

History of Music Theory
Final Exam Project
Chronological Outline of Theoretical Musical Thought
David Mitchell

Era	Principal Theorists and Texts	Ideas	Evidence and other Information
6 th Century BC	Pythagoras No Treatise	According to Dr. Vogel's "Brief Sketches," he discovered tuning "ratios of P4, P5, and P8. Belief that numbers are an important guide to understanding the world and music: Harmony of the spheres," the body, and instruments.	The story of Pythagoras and his discover of tuning ratios is in several medieval treatises.
c. 375-? BC	Aristoxenus <i>Harmonic Elements</i> <i>Rhythmical Elements</i>	According to Dr. Vogel's "Brief Sketches," He discussed "Greek Greater Perfect System, Genera, Shades of Tuning, and Melody. Believed that the ear is the final judge in dividing intervals and that the octave and tone may be divided into equal units." It is not mathematical ratios that are the final judge it is the ear and what sounds best.	Found in Aristides Quintianus, <i>On Music</i>
?-161 AD	Ptolemy <i>The Harmonics</i>	According to Dr. Vogel's "Brief Sketches," "Believed that music theory could be expressed in precise mathematical calculations and that empirical observation should not contradict reason. Criticized Pythagoreans and Aristoxenus."	
c.480- 524 AD	Boethius, Anicius Manlius Severinus <i>De Institutione Musica</i>	Dr. Vogel "Brief Sketches," "Transmission of the knowledge of ancient Greek music to the middle ages. Music is part of the Quadrivium (along with arithmetic, geometry, and astronomy), Perpetuation of Ptolemaic music theory. Use of Latin letters A-P to represent the degrees of the double octave."	<i>Fundamentals of Music</i> Translated by Calvin Bower
9 th Century	Pseudo-Hucbald	According to Chisom, "Earliest known sources for discussion of organum.	<i>Musica Enchiriadis</i>

	<i>Musica Enchiriadis</i> <i>Scolica Enchiriadis</i>	The eight 'modes' are also discussed at length. Describes the use of fixed-pitch tetrachord which is repeated to create a scale."	Translated by Leonie Rosenstiel
10 th Century	<i>Alia Musica</i>	Dr. Vogel: "The work is a general discussion of musical intervals and the medieval modes. A turning point in the history of modal theory (error in assigning the Greek names to medieval scales). "	<i>Alia Musica</i> Translated by Edmund B. Heard <i>Sources Readings</i> Oliver Strunk
878/9-942 AD	Odo Abbot of Cluny No Treatise	According to Krzyzaniak, "Clear explanation of the division of the monochord, assigns letters to pitches in a manner that resembles our modern system, straightforward description of the 8 modes, along with numerous musical examples."	There are many treatises once incorrectly attributed to Odo.
c. 991/2-1033	Guido D'Arezzo <i>Micrologus</i>	According to Mitchell, "First treatise that codified the musical staff, Invented solmization syllables, influential expert in training choirs and singers." After his innovations choirs could read music from a staff that they had never heard before.	Facsimiles of <i>Micrologus</i> are available.
13 th Century	Anonymous IV <i>De Mensuris et Discantu</i>	According to Anonymous, "This treatise is the most important work for understanding the polyphony of the Notre Dame school of the early 13 th century. There is an extensive discussion of the rhythmic modes and their notation."	<i>Scriptorum</i> Coussemaker trans.
Mid to Late 13 th Century	Franco of Cologne <i>Ars Cantus Mensurabilis</i>	According to Riojas, "Reduced the rhythmic modes to five from six or seven. Assigned duration based on the shape of note symbols within a perfection. Ligatures were standardized and assigned definite rhythmic meanings."	<i>Ars Cantus Mensurabilis</i> Edited by Gilbert Reaney and Andre Gilles And Strunk <i>Source Readings</i>
c. 1260- 1330	Jacobus of Liege <i>Speculum Musicae</i> <i>Tractatus de Consonantibus</i>	According to Peyton, "No new concepts it, but it gives us vital insight into Medieval musical thought and practice. Discusses the "cadence" and how notes resolve in a	<i>Speculum Musicae</i> Edited by Roger Gragard

	<p><i>Musicalibus Tractus de intonation tonorum</i> <i>Compendium de Musica</i></p>	cadence. Debates ideological innovations of Ars Nova.”	
1274?- 1305/19	<p>Marchetto of Padua</p> <p><i>Lucidarium in arte musice plane</i> <i>Pomerium in arte musice mensurate</i></p>	According to Dr. Vogel, “Marchetto divided the one into five equal parts without giving the ratios. He said that two dieses equal the limma and three equal the apotome.” First to discuss chromaticism	
1291-1361	<p>Philippe de Vitry</p> <p>Ars Nova (c. 1320)</p>	An important innovator of the motet and rhythmic notation. Taruskin-“ The earliest genre to be affected by the Ars Nova, and the most characteristic one, was—almost needless to say—the motet, already a hotbed of innovation and already the primary site of the <i>discordia concors</i> . The fourteenth-century transformation of the motet gives the clearest insight into the nature of the Ars Nova innovations and their purposes.” He was an innovator of the isorhythmic motet.	<i>Roman de Fauvel</i>
c. 1300-1351	<p>Jean de Muris</p> <p><i>Notitia Artis Musicae Compendium</i></p> <p><i>Musicae Practiae</i></p> <p><i>Musica Speculativa Secudum Boetium</i></p>	<p>According to Hepworth, “The imperfect division of the breve, other issues relating to musical proportions.”</p> <p>Degrees of Rhythm</p>	<p>Critical Edition by Johannis de Muris</p> <p><i>Source Readings</i> Strunk</p>
1435-1510	<p>Johannes Tinctoris</p> <p>Book of the Art of Counterpoint</p> <p>Book of the Nature and Interval Structure of the Modes</p> <p>Musical Proportions Dictionary of Musical Terms</p>	According to Krzyzaniak, “Accurately describes the mensural and contrapuntal techniques of his Franco-Flemish contemporaries, suggests a pervasive use of thirds, first European dictionary of musical terms.”	Several Translations are available from various sources.

1440-1500	Bartolome Ramos de Pareja <i>Musica Practica</i>	According to Seals, “Negative opinions of other theorists Liked divisions of the monochord that produced 5:4 and 6:5 thirds Sacrificed the purity of fifths and fourths Upheld equal length of the breve”	<i>Musica Practica</i> Translated by Clement Miller
1451-1522	Franchinus Gaffurius <i>Theorica Musicae</i> <i>Practica Musicae</i> <i>De Harmonia Musicorum Instrumentorum</i>	Most important source of writings from Boethius. First theorist to have a substantial number of his writings published. Tried to reconcile church and Greek modes.	There are translations of all three treatises.
1465-1529	Domingo Marcos Duran <i>Lux Bella</i> <i>Comento Sobre Lux Bella</i> <i>Sumula de Canto de Organo</i>	According to Dr. Vogel, “First to publish a musical treatise in Castilian Thorough discussion of the hexachordal system at its fullest extent Added two hexachords and one letter to the Guidonian system and overlapped the hexachords to extend the system indefinitely Rules for singing chants”	<i>The Theoretical Writings of Domingo Marcos Duran</i> Dr. Roger Vogel
1480-1550	Pietro Aaron <i>De Institutione Harmonica</i> <i>Il Toscanello in Musica</i> <i>Trattato Della Natura e Cognizione di Tutti</i>	$\frac{1}{4}$ Mean Tone Tuning (Tune the Fifths Flat) Eight Rules for Counterpoint Comprehensive Manual on Plainchant and Counterpoint Il Toscanello-Composer should enter all accidentals and use standard key signatures	<i>The Theoretical Writings of Pietro Aaron</i> Peter Bergquist Ed.
1488-1563	Heinrich Glarean Isagoge in Musicen Dodecachordon Musicae Epitome	12 modes including Aeolian Hypo-Aeolian, Ionian and Hypo-Ionian How to read and perform music Bb in F Ionian not Lydian	<i>Dodecachordon</i> Trans. By Clement Miller
1511-1576	Nicola Vincentino dei Vincentini <i>L’ Antica Musica Ridotta Alla Modern Prattica</i>	Created a microtone keyboard 2 manuals $\frac{1}{4}$ tone apart Mean tone tuned to create perfect 5ths and perfectly tuned intervals 36 keys per octave 31 different notes Debated Lusitano	<i>The Just Intonation System of Nicola Vincentino</i> Alves William trans.

1517-1590	Gioseffo Zarlino <i>Le Institutioni Harmoniche</i> <i>Dimostrationsi Harmoniche</i> <i>Sopplimenti Musicali</i>	Renumbering of the Modes Church modes moved to C How to write contrapuntal music Fold out of equal tempered lute	<i>The Art of Counterpoint</i> Trans. By Marco and Palisca
1571-1621	Michael Praetorius <i>The Three Volume Syntagma Musicum</i>	According to Hepworth, "Discussions of musical instruments in Volumes I and II are the best written in his generation First to write about the use of figured bass, or thorough-bass"	All three volumes translated into English
1557/8-1602	Thomas Morley A Plaine and Easie Introduction to Practicall Musicke	Largely responsible for the dispersion of light Italian genres, the canzonetta and balletto, in England, and his own madrigals, canzonets, and ballets Chief proponent of the English madrigal	The translated treatise itself and Strunk's summary of contributions
1588-1648	Marin Mersenne Traite de l'harmonie universelle Harmonicorum libri XII Harmonie universelle	According to Hepworth, "The study of acoustics, Rules relating to musical sounds, Advocating the use of equal temperament, Science of sound and the overtone series, Psychological aspects of music, Musical Instruments outside of Western Europe	English translations of main treatises by Bernard and Marin
1660-1741	Johann Joseph Fux <i>Gradus ad Parnassum</i>	Species approach to counterpoint Added more steps between simple and florid counterpoint Easier to learn Thought he was writing Renaissance Counterpoint 1700-1900 worked directly from Gradus Parnassum	<i>The Study of the Fugue</i> Alfred Mann trans.
1683-1764	Jean-Philippe Rameau <i>Traite de l'harmonie reduite a ses principes naturels</i> <i>Nouveau systeme de musique theorique</i>	Examined, explored, and codified the harmonic principles of European music, with a focus on chords rather than counterpoint. Conceptualized the fundamental bass Theoretical bass made up of roots Melody arises from harmony	<i>Treatise on Harmony</i> Philip Gossett trans. Strunk Source Readings

	<i>Generation harmonique</i>	Two types of chords major and minor	
1681-1764	Jahann Mattheson <i>Der Vollkommene Capellmeister</i>	One of the most important writers on German Baroque Music Early influence on Handel Founder of musical criticism in Germany Composition and counterpoint Continuo in all keys	Der Vollkommene Capellmeister Ernest Harriss trans.
1683-1729	Johann David Heinichen <i>Neu erfundene und grundliche Anweisung...zu vollkommener Erlernun des General Basses</i>	The first comprehensive treatise on the thorough-bass The best tools for reconstructing thorough-bass accompaniments of music written in the German Italian style after 1700 Effect of modulation on Affections Brighter higher keys How to handle dissonance and 4+ voice accompaniment Major and minor circle of fifths Connecting all of the keys	Translation by George Buelow
1718-1795	Friedrich Wilhelm Marpurg <i>Abhandlung von der Fuge</i> <i>Handbuch bey dem Generalbasse und der Composition</i>	According to Peyton, "All the rules to construct a fugue Significant contribution to the development of common practice harmonic theory Source for 18 th century performance practice Edited and contributed to some of the earliest music periodicals"	D'Alemberts translation
1692-1770	Giuseppe Tartini <i>Rules for Learning to Play the Violin Well/Treatise on Ornamentation</i> <i>Treatise on Music According to the True Science of Harmony</i>	First treatise to solely address ornamentation Rules for Bowing Rejected Rameau's idea that frequency, not string length, determined pitch Converted the Greek explanation of harmony from 'successive harmony' to 'simultaneous harmony'	Complete Works Edition: Anna Cavalla Todeschini ed.
1697-1773	Johann Joachim Quantz <i>On Playing the Flute</i>	Outstanding discussion of mid-eighteenth century flute technique including ornamentation and style Extensive discussion of the roles of	Treatise translated by Edward R. Reilly

		the instruments in the late baroque-early classic orchestra	
1714-1788	Carl Philipp Emanuel Bach <i>Essay on the true art of playing keyboard instruments</i>	Guide to performing notated keyboard music. Discussion of fingering and ornamentation Figured bass. Excellent discussion of chords and accompaniments styles. Widely distributed	Translated by William Mitchell
1784-1871	Francois Joseph Fetis 6 treatises Most important <i>Biographie universelle des musiciens</i> <i>Esquisse de l'histoire de l'harmonie</i>	Most extensive biography of its day Good period source for French musicians Believed that harmony is not derived from natural law, but rather from practice Theory of harmony based on tonality Three groups of chords major, minor, and inversions	Harmony Treatise Mary Arlin trans.
1821-1894	Hermann Ludwig Ferdinand von Helmholtz <i>On the Sensations of Tone as a Physiological Basis for the Theory of Music</i>	Explained the role of overtones in timbre using Ohm's Acoustic Law Founded the study of the physiology of hearing Theory of non-linearity of the ear Invented a microscope to study sound waves Taking our perception of the world into account	On the Sensations Translated by Alexander Ellis
1849- 1919	Hugo Riemann <i>Handbuch der Harmonielehre</i> <i>Geschichte der Musiktheorie</i>	One of the first modern musicologists Dominant and subdominant were 5 th related Tonic, Subdom., Dom., aggregate. Tonnetz grid of PLR relationships Explains close relationship of third related chords Led to Neo-Riemannian theory	<i>Riemann and the Birth of Musical Thought</i> By Alexander Rehding
1874-1951	Arnold Schoenberg <i>Harmonielehre</i> <i>Structural function of harmony</i> <i>Style and Idea</i> <i>Etc.</i>	"Emancipation of the dissonance" Invented twelve-tone serialism Interesting perspective on tonal theory "Brahms the progressive" and introduced the idea of developing variation	Schoenberg.at
1868-1935	Heinrich Schenker	Theory intended to be helpful to performers	Free Composition Five Graphic Music

	<i>Neue Musikalische Theorien und Phantasien</i> <i>Funf Urlinie Tafeln</i>	First theory to discuss hierarchy in music Underlying fundamental structure Fore, middle, and background structural levels	Analyses
1895-1963	Paul Hindemith Unterweisung im Tonsatz	Chromatic scale serves as a theoretical basis Chord as a compound product of its intervals and not tertian harmony Combination tones based on overtone series is the determiner of dissonance	<i>The Craft of Music Composition</i>
1895-1943	Joseph Schillinger <i>System of Musical Composition</i>	Important teacher Taught Gershwin, G. Miller, Goodman System is a method of musical composition based on mathematical processes. It comprises theories of rhythm, harmony, melody, counterpoint, form, and semantics - wiki	
1908-1992	Olivier Messiaen <i>The Technique of my Musical Language</i>	Modes of limited transposition divided by tritone Equal on both sides only 6 transpositions Composed music with religious themes, love themes, numbers, and bird songs Organist at La Trinite, Paris	<i>The Messaien Companion</i> Peter Hill
1915-1987	Vincent Persichetti <i>Twentieth-Century Harmony</i>	Documentation of harmonic practices of the mid-twentieth century Harmonic materials used by twentieth century composers Any note or notes can follow another Classification of degrees of harmonic dissonance and how to compose with them	<i>The Complete Musician</i> William Schuman
1922-2001	Iannis Xenakis <i>Arts/Sciences: Alloys</i> <i>Formalised Music</i>	Architect and Composer Applied principles of architectural design to composition Used formal logic and mathematics to describe music Wrote Free Stochastic Music Formed scales with logic sieves	His Dissertation Sharon Kanach trans.
b. 1926	Allen Forte	Pioneer in the use of Set Theory Analysis	The Structure of Atonal Music is the

	<p><i>The Structure of Atonal Music</i></p> <p><i>Tonal Harmony in Concept and Practice</i></p> <p><i>Introduction to Schenkerian Analysis</i></p>	<p>Categorized and organized all possible pitch class sets</p> <p><i>The Structure</i> contains mathematical formulae used to show the relation of one prime form to another</p> <p>Appendices with all sets possible</p> <p>Examples of set theory analysis of pieces by Ives, Stravinsky, Schoenberg, and others</p>	<p>best evidence of his concepts</p>
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