tá- re sú- um : ante conspéctum génti- um re-
ve- lá- vit * justí- ti- am sú- am.

Viderunt Omnes (continued)

- ▶ Leoninus's Version

- ▶ 12th Century

Musical score for Leoninus's version of *Viderunt Omnes*. The score is written for a soloist and several singers. The soloist part is on a single staff with a treble clef and a common time signature (C). The lyrics "Vi -" are written below the staff. A blue circle highlights a specific melodic phrase in the soloist's part. The several singers part is on a single staff with a treble clef and a common time signature (C). The lyrics "Vi -" are written below the staff.

Source: Burkholder, *Norton Anthology of Western Music*. Vol 1. Pg. 67

- ▶ Perotinus's Version

- ▶ Circa 1198

Musical score for Perotinus's version of *Viderunt Omnes*. The score is written for multiple voices. The lyrics "- vit]" are written below the staves. A blue circle highlights a specific melodic phrase in the top voice part. The score includes various musical notations such as notes, rests, and slurs.

Source: Burkholder, *Norton Anthology of Western Music*. Vol 1. Pg. 92

Similar trends found in Adam de la Halle and other anonymous compositions of this era.

Guillaume de Machaut: 14th Century

La Messe de Notre Dame: Gloria

- ▶ Cadences
 - ▶ Weak ends on imperfect consonance
 - ▶ No leading tone
 - ▶ Strong ends on perfect consonances
 - ▶ Double leading tone
 - ▶ Use of chromatic manipulation

Weak Cadence

Musical score for the word "tens." in the Gloria. It consists of four staves. The top staff is the vocal line, and the other three are instrumental accompaniment. The music ends on an imperfect consonance (a major third). There are no leading tones present in the final chord.

Strong Cadence

Musical score for the word "men." in the Gloria. It consists of four staves. The top staff is the vocal line, and the other three are instrumental accompaniment. The music ends on a perfect consonance (a major sixth). Red arrows point to the leading tones (F# and C#) in the vocal and instrumental parts, which create a double leading tone effect.

Source: Burkholder, *Norton Anthology of Western Music*. Vol 1. Pg. 138 and 142



Renaissance Music

Modality with Increased Chromaticism

Josquin Desprez (circa 1450-1521)

Faulte d'argent

- ▶ Increased Chromaticism
- ▶ Constant switch between 2 finals: G and D
 - ▶ F sharp and C sharp inserted to lead to these finals
 - ▶ Obvious knowledge of the leading tone phenomenon
- ▶ Final Cadence on D

A snippet of a musical score for 'Faulte d'argent'. The lyrics are: 'le, non pa- dou-leur non pa-reil-le, non pa-reil-le, Faul-te d'ar-gent,'. The score shows a chromatic line with a sharp sign above a note circled in blue. Another sharp sign is above a note in the second system, also circled in blue. The final cadence is on D.

A snippet of a musical score for 'Faulte d'argent'. The lyrics are: '- le. res-veil-le. veil-le. - veil-le.' The score shows a chromatic line with a sharp sign above a note circled in blue. Another sharp sign is above a note in the bottom system, also circled in blue. The final cadence is on D.

Source: Burkholder, *Norton Anthology of Western Music*. Vol 1. Pg. 224 and 228

Similar trends found in other pieces by Josquin Desprez, Tomás Luis de Victoria's sacred motet from circa 1570, *O Magnum Mysterium*, Orlande de Lassus's 1579 motet, *Cum Essem Parvulus* and other pieces from this time period.

Italian Madrigals

- ▶ Jaques Arcadelt's *Il Bianco e Dolce Cigno* from 1538 and Cipriano de Rore's *De La Belle Contrade d'Oriente* from 1560-65.
 - ▶ Final on F: Leading tone of E
 - ▶ Occasional Chromatic manipulation to create leading tones
 - ▶ F sharp to G, B natural to C

Italian Madrigals (continued)

- ▶ Became increasingly chromatic over time.
- ▶ Luca Marenzio's *Solo e Pensoso*: 1590s
 - ▶ Top voice sings chromatic scale
 - ▶ Creates leading tones to next sonority
 - ▶ Use of chord like structures, foreshadowing tonality

The trend of increased chromaticism and stronger uses of the leading tone continues all the way to the Baroque period.

The image displays two systems of musical notation for the madrigal "Solo e Pensoso" by Luca Marenzio. Each system consists of six staves: Contralto (C), Alto (A), Tenore (T), Quarta (Q), Quinto (Q), and Basso (B). The music is written in a 16th-century style with a common time signature (C) and a key signature of one sharp (F#). The lyrics are written below the vocal staves. In the first system, the lyrics are: C: Solo e So - lo e pen - so; A: Solo e So - lo e pen - so - so i più de - ser - ti; T: Solo e So - lo e pen - so - so i più de - ser - ti; Q: Solo e; B: Solo e. The second system continues the lyrics: C: - so i più de - ser - ti; A: cam - pi i più de - ser - ti cam - pi; T: cam - pi i più de - ser - ti cam - pi; Q: So - lo e pen - so - so i più de - ser - ti cam - pi; B: So - lo e pen - so - so i più de - ser - ti cam - pi. Red arrows in the vocal staves highlight chromatic passages, such as the scale in the Contralto part of the first system and the chromatic descent in the Alto part of the second system.



Baroque Music

Tonality Begins

The Baroque Period and Tonality

- ▶ Major and Minor Scales and Keys
 - ▶ Easily change keys through chromatically inserted leading tone
 - ▶ Example: Key of C—Add F sharp—cadence on new key in G
- ▶ Strong Cadences with longer anticipation for resolution
 - ▶ Dominant 7 chord
 - ▶ Contains leading tone as 3rd of the chord reinforced with a tritone relationship to the 7th of the chord forcing dissonance to consonance.
 - ▶ Commonly used in cadences.
- ▶ Chord Structures
 - ▶ Hierarchy of chords in the scale

Claudio Monteverdi: 1567-1643

- ▶ Often considered first composer to utilize tonality.
- ▶ *Cruda Amarilli*: late 1590s
 - ▶ unprepared dominant seven chord
 - ▶ 7th approached by downward leap
 - ▶ Sudden insertion of leading tone in other voice
 - ▶ Completes dominant 7 chord
 - ▶ Creates sudden need for resolution

His later works such as *L'Orfeo* from 1607, and *L'incoronazione di Poppea* from 1642, show further development of tonal harmony. The composers who followed him continued to compose tonally.

The image displays a musical score for the piece 'Cruda Amarilli' by Claudio Monteverdi. It features six staves of music, with the top two staves representing vocal lines and the bottom four staves representing instrumental accompaniment. The lyrics 'ahi las - so,' are written below the vocal staves. A red arrow points to a specific note in the top vocal line, which is marked with a '(b)' above it, indicating a chromatic alteration. This note is part of a unprepared dominant seven chord, a key harmonic feature of the piece. The score includes various musical notations such as treble and bass clefs, notes, rests, and accidentals.

Source: Burkholder, *Norton Anthology of Western Music*. Vol 1. Pg. 431

Johann Sebastian Bach: 1685-1750

Culmination of Baroque Period

- ▶ Well Tempered Clavier
 - ▶ All 24 major and minor keys
 - ▶ Utilizes chromatic insertion of leading tone to change keys
- ▶ Large body of other works utilizing tonal principles

Conclusion

- ▶ The leading tone was used in all three eras
- ▶ As time passed, more chromatic insertions of the leading tone were used.
- ▶ Perhaps the leading tone is one of the main contributors to the discovery of tonal music theory and the transition out of modality.

Questions?

Works Cited

- Arlin, Mary I. "Fétis' Contribution to Practical and Historical Music Theory." *Revue Belge De Musicologie / Belgisch Tijdschrift Voor Muziekwetenschap* 26/27 (1972): 106-15. doi:10.2307/3686544.
- Bach, Johann Sebastian. *The Well-Tempered Clavier, Volume 1*. Edited by Willard A. Palmer. 3rd ed. Van Nuys, CA: Alfred Pub. Co., 2004.
- Bain, Jennifer. "Theorizing the Cadence in the Music of Machaut." *Journal of Music Theory* 47, no. 2 (2003): 325-62. <http://0-www.jstor.org.library.cedarville.edu/stable/30041094>.
- Boorman, Stanley. "False Relations and the Cadence." In *Collected Work: Essays on Italian Music in the Cinquecento. Series: Altro polo*, Sydney, Australia: Frederick May Foundation for Italian Studies, 1990. Pages: 221-264.
- Burkholder, J. Peter, and Claude V. Palisca. *Norton Anthology of Western Music*. 7th ed. Vol. 1: Ancient to Baroque. New York: W.W. Norton & Company, 2014.
- Burkholder, J. Peter, Donald Jay Grout, and Claude V. Palisca. *A History of Western Music*. 9th ed. New York, London: W. W. Norton and Company, Inc., 2014.
- Chew, Geoffrey. "The Perfections of Modern Music: Consecutive Fifths and Tonal Coherence in Monteverdi." *Music Analysis* 8, no. 3 (1989): 247-73. doi:10.2307/854290.
- "The Spice of Music: Towards a Theory of the Leading Note." *Music Analysis* 2, no. 1 (March 1983): 35-53. *RILM Abstracts of Music Literature (1967 to Present only)*, EBSCOhost (accessed September 30, 2017).
- De Clercq, Trevor. "A Model for Scale-Degree Reinterpretation: Melodic Structure, Modulation, and Cadence Choice in the Chorale Harmonizations of J.S. Bach." *Empirical Musicology Review* 10, no. 3 (January 1, 2015): 188-206. *RILM Abstracts of Music Literature (1967 to Present only)*, EBSCOhost (accessed September 30, 2017).
- Dumitrescu, Theodor. "Leading Tones in Cantus Firmi and the Early L'homme Armé Tradition." *Studi Musicali* 31, no. 1 (January 1, 2002): 17-55. *RILM Abstracts of Music Literature (1967 to Present only)*, EBSCOhost (accessed September 30, 2017).
- Erickson, Robert. *The Structure of Music: A Listener's Guide*. New York: The Noonday Press, 1995.
- Gouk, Penelope. "Science and Music, or the Science of Music: Some Little-known Examples of 'Music Theory' Between 1650 and 1750." In *Towards Tonality: Aspects of Baroque Music*, edited by the Orpheus Institute, 41-70. Ghent, Germany: Leuven University Press, 2007.
- Helm, E. Eugene. *Melody, Harmony, Tonality: An Introduction*. Lanham, Maryland: Rowman & Littlefield, 2013.
- Holtmeier, Ludwig. "Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave." *Journal of Music Theory* 51, no. 1 (2007): 5-49. <http://0-www.jstor.org.library.cedarville.edu/stable/40283107>.
- Judd, Cristle Collins, Margaret Bent, Sarah Fuller, Frans Wiering, Timothy H. Steele, Jessie Ann Owens, Harold Powers, and Michael Dodds, *Tonal Structures in Early Music*, edited by Cristle Collins Judd. New York; London: Garland Pub, 2000, 1998.
- Kang, Youyoung. "Monteverdi's Early Seventeenth-Century 'Harmonic Progressions'." *Music Analysis* 30, no. 2/3 (2011): 186-217. <http://0-www.jstor.org.library.cedarville.edu/stable/41495900>.
- McClary, Susan Kaye. "Towards a History of Harmonic Tonality." In *Towards Tonality: Aspects of Baroque Music*, edited by the Orpheus Institute, 91-118. Ghent, Germany: Leuven University Press, 2007.
- Money, Jane Elizabeth. "An Investigation into Tonal Procedure in Selected Keyboard Works of Johann Sebastian Bach (1685–1750): A study in tonality." 1975. *RILM Abstracts of Music Literature (1967 to Present only)*, EBSCOhost (accessed September 29, 2017).
- Rameau, Jean Philippe. 1722. *Treatise on Harmony*. New York, Dover Publications, 1971.
- Routley, Nicholas. "A Practical Guide to 'Musica Ficta'." *Early Music* 13, no. 1, 59-71. Oxford University Press, 1985 <http://0-www.jstor.org.library.cedarville.edu/stable/3127407>.
- Simms, Bryan. "Choron, Fétis, and the Theory of Tonality." *Journal of Music Theory* 19, no. 1 (1975): 112-38. Accessed September 29, 2017. doi:10.2307/843752.
- Zarlino, Gioseffo. *The Art of Counterpoint. Part Three of Le Institutioni Harmoniche, 1558*. n.p.: New Haven, Yale University Press, 1968.