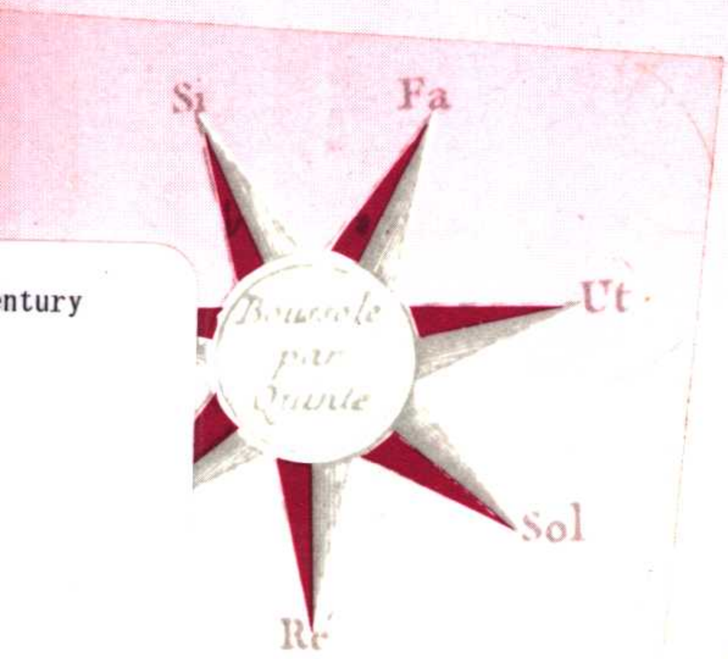
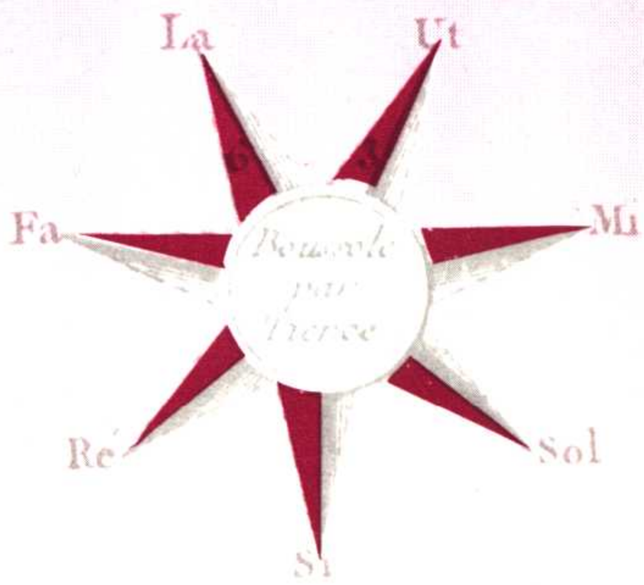
Compositional Theory in the Eighteenth Century

JOEL LESTER





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Acknowledgments

A COMPREHENSIVE SURVEY such as this work is possible only because of innumerable earlier studies, for which I am unremittingly grateful. I have been researching this material in various forms for two decades. As a result, it is more than likely that ideas I have incorporated into my own thinking may have come from an article or dissertation I read years ago. In addition, I have frequently drafted a passage only to find its tenets in a subsequent publication. I have tried wherever possible to cite sources, especially where a reader may profit from a more detailed discussion of an individual topic than space allows here. I apologize in advance for any unintended omissions. The Bibliography, extensive as it is, is intended not as a comprehensive survey of the primary or secondary literature but as a list of those items referred to in the text.

I also owe heartfelt thanks to a number of individuals: to Margaretta Fulton, Humanities Editor at Harvard University Press, who proposed that I write this book and who has been supportive and knowledgeable at every step; to Donna Bouvier, who steered this book through production; to David Lewin, who made uncommonly keen suggestions on an earlier draft; to Thomas Christensen, who has been an inexhaustible source of information on eighteenth-century theory; to Frank Samarotto, for his handsome musical orthography; to Don Franklin, for providing facsimiles of a Bach manuscript; to David Kornacker, for assistance with the translations from French; to Rebecca Pechefsky, for assistance in editing; to students in my history-of-theory seminars at The Graduate School of The City University of New York, whose questions stimulated my thinking; and, most of all, to my family, who patiently allowed me to work and who listened to and commented on numerous passages. An award from the Research Foundation of CUNY provided for the purchase of research materials. And an Eisner Research Award from the Humanities Division at The City College released me from some duties, allowing me to begin work. Last, without the collection of the Music Research Division at the New York Public Library at Lincoln Center and the assistance of the librarians there I would hardly have dared to undertake this work.

We have the good fortune to live in a century in which most sciences and arts have risen to such a high degree of perfection.

Preface by Johann Ernst Bach to
Anleitung zu der musikalischen Gelahrtheit
(1758) by Jacob Adlung

There are two opposing dangers to be avoided when proposing a system of harmony: one is to censure those things that are constantly and successfully used in any number of ways; the other to extend rules to cases that cannot be used, or that can be used only with special precautions.

Alexandre-Théophile Vandermonde,
Second Mémoire sur un nouveau système d'harmonie applicable à l'état de la musique
(1778), p. 2

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Introduction

The picture any age forms of a section of the past is never totally independent of the controversies of its own time, in which it seeks to ascertain the nature of its own historical essence. There is a danger that (since every historian is also a child of his own time) historical judgements will be based indiscriminately and uncritically on the norms we all (necessarily) use to orientate ourselves in our own time. The best way to avoid or at least reduce the danger is to recognize it and thus seek to neutralize it, instead of allowing it to seep into the investigation of a past epoch in the form of implicit assumptions.

Dahlhaus 1985, p. 2

MANY INTRODUCTIONS begin by explaining the need for yet another book on the topic at hand. Such comments are not pertinent here. No other comprehensive history details what eighteenth-century writers on compositional theory said, when and how they said it, and what they meant in the context of their own times.

Such a study was less urgent prior to recent years. But the increasingly prevalent belief that analysis of and scholarship on the music of past ages should at least acknowledge the thinking of those ages has made a comprehensive and critical survey of that theory a pressing concern. Unless theory of a former age is understood in its own context, its issues are eviscerated and its theorists turned into shades merely foreshadowing modern theoretical positions or cardboard figures standing in for modern theoretical disputes.

By being aware of its context, we can become aware of the resplendence of eighteenth-century theory. This was the era in which many features of modern theory first emerged and in which theorists first began grappling in modern terms with issues that remain challenging today—the nature of the interaction between lines and harmonies, the nature of the interaction between melodic motives and phrasing and harmonies, the factors that

make music mobile and the best ways to understand them, the relation between point-to-point connections and larger structures, and the presence of structural foundations lying below the compositional surface.

It is central to this study that the first priority of a historian of ideas is to understand how the original authors thought. Writers of past eras, when formulating their thoughts in ways that seem problematic to modern readers, were not trying to state our modern ideas in clumsy fashion; they were stating their own ideas in their own terms. Only by being sensitive to their terminology, to their perspectives, and to their theoretical agendas can we avoid unwittingly misinterpreting the import of their ideas. A full exploration of terminology, perspectives, and agendas is the subject matter of this study as a whole. But one instance of each can foreshadow the issues involved.

Modulation is a term that has lost a once-common meaning. Nowadays it denotes a change of key or the process of key change. In the eighteenth century (and well into the nineteenth), it also commonly denoted what seems to us the contradictory meaning of reinforcing a sense of the current key. An eighteenth-century musician understood an underlying unity encompassing *modulating within a key* and *modulating from one key to another*—a family of ideas including the notions of a melody or progression that has a sense of direction (establishing one key or moving to another), a melody in general, a chord progression or voice leading in general, the substance from which a melody or a chord is made, and so forth. Thus Johann Gottfried Walther, when he talks about why a proper scale has a mixture of whole steps and half steps, says if there were no half steps, the resulting whole-tone scale would be a "modulation without modulation . . . a pure mishmash" in the sense of a melodic structure without structure (Walther 1732, article *modus musicus;* Lester 1989, p. 212): neither "modulation" here denotes change of key.

No single modern term encompasses what we regard as these separate meanings. Yet if we are to understand eighteenth-century musicians, we must try to grasp the family resemblance recognized by them among what we regard as separate tenets. Construing a term solely in its modern sense or transferring only a part of its meaning to a single modern term inevitably distorts the meaning of the original. In this study, discussions of individual theorists adhere wherever possible to the terminology of the original source. When *modulation* or a similar term occurs in a citation, it is generally rendered by a modern equivalent along with the original term. The original meaning emerges by trying to think in terms of the original vocabulary, not merely by trying to find a modern term that perhaps is relatively close to that original term but invariably carries some unwarranted connotations and excludes others.

Likewise, complexes of ideas often carried different connotations in the

eighteenth century than they do nowadays. For instance, after the middle of the eighteenth century, the intervals in species counterpoint were understood as parts of chords and chord progressions by many musicians, Mozart and Beethoven among them, not as purely intervallic voice leading. But this does not necessarily mean that they were thinking along the lines of a late-nineteenth-century harmony text, placing chord numbers willy-nilly beneath the exercise and thinking of each verticality outside its linear context. Counterpoint represented to them the interaction of lines, even though they thought of the intervals between those lines as complete or incomplete statements of chords.

Finally, a theorist may have introduced an explanation to resolve a problem hardly remembered by modern musicians. Consider the issue of suspensions. Nowadays, we easily parse the surface of a piece into triads and seventh chords and sort out nonharmonic suspensions. It is hard for us to imagine the music world before triads, seventh chords, and their inversions were recognized as the standard harmonies and other tones conceived of as additions to them. But that was the situation confronting early-eighteenth-century musicians. Innumerable rules and exceptions dealt with the treatment of dozens of verticalities containing suspended notes—some indicated by different thoroughbass figurings and some sharing the same thoroughbass figurings in any of a large number of idiosyncratic systems of thoroughbass numbering; some resolving down and some resolving up; some forming what we consider seventh chords and therefore not resolving until several other voices also moved, and others resolving without other voices moving; and some even being consonances over the bass though they nevertheless had to resolve as suspensions (such as the fifth in a 6/5 chord).

To simplify this situation Rameau developed his theory of chords by subposition (ninth and eleventh chords), explaining how the resolution of virtually all suspended dissonances could be understood by a single rule. From an early-eighteenth-century perspective, he was trying to rationalize suspended dissonances and give a linear context to verticalities that thoroughbass theory simply considered entities capable of being juxtaposed with numerous other entities. It is easy for a modern musician to see only the resulting ninth and eleventh chords reminiscent of the absurdly stacked thirds of later harmonic theory and wonder what a theory with ninth and eleventh chords has to do with early-eighteenth-century music. Only by understanding the situation that motivated Rameau's theoretical formulation can we understand his constructs.

To be sure, terms, ideas, and slogans do change. And an important part of their meaning today is what those changes inspired. Perhaps an eighteenth-century political slogan can demonstrate this point more dramatically than a musical term. "All men are created equal" has resounded

through the last two centuries. But it has clearly meant different things to different people at different times. Many Americans in the eighteenth and nineteenth centuries, possibly including the author of the phrase, saw little conflict between espousing the slogan and owning slaves, excluding women and those who did not own property from full citizenship rights, and so forth.

Jefferson's words, taken in their own eighteenth-century context, reflect an attitude that we today may regard as internally inconsistent. But those words also helped people become aware of inequalities (a role the slogan still plays) and thereby inspired and continue to inspire them to change their practices and attitudes so as to conform more closely to the slogan. The same is true of musical theoretical terms, ideas, and slogans.

Ideas may well have lives quite independent of their original context, but it is ultimately misleading to take an idea as it has developed in a later era and apply that formulation to the original context. It often distorts the original idea to such an extent that it seems no reasonable person could have thought that way.

Any study will necessarily view the past through the agenda of its present. Historians address only issues that they conceive of as issues. Thus Hugo Riemann acknowledges in the preface to his impressive *Geschichte der Musiktheorie im IX.–XIX. Jahrhundert* (1898), the closest approximation to a comprehensive history of theory, that he intended not a comprehensive, objective history, but a chronicle tracing theoretical tenets from their genesis to their place in his own theory of harmony. Likewise, Matthew Shirlaw's perceptive *Theory of Harmony* (1917) concentrates on speculative harmonic theory, primarily by those who treat "The Natural Principles of Harmony" (subtitle), excluding important writers, ignoring crucial theoretical traditions (counterpoint and the study of melody), and largely bypassing practical aspects of theory and the practical applications of speculative tenets.

Many studies of eighteenth-century theory address issues from the perspective of functional harmony and overlook many discussions of voice leading and hierarchical structure to which a Schenkerian perspective awakens us. To take a glaring example, Riemann's and Shirlaw's studies, different as they are, dismiss or ignore species counterpoint as a force in eighteenth-century musical thinking. The linear concerns of the eighteenth century were simply not as important in Riemann's and Shirlaw's time as they have become since. Some modern European scholars of eighteenth-century theory—Peter Benary, Arnold Feil, and Carl Dahlhaus among them—have also been less concerned with the implications of many linear and hierarchical ideas in eighteenth-century theory than some American scholars are. It is inevitable that the present study, which does address

these issues, will fail to address other concerns of interest in the present or in the future.

In short, objectivity is an elusive goal in history. Indeed, it has become fashionable in some disciplines to deny altogether that objectivity is a proper goal of historical research. But as stated in the epigraph at the head of this Introduction, awareness of one's biases can help one avoid potential pitfalls.

Surveying the writings of approximately a century of musicians and comparing all these works has inevitably brought new items to light. For instance, it is now clear that numerals placed next to the chords in an example to analyze the root movements first appeared in print earlier than has hitherto been believed: in 1766 in a book published by John Trydell in Dublin and then widely propagated via its inclusion in the 1771 *Encyclopaedia Britannica*. Of greater significance than such facts is the extent to which it is now evident that many tenets or discoveries long associated with a single theorist actually appeared widely in print much earlier. For instance, many ideas central to Rameau's theory—not only triadic inversions and the notion of a chordal root, but also directed motion as evaded cadences, the association of specific chord types with specific scale degrees, and so forth—appeared in many earlier works.

These and other findings have led to the discovery of a larger degree of agreement than has previously been thought to exist among different eighteenth-century schools of thought. Despite numerous and acrimonious theoretical disputes, representatives of various theoretical traditions such as species counterpoint, thoroughbass, and harmony shared many more underlying tenets than has been recognized, especially in terms of practical applications.

This study deals intensively with the period from the 1720s through about 1790, that is, from three treatises considered classics in their theoretical traditions—Rameau's 1722 treatise on harmony, composition, and accompaniment; Fux's 1725 manual on counterpoint, fugue, and composition; and Heinichen's 1728 manual on thoroughbass and composition—through the *Versuch einer Anleitung zur Composition* by Koch (1782–1793). To cover the background of the earlier works, the historical survey begins with Zarlino, the great theorist of the second half of the sixteenth century, whose works remained influential into the eighteenth century.

The emphasis is on compositional theory to the extent that it can be separated from speculative theory, aesthetics, or performance theory. Issues of speculative theory (the origins of notes, intervals, chords; representations of the divine in music; and so forth) and aesthetics are discussed only where necessary to understand the practical application of a writer's

ideas or the climate in which a theorist worked. Sources whose primary focus is performance, especially thoroughbass manuals, are invoked as they illuminate composition. Even publications intended for amateurs can shed light on the spread of ideas within the music world. This information is central to the vision of history of theory in the present study. It is one thing to present what Rameau, for instance, articulated in his works. It is quite another to see how those ideas affected the music primers of the time. Although some of Rameau's ideas were avidly debated over the decades but never left the hothouse of speculative treatises and their rebuttals, other ideas quickly joined everyday musical discourse.

Composition is construed here rather broadly to include everything from musical rudiments, intervals and chords, the study of harmony and voice leading, considerations of melody, musical phrasing and form, and the actual process of working out a composition. The relationship between music and text (including most aspects of text setting) is considered an aspect of musical aesthetics and is therefore bypassed. To have included it would have expanded an already large study.

Finally, this work should be regarded as a preliminary sketch of a history of eighteenth-century theory. The field is vast and, despite many strides taken in the past few decades, still contains numerous large patches that mapmakers of old labeled *terra incognita*. My aim is to present a comprehensive view of the century, fill in many gaps, correct misconceptions, and make it easier for future scholars to orient themselves within the field.

CHAPTER ONE

Zarlino and His Legacy

Zarlino: A celebrated writer on music whom M. de Brossard calls "the prince of modern musicians."

Rameau 1722, Table of Terms

THE OPENING DECADES of the eighteenth century present a plethora of seemingly disparate theoretical approaches to the materials of musical composition. There were methods of traditional counterpoint (intervals and their interactions), a method of species counterpoint, methods of thoroughbass, and studies of harmony. These works, as well as dictionaries and journals, described several approaches to melodic construction, phrasing, and those aspects of music that nowadays fall under the heading of form: rhetoric underlay discussions of cadences, of dissonant configurations, of the parsing of pieces, and of melodic construction in general; variations applied to thoroughbass voice leadings created all sorts of compositions; and there were discussions of imitation, canon, and fugue, descriptions of the events within various types of movements, and ad hoc discussions of melodic contour and rhythmic continuity. Several different systems of modes and various formulations of the major-minor keys coexisted. While some writers continued to invoke numerical ratios to explain the basics of music, others appealed to the new science of acoustics, and still others specified no particular model to account for the musical elements. If this were not sufficient diversity, every new work seemed to present its own idiosyncratic mixture of these elements.

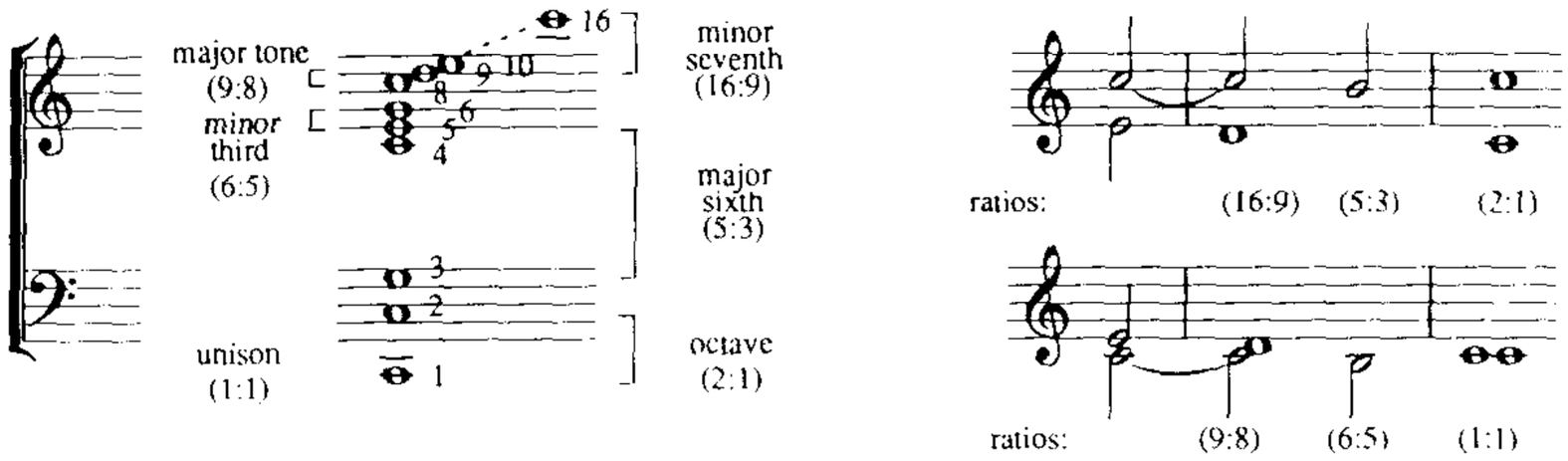
Despite this wide range of content, approach, purview, and conceptual model, most of these traditions can be traced to common roots in mid-sixteenth-century theory and in the profound changes in musical style that took place at the end of that century. Both species counterpoint as offered by Johann Joseph Fux (1660–1741) and the harmonic theories of Jean-

Philippe Rameau (1683–1764) are deeply indebted to the great sixteenth-century theorist Gioseffo Zarlino (1517–1590). The controversies over musical style that split the world of composition into *prima pratica* and *seconda pratica* (controversies in which Zarlino was an early participant) were crucial to the rise of thoroughbass, the evolution of major and minor keys, the continued existence of contrapuntal theory alongside growing harmonic perspectives, and also the use of rhetoric to explain the ordering and content of musical compositions. As a result, although Zarlino is far removed from the eighteenth century chronologically and conceptually, it is appropriate to begin a study of eighteenth-century theory with his ideas as they appeared in the mid-sixteenth century. This discussion concentrates solely on those aspects of Zarlino's ideas that are important to an understanding of eighteenth-century theory.

Zarlino as Theorist

Among the many excellent sixteenth-century writers on music, Zarlino alone was preeminently influential on later theorists in numerous countries. His formulations, transmitted via his own magnum opus, the *Istitutioni harmoniche* of 1558, via manuscript translations, and via the writing of his pupils and others influenced by him, were authoritative for musicians in Italy, France, Germany, and England by the early seventeenth century. More than 160 years after its publication, ideas from the *Istitutioni* permeate early-eighteenth-century writings in several different theoretical traditions. And as late as the end of the nineteenth century, Hugo Riemann cited Zarlino as a source of parts of his harmonic theories (even though Riemann misconstrued the role of these tenets in Zarlino's work).

Zarlino's authority and influence derive from his erudition as well as his practical knowledge. He was a composer as well as a scholar—a student of Adrian Willaert (c. 1490–1562) and *maestro di cappella* at Saint Mark's in Venice from 1565 until his death in 1590, succeeding in that post Willaert, who held it from 1527 to 1562, and fellow Willaert pupil Cipriano de Rore (1516–1565). Later musicians found Zarlino's writings stimulating because he was primarily concerned with human music *(musica humana);* hearing and the practices of composers were both central issues and also important criteria in deciding theoretical matters. But Zarlino's humanism, which also encompasses the first detailed discussion of text setting, did not endorse all compositional practices. Music did not exist for him solely to titillate the listener. Along with Plato, Zarlino believed that music should be enjoyed prudently because it has the capacity to arouse evil as well as good (Zarlino 1558, Part 1, Chapter 3; Plato's *Republic* in Strunk 1950, pp. 7–8). He repeatedly insisted that music should contain pleasing sounds combined with skill, and he rejected what he

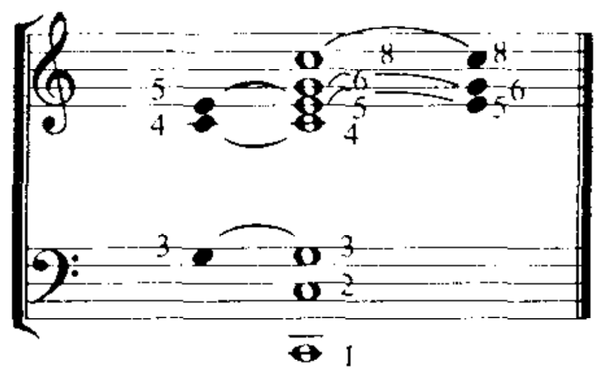


Example 1-1.

deemed excessive and improper dissonances, improper melodic intervals, and undue chromaticism. It is therefore not surprising that the most prominent musician to challenge these apparent extravagances in monodies early in the next century was Zarlino's pupil Giovanni Maria Artusi (c. 1540–1613).

Platonic-Pythagorean numerology provided a systematic basis for Zarlino's conception of proper and improper usages. The ancient Greeks had realized that in music there was a direct correlation between low-numbered string ratios and the simplest musical intervals (1:1 for the unison, 2:1 for the octave, 3:2 for the fifth, and so forth). This placed music in striking contrast to other quantifiable domains, where everyday relationships were often represented by quite complex numbers. In geometry, for instance, the radius and diameter of a circle relate to the circumference and area via the irrational pi, and the hypotenuse of a right triangle is the square root of the sum of the other sides, generally an irrational number. From antiquity through the beginning of the modern era, the ratios of musical intervals, where there was a one-to-one relationship between simple structures and simple proportions, were invoked in cosmology and other sciences, as well as in theories to explain musical structure. Intervals represented by simple ratios were the most consonant. And the progression from relatively complex ratios through simpler ratios to ratios close to unity explained the functional progression from a suspended dissonance to a third or sixth to the perfection of a cadential unison or octave (see Example 1-1). The directionality of such cadential voice leadings in both musical terms and also mathematical terms (as the ratios progress toward unity) provided the basis for a rudimentary functional theory of intervallic harmonic progression.

Humanistic concerns and Platonic-Pythagorean reasoning coexist but do not always agree as the conceptual underpinnings of Zarlino's theoretical perspective. Like all theorists who have sought to explain music via a systematic theory, Zarlino had to strike a balance between music in a particular style created by and heard by humans and music as a construction based on abstract and eternal principles. For instance, since Zarlino



Example 1-2.

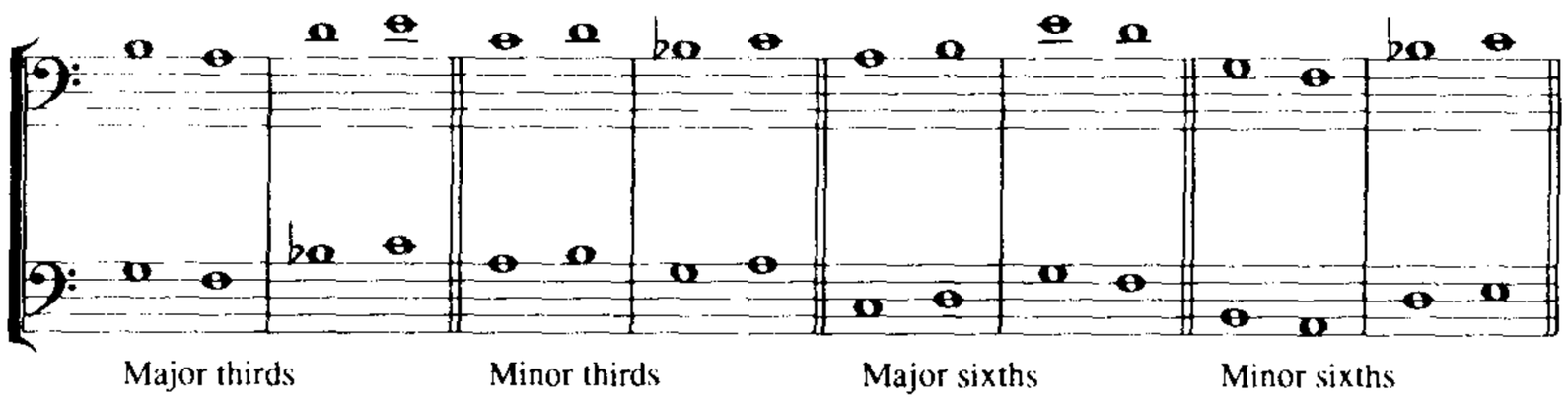
believed that smaller-number ratios were more consonant than larger-number ratios, the inexorable logic of numbers led him to argue that what we call a major 6/4 chord (represented by the proportion 5:4:3) is more consonant than what we call a minor 6/3 chord (8:6:5) (Zarlino 1558, Part 3, Chapter 60); see Example 1-2. Zarlino's argument is not entirely irrelevant to sixteenth-century practices, since there are occasional "major 6/4 chords" in his own compositions and those of his contemporaries in which the dissonant fourth is treated more leniently than it is in other combinations.[1] Yet Zarlino readily acknowledges that the 6/4 chord is "little esteemed by musicians," and elsewhere he does not insist on its use.

Zarlino's special genius, then, lay in his ability to organize the comprehensive practical knowledge of his age according to speculative principles, and at the same time to look beyond the boundaries of those principles to acknowledge practical realities, occasionally including novel insights that challenge the very bases of his theoretical conceptions.

Aspects of Zarlino's Compositional Theory, Sixteenth-Century Music, and Later Adaptations

Zarlino's *Istitutioni* lays out the compositional practices of the sacred music of his own time. The style he surveys is not, therefore, that of his slightly younger contemporary Palestrina (c. 1525–1594), most of whose compositions postdate the first edition of *Istitutioni,* but that of his teacher Willaert (even though on many matters, Zarlino's explanations do in fact agree with usages of the Palestrina-Lassus generation). Zarlino frequently applies a perspective on voice-leading concerns somewhat different from the one that modern musicians might apply and even different from that of the seventeenth- and eighteenth-century musicians who cited him as an authority. Thus, when later theorists borrow or adapt tenets from the *Istitutioni,* it is important to recognize the differences between the formulation and placement of the tenet within Zarlino's own works, the

1. In Zarlino's madrigal *Amor mentre dormia* (Zarlino 1562, p. 25, m. 21) and in Part 2 of Palestrina's *Beatus Laurentius* (*Werke,* 5, p. 55), suspended fourths that are part of "major 6/4" chords last twice as long as other suspensions.



Example 1-3. Zarlino 1558, Part 3, Chapter 29

often different formulation of the tenet within the later work, and the sometimes different formulation of that tenet in modern theory.

Zarlino's discussion of consecutive consonances is representative. In addition to the familiar prohibition on parallel octaves and perfect fifths, he bans two major thirds or two minor sixths in succession and only barely tolerates consecutive minor thirds or major sixths (Part 3, Chapter 29)—proscriptions that Zarlino may have received from his teacher Willaert (Berger 1987, pp. 111–112).

Zarlino gives three reasons for these proscriptions. First and foremost, consecutive consonances violate the principle of variety. Promoting variety, which "brings pleasure and delight" (Part 3, Chapter 55), is a goal of many of Zarlino's compositional recommendations. In addition to proscribing consecutive consonances of the same size, Zarlino also bans repeated melodic motives (Chapter 55), urges avoiding unisons since they contain no variety (Chapter 41), and praises the harmonic perfection of what we call the root-position triad (without using that term)[2] because it contains a variety of consonances: the major and minor thirds within a fifth (Chapter 31).

Because of variety, Zarlino tolerates two minor thirds or two major sixths in succession only when the parts move by step, because in this case the interval in each of the two parts differs in the system of just intonation he proposes: one part moves by a major tone (9:8), while the other moves by a minor tone (10:9). He prohibits minor thirds or major sixths in succession when skips are involved.

Zarlino's second reason for banning parallel consonances is that there should be a semitone (literally or contained within a skip) somewhere in any interval-to-interval connection. The lack of a semitone arises when both parts in an interval succession move by whole tones; see Example 1-3. When thirds or sixths of different qualities follow one another by

2. The term *triad (trias harmonica)* was coined by Johannes Lippius (1585–1612) in the seventeenth century. References in modern scholarship to Zarlino's use of the term are erroneous.