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Karol Berger

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Musica ficta

The main purpose of this book is to clarify the meaning and use of the conventions governing the practice of implied accidentals in vocal polyphony from the early fourteenth to the mid-sixteenth century – a problem which has fascinated musicologists for over a hundred years now.

Although musicians of the late Middle Ages and Renaissance had at their disposal everything they needed to notate pitches unambiguously, they did not think it was necessary to write down all accidentals; since some accidental inflections were implied by the musical context, performers made them whether or not they were notated. This practice imposes on modern readers of early music sources, be they editors, performers or historians, the task of supplying all such conventionally implied accidental inflections and the successful achievement of this task depends on a knowledge and understanding of the conventions involved.

Since the practice of implied accidentals can be understood only in a wider context of compositional, notational, and performing practice of the period, the book attempts to throw light on some aspects of these practices as well.

Professor Berger's study represents the first attempt to examine the whole surviving theoretical evidence relevant to the subject and thus lays an indispensable foundation for any future work in this area.

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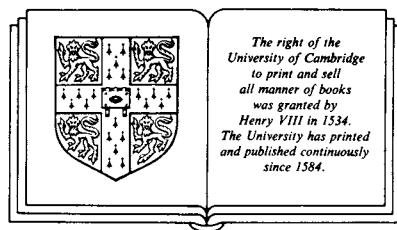
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Musica ficta

THEORIES OF ACCIDENTAL INFLECTIONS
IN VOCAL POLYPHONY FROM
MARCHETTO DA PADOVA TO
GIOSEFFO ZARLINO

KAROL BERGER



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To Anna Maria

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Note: Throughout this book, the medieval letter notation (Γ , A-G, a-g, aa-ee, b=fa, h or #=mi) is used to indicate pitches. Italicized capital letters are used when the octave of the pitch is of no concern. Ascending degrees of a mode are indicated by consecutive Arabic numerals beginning with 1 for the final.

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Music notation, like other forms of writing, aids memory by means of visual representation of what is intrinsically an aural medium. The development of music notation in Europe shows an increasing graphic control over various aspects of sound and its artistic organization. The problem of how to represent music visually was solved first in the matter of pitch. By the early eleventh century, all graphic signs needed to notate pitch unambiguously had been introduced, so that the principal innovations in music notation made during the high and late Middle Ages and the Renaissance were in the domain of rhythm and meter. However, although musicians of the period had at their disposal everything they needed to notate pitches unambiguously, modern readers of early music sources, be they textual critics, performers or historians, are bedevilled by a persistent problem in reconstructing the intended pitches. This is known somewhat informally as the problem of *musica ficta*.

During the Middle Ages and the Renaissance it was not necessary to write down all accidentals. Since some accidental inflections were conventionally implied by the musical context, performers made them whether or not they were notated. This practice imposes on modern readers of early music sources the task of supplying all such conventionally implied accidental inflections. A successful performance of this task depends on our knowledge and understanding of the conventions involved. The main purpose of the present book is to offer assistance by clarifying the meaning and use of the conventions governing the practice of implied accidentals in vocal polyphony from the early fourteenth to the mid sixteenth century.

It should be self-evident why this is a worthwhile goal. Our understanding of the practice of implied accidentals is a prerequisite for our ability to read, perform and study early music. But the investigation undertaken in the present book will yield some less obvious benefits as well. The practice of implied accidentals can be understood only in a wider context of compositional, notational and performing practices of the period and, consequently, our investigation will need to shed light on at least some aspects of these practices. For example, one of the conventional functions of accidental inflections was to supply cadential leading tones. It is necessary to deepen our understanding of the structure of cadences in order to be able to recognize contexts which called for inflections. The present study will also make

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new questions and areas of investigation possible. For instance, we will be able to distinguish between conventional and unconventional uses of accidental inflections, a distinction indispensable in studying the development of chromaticism in European music.

Musicologists have been aware of the problem of implied accidentals for more than a hundred years now and, especially in the last forty years, made great progress toward solving it. Our understanding of *musica ficta* has been particularly enriched by Edward E. Lowinsky,¹ Richard H. Hoppin,² Lewis Lockwood,³ Carl Dahlhaus,⁴ James Haar,⁵ Margaret Bent,⁶ Andrew Hughes⁷ and Howard Mayer Brown.⁸ And yet we are still very far from a generally accepted musicological theory of *musica ficta* and from a commonly employed set of editorial procedures for dealing with written and implied accidental inflections in early music. The problem of implied accidentals remains until this day, in the words of Lewis Lockwood, 'one of the frontier problems of musicology'.⁹ The reason why the solution has

¹ See especially 'The Goddess Fortuna in Music, with a Special Study of Josquin's *Fortuna d'un gran tempo*', *The Musical Quarterly*, XXIX (1943), 45-77; 'The Function of Conflicting Signatures in Early Polyphonic Music', *ibid.*, XXXI (1945), 227-60; *Secret Chromatic Art in the Netherlands Motet* (New York: Columbia University Press, 1946); 'Conflicting Views on Conflicting Signatures', *Journal of the American Musicological Society*, VII (1954), 181-204; 'Adrian Willaert's Chromatic "Duo" Re-Examined', *Tijdschrift van de Vereniging voor Nederlandse Muziekgeschiedenis*, XVIII (1956), 1-36; 'Matthaeus Greiter's *Fortuna*: An Experiment in Chromaticism and in Musical Iconography', *The Musical Quarterly*, XLII (1956), 500-19 and XLIII (1957), 68-85; 'Foreword', H. C. Slim, ed., *Musica Nova*, Monuments of Renaissance Music 1 (Chicago and London: The University of Chicago Press, 1964), pp. V-XXI. The work of Lowinsky has played a singularly invigorating role in the history of the subject and if I occasionally take issue with some conclusions reached by him as well as by other scholars mentioned here it is with full awareness that my work would be impossible without these brilliant predecessors.

² 'Partial Signatures and *Musica Ficta* in Some Early 15th-Century Sources', *Journal of the American Musicological Society*, VI (1953), 197-215; 'Conflicting Signatures Reviewed', *ibid.*, IX (1956), 97-117.

³ 'A Dispute on Accidentals in Sixteenth-Century Rome', *Analecta Musicologica*, II (1965), 24-40; 'A Sample Problem of *Musica Ficta*: Willaert's *Pater Noster*', H. S. Powers, ed., *Studies in Music History. Essays for Oliver Strunk* (Princeton: Princeton University Press, 1968), pp. 161-82.

⁴ See especially 'Zur Akzidentiensetzung in den Motetten Josquins des Prez', R. Baum and W. Rehm, eds., *Musik und Verlag. Karl Vötterle zum 65. Geburtstag am 12. April 1968* (Kassel: Bärenreiter, 1968), pp. 206-19; 'Tonsystem und Kontrapunkt um 1500', *Jahrbuch des Staatlichen Instituts für Musikforschung Preussischer Kulturbesitz* (1969), 7-18; 'Relationes harmonicae', *Archiv für Musikwissenschaft*, XXXII (1975), 208-27.

⁵ 'Zarlino's Definition of Fugue and Imitation', *Journal of the American Musicological Society*, XXIV (1971), 226-54; 'False Relations and Chromaticism in Sixteenth-Century Music', *ibid.*, XXX (1977), 391-418.

⁶ 'Musica Recta and Musica Ficta', *Musica Disciplina*, XXVI (1972), 73-100; 'Diatonic *Ficta*', *Early Music History*, IV (1984), 1-48.

⁷ See especially *Manuscript Accidentals: Ficta in Focus 1350-1450*, Musicological Studies and Documents 27 (n.p.: American Institute of Musicology, 1972).

⁸ See especially 'Accidentals and Ornamentation in Sixteenth-Century Intabulations of Josquin's Motets', E. E. Lowinsky, ed., *Josquin des Prez* (London: Oxford University Press, 1976), pp. 475-522.

⁹ 'A Sample Problem of *Musica Ficta*', p. 161.

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eluded us thus far is that scholars working on the problem have never examined systematically the whole available evidence, but have limited themselves to a few individual theorists, composers, sources or works. The practice of implied accidentals stretched over several centuries and over all parts of Europe with a written music tradition. We cannot exclude the possibility that the practice evolved in time and differed from place to place. But we cannot begin to study such chronological and geographical variants before we acquire a comprehensive picture of the whole practice. Only then will we be able to distinguish constant elements from variable ones. Otherwise we shall always run the risk of taking an exception for a rule.

There are two types of evidence relevant to our problem: music theory and musical sources themselves. We have much to learn from a study of musical sources, in particular from a comparison of different versions of the same work, including instrumental intabulations of vocal models. But much of this practical evidence remains ambiguous if it is not interpreted in the light of the information provided by music theorists of the period. Without theoretical evidence we could not be sure that a performer was supposed to inflect pitches in certain contexts even if the inflections were not explicitly indicated, we could not discover what these contexts were, and we would not know how musicians of the period thought about and dealt with the problem of implied accidentals. The nature of the problem makes a study of theoretical evidence a prerequisite for an examination of practical sources.

It is for this reason that a comprehensive study of the entire surviving theoretical evidence concerning *musica ficta* is attempted in this book. The evidence examined has been limited only chronologically; I begin with theorists writing after *ca.* 1300 and stop with those writing *ca.* 1560. The reasons for the choice of the starting point are first, that the medieval gamut and the set of concepts and images which it involved and which enabled a musician to think about pitches and intervals reached its fully developed state only in the late thirteenth century and second, that the classification of intervals which underlied the practice of implied accidentals stabilized only in the early fourteenth century. This is not to say that the practice was unknown before 1300, but merely that, together with the theory and practice of counterpoint with which it was intimately linked, it entered a mature and relatively stable phase after that date. The reason for ending the investigation after the middle of the sixteenth century is that by that time the growing interest of composers in genuine chromaticism made exact notation of accidental inflections increasingly desirable and thus began slowly to undermine the practice of implied accidentals. Within the chosen chronological limits, I have attempted to examine the entire surviving evidence to the extent allowed by the present state of bibliographic control over early music theory. Relevant theoretical texts may be discovered in the future, but

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presently known texts are sufficiently rich and consistent to give us reasonable assurance that we may correctly distinguish the set of ideas commonly shared by musicians from idiosyncratic reform proposals by individual theorists, and that we may describe the historical evolution of this common core of ideas and practices within the studied period. It will be seen that some of these ideas and practices remained constant throughout this period, while others evolved. It will be also be seen that theoretical evidence alone shows no unmistakable geographical variants in the practice of implied accidentals. A future search for such variants will have to be based on the evidence of practical sources.

The most general features of the method followed in the present study have already been indicated. Since what we want to discover are commonly shared conventions, we must distinguish these from a theorist's idiosyncrasies, inventions, reform proposals and the like. The latter may be significant in allowing us to uncover problems with which musicians of the period struggled, but the former will obviously have to be in the center of our interest. In addition, we shall want to distinguish those elements of the set of commonly shared ideas, attitudes and practices which remained constant from those which changed and to describe the historical evolution of the latter.

The book is divided into three parts. Part I ('The content and structure of *musica ficta*') consists of two chapters and attempts to answer the question 'What was *musica ficta*?'. Part II ('The functions and uses of *musica ficta*') consists of five chapters and discusses the question 'Why and how was *musica ficta* used?'. Part III ('Written and implied accidental inflections') consists of one chapter and attempts to illuminate the nature of the practice of implying rather than notating inflections.

Chapters 1 and 2 describe the concepts and images in terms of which musicians of the Middle Ages and the Renaissance thought about and imagined the entire system of steps and intervals they used. An understanding of these concepts and images is indispensable if we are to avoid anachronistic assumptions when dealing with accidental inflections in early music. In the first chapter ('Within the hand'), I concentrate on that part of the total gamut which represented the norm (*musica vera*), in the second ('Beyond the hand'), on the remaining portion of the gamut (*musica ficta*). In each case, in addition to a discussion of relevant concepts and images, I describe the method of writing and reading the steps and intervals, and the content and organization of the gamut. The most important practical result of the discussion is that it enables us to trace the evolution of the content of the gamut and to tell which steps were available at each stage of the evolution. We shall also be able to distinguish those steps which were used only in theoretical experiments from those which were used in practice, and to distinguish within the latter group the normally used accidental inflections from the unusual ones.

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The function of accidentals placed at the beginning of the staff is discussed in Chapter 3 ('Signatures'), which includes a correction of a current misconception concerning the effect of a signature on the distinction between *musica vera* and *ficta* and presents a new hypothesis concerning 'conflicting' signatures, while the functions and uses of internal accidental inflections in various types of musical contexts which conventionally required such inflections are considered in Chapters 4–7.

In Chapter 4 ('Horizontal relations') I take up melodic progressions which were conventionally corrected by means of accidental inflections and demonstrate that the prohibition of the melodic tritone was not applied mechanically, but had numerous exceptions. This makes it possible to formulate precise guidelines for the application of the prohibition. The origin and applicability of the 'fa-above-la' rule is also explained here. Once we know how to recognize melodic contexts which had to be corrected by means of accidental inflections, we must find out which inflection to choose when there are alternative ways of correcting the context. It is now possible to explain why flats rather than sharps were regularly chosen to correct such contexts. Finally, theorists allow us to discover what was done when an accidental inflection introduced to correct a melodic progression produced another undesirable progression in turn.

Chapter 5 ('Vertical and cross relations') begins again with the prohibited non-harmonic vertical and cross relations, shows that the prohibition had numerous exceptions, and defines precisely the contexts in which it applied. It will be demonstrated that the prohibition was invoked in practice much less often than hitherto suspected. Also discussed are the problems of how the undesirable intervals were corrected, and what was done when the chosen correction introduced new problems, or when one had to choose between correcting a melodic or a harmonic context.

Chapter 6 ('Contrapuntal progressions') discusses contexts which involve progressions from one vertical interval to another and defines those contexts of this type which conventionally required the use of accidental inflections. Since our ability to recognize such contexts depends on our understanding of cadential structures, I undertake here to define cadential progressions much more precisely than has been done up to this time. The much-discussed problem of whether the lower or upper leading tone to the final was chosen in situations in which both were possible is considered next in the light of new evidence and it is argued that an understanding of the modal context is relevant to the problem. Also discussed is the behavior of the secondary leading tone to the fifth degree above the final and the question of what was done when cadential inflections introduced undesirable relations.

The subject of Chapter 7 ('Canon and imitation') is a family of compositional techniques involving the use of the same complete or incomplete

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melody more than once in a single work. Techniques of this sort may have conventionally required the use of accidental inflections. They raise the question of whether one tried to preserve exact intervals of the melody at each appearance.

While Chapters 3–7 discussed the functions and uses of accidental inflections regardless of whether these were expressly notated or not, Chapter 8 ('Classes of accidental inflections in early vocal polyphony') addresses directly the problem of unspecified but implied inflections. It is explained here why some accidentals were written down while others were left out. It is also shown that we may distinguish those source accidentals which must have been written down by the author of the musical text (whether the composer or editor of a given version of the work) from those which may have been contributed by the transmitters (scribes, printers) or performers of the work, and that the distinction has important implications both for our ability to read the sources and for future research into the development of tonal language. Finally, a set of general principles and specific procedures which should guide a modern reader (editor, performer) of early music sources with respect to accidental inflections is proposed.

I have been very fortunate in the quality of advice and support I have received while writing this book. It is a great pleasure indeed to be able to acknowledge this help here. I would like to thank particularly warmly Professors James Haar and Anthony Newcomb for their careful and critical reading of the completed manuscript. The book the reader has in his hands would have been much weaker without their expert suggestions, though it should go without saying that such problems as remain are the sole responsibility of the stubborn author. I have also benefited greatly from the comments received from Professor Claude V. Palisca and from stimulating correspondence with Professors Margaret Bent and Howard M. Brown. My friends and colleagues Professors George Houle and William P. Mahrt have been kind enough to participate in my Stanford seminar devoted to the examination of accidental inflections in Dufay's music where the benefits of their practical expertise in early music performance proved invaluable. I have learned a lot from a number of students who patiently but actively participated in several seminars on practical applications of accidental inflections both at Boston University and at Stanford. I am also much indebted to my friend Glenna Houle for excellent advice in matters of style. The staffs at Music Libraries at both Boston and Stanford Universities have been indefatigable in providing me with microfilms and other materials and I am very grateful indeed for their hard work. A large part of my research has been generously supported by a fellowship from the National Endowment for the Humanities in 1980–1. Portions of Chapter 1 appeared earlier in *Musica Disciplina*, XXXV (1981), of Chapter 2(iv) in *Journal of*

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Musicology, IV (1985–6) and of Chapter 2(v) in *Revue belge de musicologie*, XXXIX–XL (1985–6); I would like to thank the editors of these journals for their permission to use this material here. I would also like to thank the American Institute of Musicology and Hänssler-Verlag, Colorado College Music Press, and University of Nebraska Press for permission to quote from books they published. Grateful acknowledgements are due to the librarians at the Centrale Bibliotheek of Rijksuniversiteit in Ghent, Bayerische Staatsbibliothek in Munich, Bodleian Library at Oxford University, the Department of Manuscripts at the Bibliothèque Nationale in Paris, and the Music Division of the Library of Congress in Washington for providing me with photographs of materials held in their libraries and for allowing me to reproduce them here. I am much obliged to Ian Rumbold for his expert subediting of the text and to Penny Souster of the Cambridge University Press for her kind overseeing of the transformation of my typescript into the present book. Finally, but most importantly, I could not hope to express my full gratitude to my wife, Anna Maria, the book's first, most critical, but also most supportive reader, for the innumerable arguments we have had over practically every point I make here. Our discussions are the main reason why I have enjoyed writing this book so much.