Journal of the American Musical Instrument Society

VOLUME XXIX • 2003



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BOOK REVIEWS

Matthew Spring. *The Lute in Britain: A History of the Instrument and Its Music.* Oxford and New York: Oxford University Press, 2001. xxxii, 536 pp.: 56 black-and-white illus., 70 musical exx., 34 tables. ISBN 0-19-816620-6. \$150.00 (hardcover).

Performer-scholar Matthew Spring has written the first full-length history of the lute and its repertory to appear in print. Focusing primarily (though not exclusively) on the lute in Britain, he surveys, digests, and imparts (in words, tables, illustrations, and musical examples) a massive amount of information on the instrument and its music from the late thirteenth through the mid-eighteenth century, drawn from original as well as secondary sources. For a single scholar to have undertaken such a comprehensive study is remarkable; that he has accomplished it in such a masterly fashion is nothing short of amazing.

In the first four chapters (1. "Introduction," 2. "The Lute in England before 1500," 3. "From Medieval to Renaissance: A Continental Excursus, 1480–1530," 4. "The Early and Mid-Renaissance Periods: 1500–1580") Spring discusses the evolution of the lute and the beginnings of its huge repertory. He examines the structural changes of the various lute types in use during the period 1285–1580 and illuminates the organological details with numerous iconographical and documentary sources. While all scholars of the lute in England are deeply indebted to the magisterial writings of John Ward, I found it troubling that Spring has uncritically accepted Dr. Ward's premise that by 1550 the term gittern had come to mean a wire-strung cittern tuned to guitar intervals. In the Middle Ages, the term referred to a very small treble lute type whose body, neck, and peg box were carved from a single piece of wood. By the mid-sixteenth century, all evidence suggests that the term gittern referred, not to a cittern tuned to guitar intervals, but to the small four-course guitar itself. Not until the mid-seventeenth century and the Restoration era did the term come to mean a cittern and, indeed, all of Ward's evidence is from that later period.

In chapter 5, "The Golden Age, Part I: 1580–1603," Spring discusses the first of two extraordinary periods of musical production for the lute, and the remarkable composers—including, among others, John Johnson, Francis Cutting, Richard Allison, John Danyel, Daniel Bacheler, Anthony Holborne, and, of course, John Dowland—whose contributions to the repertory embraced not only the solo music surveyed in this chapter but the ensemble music and songs accompanied by lute discussed in the ensuing chapters. Musical examples and lists of music sources are given in generous measure; an invaluable table of English lute iconography of the period is also included.

Chapter 6, "The Lute in Consort," includes the most extensive discussion to date of the lute's role in the English mixed consort and the nature of this important genre. No ensemble repertory quite like it existed anywhere else at any time. At its most highly developed, the consort (a term that designates both the ensemble and the musical genre) includes fully written-out parts for a treble viol (or violin), which plays the tune, sometimes breaking into rapid, ornamental "divisions" on the repeats of sections; a lute, whose role is to support the harmonies on the first playing of each section and to play virtuoso divisions on the repeats of sections; a flute (or sometimes a recorder is indicated) to play an alto line, which provides harmonic filler and occasionally rises up out of the texture to play snatches of the tune or a running line; a bass viol to play the bass line; a bandora (a rich and resonant metal-strung, chordal bass instrument plucked with the fingers), which plays harmonies from the bass line and frequently doubles the bass viol part an octave lower; and a cittern (a metal-strung instrument played with a plectrum), which keeps the entire ensemble together by playing a non-stop series of chords.

Spring's commentary on the consort repertory and the function of the instruments that played it is excellent, and is enhanced by a useful four-page table listing the items in the main sources of the repertory and another table listing iconography. His discussion of the nature of two of the instruments, however, is somewhat misleading in that he presents as fact an idea posited by Ian Harwood (in his article "A Case of Double Standards? Instrumental Pitch in England c.1600," *Early Music* 9 [1981]: 470–81) that the lute and cittern used in the English mixed consort were smaller than the normal lute and cittern and were tuned a fourth higher. To back up Harwood's theory, he also discusses the "tiny cittern" theory posited by Djilda Abbott and Ephraim Segerman, who argue that the cittern was even smaller than the instrument described by Harwood and was tuned a full octave higher than the normal instrument (see Djilda Abbott and Ephraim Segerman, "Strings in the 16th and 17th Centuries," *Galpin Society Journal* 27 [1974]: 48–73). Since this "smaller

and higher" theory has by no means been proven to the satisfaction of other music scholars and organologists (see "Cittern" in *The New Grove Dictionary of Music and Musicians,* second ed. [London: Macmillan, 2001]), Spring should have brought this fact to the attention of his readers. Chapter 7, "The Golden Age, Part II: 1603–1625," continues where

Chapter 7, "The Golden Age, Part II: 1603–1625," continues where chapter 5 left off: at the end of the Elizabethan era and the beginning of the Jacobean. During this period John Dowland became the most revered lute and lute-song composer in England, Robert Johnson succeeded him, and developments in Italy and France engendered a number of structural changes to the lute in England that were designed to increase its bass range. These changes were driven by the demands of the new musical style that first emerged in Italy and resulted later in an array of experimental French lute tunings that, combined with all the additional bass strings, altered the lute's tone color in France and England. Spring reports and documents these developments extremely well. In addition to its solo function and its dazzling role in the mixed con-

In addition to its solo function and its dazzling role in the mixed consort, the lute was also the premier instrument for accompanying the solo voice. Many would agree that the quality of English song in the age of Shakespeare has not been equaled (except, I think, by the songs of Purcell at the end of the century). In chapter 8, "The Lute in Song Accompaniment," the author surveys the English ayre, a repertory of such size and artistic importance that entire books have been devoted to it. A detailed treatment of the genre, including its literary aspects, can hardly be expected in a book of this nature, thus Spring must be given an immense amount of credit for summarizing it so adeptly in one chapter.

Developments elsewhere in Europe are described in chapter 9, "From Renaissance to Baroque: A Continental Excursus, 1600–1650." Here Spring compares the changes in the physical nature of the lute, its playing techniques, tunings, and other performance practice issues taking place outside of England with the development and use of the twelvecourse lute type, with its distinctive "flatt" tuning (a particular scordatura tuning) that was much favored by the English until the early eighteenth century. Continuing his discussion of this type of lute, Spring vividly documents its development, music, and place in contemporary society in chapter 10, "The Caroline and Commonwealth Periods: 1625–1660"; its importance is explored here for the first time ever. In chapter 11, "The Theorbo," the author describes another form of

In chapter 11, "The Theorbo," the author describes another form of lute, and, in particular, a distinctly English version of it. The theorbo was an Italian creation (the *tiorba* or, as it was called in Italian humanist circles, the *chitarrone*) which, due to its very long, fingered strings and its many extra unfingered bass strings stretching across a separate neck to a second peg box, required a different tuning configuration from that of the lute. The theorbo soon became widely known throughout Europe and England because, like the lute proper, it was ideally suited for basso continuo accompaniment.

Spring gives a good account of the theorbo's Italian background, but his discussion of the Italian lute seems largely limited to the information found in the 1980 edition of *The New Grove Dictionary of Music and Musicians.* This is evident from his statement: "Why the lute should decline so quickly [in Italy] after 1630 . . . has yet to be explained" (p. 371). In fact, a considerable amount of Italian lute music (solos, obbligato parts in operas and oratorios, and chamber music) was produced after 1630 indeed, through the era of Beethoven. Several manuscripts of lute tablature survive from the latter half of the seventeenth century, and there is even a published lute tablature source from 1718 (Giovanni Zamboni's *Sonate d'intavolature di leuto*). However, the Italians seem, generally, to have abandoned tablature in favor of staff notation "after 1630," and lute scholars, who have hardly studied the later Italian lute repertory in tablature, have virtually ignored the lute's rich Italian repertory in staff notation.

Understandably, Spring is much more at home when it comes to the main subject of his book, the lute in Britain. In chapter 12, "The Decline of the Lute in England after 1660," he does a splendid job of chronicling lute practice from the Restoration to Handel's time and beyond, while in chapter 13, "Scottish Lute Music," he presents one of the few authoritative essays on the subject in print, spanning the late fifteenth through the mid-eighteenth century. The many English, French, German, and other continental influences on Scottish lute music and on the instruments used in Scotland are studied in detail, as are the native Scots melodies that came strongly to the fore during the latter portion of the period.

The Lute in Britain has been beautifully produced by Oxford University Press. The vast amount of information it contains, its presentation, the extremely useful tables of music sources and iconography, and the wonderful selection of illustrations make it well worth the price. A "must" for scholars of English and Scottish music and the ever-growing number of players in the international lute community, it should also be of interest to instrument makers and researchers for the wealth of information it provides on the physical nature of the instruments, which is meticulously documented by a combination of iconography, music sources, and contemporary writings. Undoubtedly, this book will become a standard reference work and should be found in every music library in the world.

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Robert Lundberg. *Historical Lute Construction.* With photographs by Robert Lundberg and Jonathon Peterson. Tacoma, WA: Guild of American Luthiers, 2002. xiv, 280 pp.: 650 black-and-white photographs, 60 black-and-white figures. ISBN: 0-9626447-4-9. \$65.00 (hardcover).

Douglas Alton Smith. *A History of the Lute from Antiquity to the Renaissance*. Fort Worth, TX: Lute Society of America, 2002. xvii, 389 pp.: 4 color plates, 75 black-and-white illus., 56 musical exx. ISBN: 0-9714071-0-X. \$85.00 (hardcover).

These two thoroughly-researched books provide a comprehensive account of the lute's history and construction. Given the key role played by the lute in instrumental Western music from the Middle Ages to the Baroque, its revival over the past several decades, and the frequency of its use on recordings and in the concert hall today, the appearance of these long-anticipated books is especially welcome and timely.

Sadly, Robert Lundberg, the author of *Historical Lute Construction*, passed away at the age of fifty-two in 2001. His legacy is this book. The culmination of years of teaching and writing, it is based on past contributions of articles on the topic of lute construction to *American Lutherie*, the journal of the Guild of American Luthiers. While perhaps intended more for the specialist, the study offers a wealth of invaluable and relevant information for the general reader who is interested in the craft of instrument making from the sixteenth through the eighteenth centuries. The bulk of the book is the second section, which is entitled "Practicum" and is organized into eighteen chapters that present Lundberg's step-by-step descriptions of his approach to each aspect of lute-making. The author's readable and engaging text is accompanied by hundreds of photos, diagrams, and informative captions; his direct, conversational writing style reflects his personality and his natural gifts as a

teacher. The first section of the book, consisting of five chapters, offers a more general introductory overview of the lute's development and the history of its construction from the pre-Renaissance to the Baroque, as well as discussions focused on its major components—bowl, belly, bridge, neck, and pegbox. These chapters are accompanied by numerous black-and-white photos of original period lutes, many of which are frequently-copied specimens from museum collections, thus making this a particularly valuable reference for lutenist and scholar. Several radiographs provide additional constructional clues to lute making. Even the reader with only a casual interest in mathematical design will marvel at Lundberg's lucid description of the geometry of barring arrangements, wood thickness graduations, and rose designs, all laid out with full-page diagrams and photographs.

At the end of the book are several useful appendices. Lundberg's drawing plans for seven lutes are intended primarily to accompany the Practicum chapters. His extensive experience in examining original instruments is revealed by an impressive catalog of lutes that he studied during his career. Also included are a glossary of lute-related terminology and a concise listing of information on lute makers.

Jonathon Peterson, who was responsible for many of the workshop photos, as well as the book's design, led the editing of the book. As he explains in the preface, an inevitable consequence of the book's posthumous production was that some editorial issues remained unresolved, for example, questions as to the author's intent on matters such as name designations for various pitch sizes of instruments in the lute consort. In this case, Lundberg's original nomenclature was left intact.

Douglas Alton Smith, a longtime scholar in the field, was also pivotal in bringing Lundberg's book to fruition. Known especially for his research on the composer Sylvius Leopold Weiss, Smith has drawn together years of his research into a volume entitled *A History of the Lute from Antiquity to the Renaissance*. Although it covers the lute's history only up to the end of the Renaissance period, the book's scope is vast. Ample discussion of the lute's repertoire and its cultural and societal context, biographies of important composers, and tablature notations are all included in chapters organized by geographical location throughout Europe. A separate chapter covers the vihuela in Spain, where during the Renaissance it played a role comparable to that of the lute. The first four chapters are devoted to the organological history of the lute itself its origins, evolution, and development—focusing particularly on the extraordinary period of lute making during the sixteenth century in Northern Italy. Smith is able to offer an especially detailed and informative account of this period because there is far more material-both surviving instruments and documentary sources-from after the beginning of the sixteenth century than from earlier times. He provides fascinating descriptions of multi-generational family lute firms in Bologna, Venice, and Padua from the early- to mid-sixteenth century until well into the seventeenth century. Recent archival work has begun to untangle the identities of key members of these families, such as the Malers and Tieffenbruckers, whose roots were invariably in the upper Bavarian region of Germany. The staggering output of their workshops is vividly shown in one of the books's appendices, consisting of two extraordinary room-by-room inventories made in 1581 of the Tieffenbrucker workshop in Venice, describing the astonishing quantity of lutes that filled the building to nearly overflow capacity. Other appendices include an inventory of lutes in the collection of sixteenth-century Augsburg banker Raymund Fugger, and a translation of the regulations of the lute-makers' guild in Füssen from 1562.

The earlier chapters of the book deal with the far more shadowy period of the lute's origins. Starting with Greek and Roman times and continuing through its use in Arabic culture during the eighth and ninth centuries, Smith outlines the lute's presence in early medieval Spain and its subsequent transmission to the rest of Europe through the Italian peninsula, via the influential and culturally fertile court in Sicily. Ties with the ancient roots of the lute were never quite broken; its association with Orpheus and Greek mythology maintained the instrument's high stature during the Renaissance. Smith aptly returns several times to the theme of humanism and the lute, and to the role of the lute's symbolism in Renaissance culture, as he deals with such topics as geometry and cosmology and the lute.

The book is profusely illustrated with excellent reproductions of lute iconography, photographs of original instruments, diagrams, and musical examples in modern staff notation (instead of tablature). In its richness and diversity of pictorial material, Smith's study serves to augment Lundberg's book, whose illustrations are almost exclusively photos of instruments and the workshop. Lundberg, in turn, covers the principles of lute making and construction in much greater depth, which is a perfect complement to Smith's overall survey approach. Taken together, both books—with their differing viewpoints yet closely related subject matter, focused principally on the Renaissance lute—are rewarding to be read simultaneously and deserve adjacent places on the reference shelf.

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Ardal Powell. *The Flute*. New Haven: Yale University Press, 2002. xi, 347 pp.: 18 color illus., 41 black-and-white illus. ISBN: 0-300-09341-1. \$35.00 (hardcover). Companion compact disc *The Flute on Record, 1902–1940.* Hudson, NY: Folkers & Powell, 2002. FP001. \$18.95. Combined price at *www.flutehistory.com,* \$43.25 plus S & H.

Ardal Powell's book, simply entitled *The Flute*, is a tremendous achievement. Its account of the transverse flute in the West from the late Middle Ages through the present focuses not only on the nature of the instrument itself and the changes it underwent over its long history, but also on the individuals and firms that made the flute, the people who played and listened to it, the music they played and heard, and the varying manners in which they played and understood the instrument. While it also touches on the transverse flute's earlier presence in other parts of the world and, occasionally, its use in folk traditions, these are not part of the main story. One of the book's greatest strengths is that it shows the interrelationship of the instrument, its repertoire, and its players and their performing styles.

Another strength is the engaging way in which Powell presents the story of the transverse flute. Included among those who make up the intended audience for the book are not only flutists, flute teachers, musicians in general, and academic readers, but also "attentive and curious" flute students. Thus, Powell writes in such a way that a specialized knowledge of music history is not required on the part of the reader, although a number of side-bars provide information about technical topics. He brings his narrative to life by including vivid biographical (or autobiographical) stories about the life experiences of flutists and flute makers of the past, as well as striking quotations from a wide variety of historical sources. Powell enhances his narrative further by including many blackand-white and color plates illustrating music-making scenes, instruments, and players, along with examples of concert programs, musical scores, fingering charts, and more. Finally, he places the whole in a grand narrative, enlivened by his own point of view and interests, that keeps the reader eagerly turning pages.

There has been no broad English-language survey about the flute since Philip Bate's *The Flute: A Study of its History, Development and Construction* was published in 1969. Since then, as Powell puts it, "a vast body of new knowledge has come to light about the instrument and the people who made it in earlier times as well as about those who wrote, played, and heard its music" (p. ix). Modestly portraying his study as "a sort of progress report on a part of that inquiry," Powell draws together a large body of information from an exceptionally diverse collection of sources, including much work published in other languages, dissertations, other unpublished materials, and little-known articles from journals devoted to the flute not indexed in any of the standard sources. Ingeniously, Powell meets the enormous challenge of giving an adequate account of both older and newer literature about the flute by including a series of bibliographic essays, placed at the end of the book, that describe and discuss reference and general works, sources pertaining to the larger history and criticism of the flute, and sources relating to the content of individual chapters. These bibliographic essays make for interesting reading in their own right and indeed are essential if one is to understand the basis for the narrative told in the main part of the text. They also serve to lead curious readers to a variety of sources from which they can learn a good deal more. Further to commend in the bibliographic essays is the generous credit Powell gives to other authors upon whose work he draws, while at the same time evaluating their strengths and weaknesses for the reader.

Although Powell claims that *The Flute* "does not set out to extend the boundaries of scholarship any further by contributing new material" (p. ix), he often sheds new light on it because of the attention he pays to the interrelationship of the various categories of material he presents. Moreover, his insistence that one should not view the history of changes in the instrument as "progress" or as an abstract line of mechanical development may yet appear new to some readers. Because of its broad subject matter the book is far too extensive to be adequately summarized in a review, but I do want to touch on every chapter, since each tells a complex and interesting story all its own.

In chapter 1, "Shepherds, Monks, and Soldiers," Powell discusses the transverse flute's arrival in Western Europe, its physical aspects insofar as they can be deduced, its appearance in medieval literature and pictures, and the different ways in which it may have been used. Chapter 2, "The Flute at War and at Home," highlights the military flute or fife before

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turning to the transverse flute and its increasing use in secular music. Powell then directs his attention to sixteenth-century printed treatises about musical instruments that provide us with the first written technical information about the flute we have. While most of what he says about those frequently confusing sources can be trusted, there are some inconsistencies or muddied descriptions, for example in his discussion of the flute fingering charts in Martin Agricola's Musica instrumentalis deudsch (1529, second ed. 1545).¹ In connection with Philibert Jambe de Fer's L'Epitome musicale de tons, sons et accordz, es voix humaines, fleustes d'Alleman, *fleustes à neuf trous, violes, & violons* of 1556, Powell makes the important point that for Jambe de Fer, the true basic scale of the renaissance flute was the Dorian rather than the major scale (pp. 33, 47). Finally, Powell traces the increasing use of the flute in small chamber consorts, Italian theatrical entertainments, and sacred compositions in the sixteenth century, informs us about the astonishing numbers of flutes owned by various courts, and concludes with a survey of all known surviving sixteenthcentury flutes, the largest group of which seems to be pitched at a'=410and most of which work best in flat modes.

In "Consort and Solo: The Seventeenth Century" (chapter 3), Powell continues his discussion of musical treatises that shed light on the construction and use of the flute—notably Michael Praetorius's *Syntagma musicum* of 1619 and Marin Mersenne's *Harmonie universelle* of 1636. After passing through some dangerous thickets having to do with transposition matters and flute bore, Powell elegantly traces the flute's emergence as a prized instrument at the court of Louis XIV. Not only was the

1. With regard to Agricola's first set of fingering charts (1529) Powell states that "a consort of flutes (sounding an octave higher than the written notes) can cover a range from D below the bass stave as far as E3 above the treble" (p. 36). But sixteenth-century flutes did not play as low as d in the bass clef, so that information is misleading. Rather, as other scholars have pointed out, the three sizes of flutes for which Agricola provided fingering charts in 1529 seem to have been meant to sound an octave and a fourth higher than the pitches illustrated in the charts, with the lowest note on the largest of these flutes thus being g in the bass clef. Indeed, Powell himself has stated this on an earlier page, although he confuses the issue by adding that "the fingering chart showing a D-A-E consort is really for a G-D-A consort transposing the notated music up a fifth" (p. 34). For a more accurate explanation of this matter, see Howard Brown, "Notes (and Transposing Notes) On the Transverse Flute in the Early Sixteenth Century," this Journal 12 (1986): 5-39. See also William E. Hettrick, The "Musica instrumentalis deudsch" of Martin Agricola (Cambridge: Cambridge University Press, 1994), and Anne Smith, "The Renaissance Flute," in John Solum, The Early Flute (Oxford: Clarendon Press, 1992), 11-33.

flute used in new ways, appearing in intimate concerts in solo and chamber settings as well as in opera and ballet performances, but it also acquired a new character—one associated with sad, tender, and languishing feelings, and with love. These changes were closely interrelated with structural changes being made in the tenor-sized instrument (the flute in d'), including changes in bore, numbers of pieces, shapes and sizes of embouchure and fingerholes, the thickness of walls, and the addition of an E_b key.

In chapter 4, devoted to "The Early Eighteenth Century: The 'Baroque' Flute's Golden Age," Powell documents the change from "a closed world of private performances" (p. 68) to the larger and more public spaces in which a new class of flute virtuosi began to emerge. Soon music for flute was being produced all over Europe in a variety of styles, while different styles of instruments, too, were being produced in flute makers' workshops. Although early eighteenth-century flutes commonly shared a conical bore and three-piece construction, each maker "developed a personal concept of tone and intonation, and devised original technical means of achieving his ideas" (p. 74). Maximum bore diameters and bore tapers, for example, differed significantly, as did the pitch of early baroque flutes. In addition to flutes and flute music, Powell refreshingly pays attention to flute players, both professional and amateur, ultimately giving pride of place to Johann Joachim Quantz (1697–1773), who constitutes the principal focus of chapter 5. In Powell's words, "Quantz's threefold activities, as a composer-performer, an instrument maker, and a writer, place him at the heart of this book, as a persuasive example of its theme that the flute, its music, and its performance technique are all bound tightly together in a vital but fragile relationship" (p. 88). Among other interesting points, Powell suggests that the difficult keys in which the flute specialists at the Dresden court, one of whom was Quantz, were expected to play give "a quite new aspect to Quantz's interest in improving his flute's intonation" (p. 95).

In chapter 6, Powell addresses technical innovations made in the design, mechanism, and sound ideal of the "classical flute" during the second half of the eighteenth century. For example, new keys for F, Bb, and G# were applied to the flute, as well as keys for low C# and C on flutes with a longer footjoint, especially by English makers. In Dresden, August Grenser made flutes that were slimmer and lighter than baroque models, were tuned to favor sharp keys, and voiced with a less full but more penetrating tone. As increasing numbers of dilettantes took up the flute, a vigorous musical instrument trade dealing in large quantities of instruments developed; and listeners could, for the first time, regularly hear traveling virtuoso flutists, each with an individual style of composition and performance.

In the following four chapters (7–10), Powell continues to trace these same matters from the late eighteenth century through the nineteenth century. As concert audiences broadened and became less exclusive, they demanded variety, and the playing of visiting flutists became the subject of increased commentary in the press. In the climate of the Romantic movement the idea that a flutist could hold the status of a "great artist" emerged; soon flutists were competing with violinists in their cultivation of a brilliant style of playing, their display of antics, an impressive volume of tone, and their use of special effects such as harmonics, the glide, and the "vibration" on sustained tones. In chapter 8, "Flute Mania," Powell particularly addresses the increasing interest in reforming the mechanics and, to some extent, the sound of the flute. He is quick to argue, however, that flutes of the period were not too defective to give an adequate account of its music, as some modern historians of the flute have alleged, nor were they insufficiently loud for orchestras of the time. Still, among the concerns addressed by early nineteenthcentury experimenters were simplifying fingerings, improving evenness of tone, achieving "equal" intonation, introducing mechanisms to facilitate the glide, experimenting with the size of the flute's bore, and extending the lower range of the flute as far as g. By around 1820, most of Europe had adopted some kind of flute with eight or nine keys, with middle c as the lowest note, except for Paris, where the official flute of the Conservatoire remained the four-keyed flute. Then in 1826 Captain James Carel Gerhard Gordon, in collaboration with August Buffet *jeune*, first designed a flute based on an open-key system.

Powell's discussion of Theobald Boehm (1794–1881), begun in chapter 8, is the focus of chapter 9, where he investigates in detail the genesis of the brilliant and controversial innovations that Boehm brought to the design of the flute in 1832 and 1847. Important revisions in Boehm's model of 1847 included the introduction of a cylindrical bore in the main part of the instrument, a so-called "parabolic" headjoint, a tube of metal (Boehm experimented with brass, copper, silver, and German silver), toneholes of the maximum possible size closed by padded keys, and a mechanism that built on the innovations of his 1832 pattern. Even though present-day Boehm-system instruments differ in significant ways from the flutes Boehm and his contemporaries built and played, it was Boehm who virtually single-handedly invented the modern flute. Yet, the adoption of the Boehm-system flute was far from uniform, and in chapter 10, "Nineteenth-Century Eclecticism," Powell addresses the controversies that continued to rage among flutists, composers, and conductors over the mechanism, tone, and character of the flute, as well as further innovations made in the design and manufacture of flutes.

Chapter 11, devoted to "The French Flute School," describes the historical roots of and the emergence of the style that originated at the Paris Conservatoire and came to dominate flute playing internationally for much of the twentieth century. Its main attributes are "the use of the French-style silver flute . . . , a preoccupation with tone, a standard repertoire, and a set of teaching materials in which the Taffanel-Gaubert method and the tone development exercises of Marcel Moyse . . . hold a central place" (p. 208).² I was delighted to read Powell's examination of the mythic aspects of the French School, which in its later years was primarily maintained through Moyse's phenomenal popularity as a teacher in the 1960s and 1970s. In this chapter, Powell also gives an account of the new French repertoire for flute that emerged in the late nineteenth and early twentieth centuries, "hand in hand with an entirely fresh notion of what made music expressive" (p. 218).

The final chapters (12–14) deal with the influence of the technology of recording on flute playing, the flute in the early music revival, and the flute in the "postmodern age." In the first of these chapters, Powell takes stock of the influence of recording on flute preferences and flute playing, stating that "within a few decades of the first high-fidelity recordings

2. In connection with earlier flute teaching at the Paris Conservatoire, Powell is misleading when he says, on page 212, that the contents of the earliest tutor used there, François Devienne's Nouvelle méthode théorique et pratique pour la flûte, were revised and altered so much that within a few decades subsequent editions retained nothing of the original material. Elsewhere I have argued that the foundation for the later French Flute School's approach to embouchure and tone development lay in Devienne's exercises for playing the scale in long tones and lessons for playing different sizes of intervals, particularly as they were elaborated on and expanded in revised editions of his method issued after his death: see Jane Bowers, "The Long and Curious History of the Devienne Method for the Flute," in Music in Performance and Society: Essays in Honor of Roland Jackson, ed. Malcolm Cole and John Koegel (Warren, Michigan: Harmonie Park Press, 1997), 205-27; and Bowers, "Later History of Devienne's Flute Method," in François Devienne's Nouvelle Méthode théorique et pratique pour la flute (Aldershot, England: Ashgate, 1999), 27–31. One other correction is that the bilingual French and German edition of the Devienne method that Powell states was issued in Hamburg in 1795 (p. 212) probably was not issued before 1812, since it includes new material not found in other editions published before then.

[that is, by around the mid-1940s] previously distinct national fashions of playing had dramatically altered and begun to merge together into a new recognizably modern shape," and that "by about 1960, all but a handful of flutists in western Europe, North America, and Japan played a metal French-style Boehm flute . . . with a relatively uniform technique and concept of style" (p. 225). Before widespread standardization took place, however, early recorded performances illustrate a fascinating sound world quite different from our own, and here the companion CD, *The Flute on Record, 1902–1940,* is invaluable. Powell also discusses flutemaking firms active in the early and mid-twentieth century. While lamenting the homogenization of the flute-making industry between the Depression and the post-war years, he does have some good words for the recording industry's impact on flute repertoire: it became more diverse, thanks to the industry's stimulus of interest in little-known music, both new and old.

In chapter 13, "The Flute in the Early Music Revival," Powell covers developments such as the publication of modern editions that attempted to reconstruct authoritative versions of early music, the issuing of facsimile editions of music and instrumental methods, attempts on the part of instrument makers to make copies of original instruments suitable for professional performance, and pioneering musicians who put the "baroque" flute on the modern map, along with the subsequent entrenchment of a certain standardized manner of performing baroque music. In the final chapter, "The Postmodern Age," Powell presents an eclectic, properly postmodern mixture of topics, including the vast increase in numbers of amateur flutists; the expansion of flute teaching as the educational industry developed; changes pertaining to the design and manufacture of flutes, including the invention of new types of low flutes, guarter-tone flutes, and a slide flute; the increased focus on physical aspects of playing such as embouchure, breathing, and sound production; and the continuing loss of tonal variety on the part of flutes and flute players. Yet Powell ends The Flute on a positive note, pointing out that increasing contact between flutists, teachers, and makers, facilitated by the growth of flute societies, specialized magazines, and the internet, has diversified the information sources and range of musical stimulation available to flutists, and flutes are now available in a wide variety of modern models and materials. Moreover, because changes to the flute and flute playing since the 1970s have been as profound as in any thirty-year period in the past, "it would be unwise to conclude that the flute's mechanical development for musical purposes seems essentially to have ceased" (p. 281).

Before concluding, I should like to issue a small warning about a smattering of unclear or incorrect citations that appear in Powell's otherwise excellent book. These include occasional titles and dates of sources, some personal names (for example, it is not instrument maker Christophe Delusse whose L'Art de la flûte traversiere appeared in 1761 [p.123], but flutist and composer de Lusse, whose first name does not appear in contemporary sources, but to whom Fétis referred as Charles and by which name Powell identifies him in the index), and other miscellaneous matters. Moreover, while the book's method of citation is generally well designed and allows Powell to comment on a wide variety of sources without interrupting the flow of the narrative, readers who wish to locate complete bibliographical information for sources only briefly mentioned in the endnotes must search the bibliographical essay that precedes the notes for each chapter, or even occasionally hunt through the bibliographical essay for an earlier chapter. It helps that the index (which is good overall) generally lists the principal references to au-thors' names that appear in the bibliographical essays, making it easier to find full citations. Yet, this requires still further hunting back and forth between text, notes, index, and bibliographical essays.

These are minor cavils, however. Powell's achievement is a tremendous one, and he is to be heartily congratulated and warmly thanked for doing such painstaking research and for presenting the story of the transverse flute, its players, its listeners, its makers, its teachers, its students, its scholars, and its repertoire in such a comprehensive and compelling fashion. Powell is also to be commended for more clearly showing those of us who are scholarly researchers how much work still needs to be done to fill in the gaps in our knowledge. Moreover, he has begun to correct a predominantly male-centered scholarship about the flute by giving women flute makers, players, and composers their due throughout. Above all, this book is liberating. If only all flute teachers, players, students, and admirers of the instrument were to read it, there should be a collective freeing up from the relatively narrow traditions of flute playing in which most of us have been brought up, and the wider world of the flute that would open up to them should become yet more interesting and compelling.

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Bruce Haynes. *The Eloquent Oboe: A History of the Hautboy from 1640 to 1760.* Oxford: Oxford University Press, 2001. xxix, 528 pp.: 93 black-and-white illus., 4 figs., 10 tables, 20 musical exx. ISBN: 0-19-816646-X. \$99.00 (hardcover).

In a way it is fitting that within three years of the death of Philip Bate (1909–1999), two major works should be published that expand upon his histories of the flute (first edition 1969) and the oboe (first edition 1956). For decades, these texts served as insightful introductions to their respective members of the woodwind family, being narratives that students of all ages could readily comprehend. With the recent release of Ardal Powell's *The Flute* (Yale University Press, 2002) [reviewed elsewhere in this Journal] and Bruce Haynes' *The Eloquent Oboe*, it is doubtful that afficionados will gravitate to Bate's books with the same zeal as in earlier days, but his writings—along with those of his peers Anthony Baines, Thurston Dart, Eric Halfpenny, Josef Marx, and James A. Macgillivray—will continue to be of interest to dedicated scholars of woodwind history, inspiring others in much the same way that they seem to have inspired Messrs. Powell and Haynes.

Instrument historians have long assumed that the oboe is a refined version of the shawm, but it was Bate's largely British circle of post-World War II wind enthusiasts who were the first to critically examine this assumption in depth and at length. By evaluating both historical documentation *and* historical instruments, they developed theories about the oboe's evolution based on analyses of its construction, design, and tone. As members of the newly formed Galpin Society, they published their findings in the organization's *Journal* from 1948 to about 1957, never suspecting that their contributions would heavily influence the revivification of the "baroque" oboe in the mid-1960s, nor the destiny of a young Californian by the name of Bruce Haynes.

Born in 1942, Haynes trained on the modern oboe, studying with Raymond Duste of San Francisco. He developed an interest in the early oboe after being exposed to sounds from the past as re-created by Frans Brüggen (recorder and traverso) and Gustav Leonhardt (harpsichord). Traveling to Holland in the mid-1960s, he studied with Brüggen for several years, then returned to the States to pursue an apprenticeship with Friedrich von Huene to gain a better understanding of how antique woodwinds would have been made. His work with von Huene enabled him to produce some replica instruments of his own. In 1972, Haynes accepted an appointment to teach recorder and baroque oboe at the Royal Conservatory in The Hague, where he was soon concertizing with fellow revivalists Leonhardt and Brüggen. Their influence on his development appears to have been paramount, for it is to these men that Haynes dedicates his book.

Haynes' fascination with the baroque oboe resulted in his acquiring instruments by Richters, Stanesby Sr., Jacob Denner, and Naust. His long acquaintance with these late-seventeenth/early-eighteenth century originals, coupled with his assiduousness in ferreting out oboe-related data from seemingly every relevant source available, places him in a unique position to address the inherent playing qualities of the young oboe and to reflect upon its emergence as a chamber and regimental instrument at the court of Louis XIV. Add to this his vast knowledge of instrumental design, reed-making customs, oboe-family repertoire, and historical performance practices, and we have the formula for an exhaustive study of the early oboe, which, in a single volume that exceeds 500 pages, is precisely what Haynes has given us.

The title of the book is derived from a passage in Johann Mattheson's *Das neu-eröffnete Orchestre* (Hamburg, 1713, p. 268, ¶ 8, wherein the oboe is described as *der gleichsam redende Hautbois . . . [der kommt] nach der Flute Allemande, der Menschen-Stimme wol am nähesten wenn [er] mannierlich und nach der Sing-Art tractirt [ist]* (literally "the as-it-were speaking oboe . . . which except for the German flute [is the instrument that] most resembles the human voice, if it is played in a mannerly style and in accordance with the singer's method"). Because the art of oboe playing shares much in common with the art of singing, and because the early oboe figured prominently in vocal music of the day (opera, cantatas, and oratorios), Haynes' choice of title is splendid; and he succeeds admirably at reinforcing the concept of the oboe's eloquence—its ability to speak, "convey and impart meaning"—at appropriate points within his text (e.g., in chapter 4, section I, where he compares the speaking phrase with the romantic "long-line").

Haynes' choice of the term *hautboy* to identify oboes from his prescribed period also makes for good sense, despite the book's being technically about the emergence, development, and spread of the French *hautbois.* As he points out in his introduction (p. 5), "In the Baroque period, the standard English name for the oboe was the 'Hautboy' . . . [it] seems an [especially] appropriate term for our time . . . because . . . it was a name that began to go out of fashion at about the same time the instrument began adding keys and rejecting cross-fingerings."

More important than the terminology he uses is the way in which Haynes organizes his sizeable amount of material. Drawing on data gathered from literally hundreds of sources, he has divided his text into seven chapters having to do with the hautboy's history (four chapters covering three decades each), its physical characteristics, manner of playing, and relationship with J. S. Bach. Although much of the information presented in these chapters has been drawn from previously published sources, it is collated in ways that enable the reader to benefit from being exposed to multiple authors' views on any given topic. In this sense, the book achieves the goal which Haynes presumably had in mind for it—to serve as a comprehensive, single-volume reference containing virtually everything written about the hautbois/hautboy from 1640-1760 (as well as slightly before and, at times, unexpectedly beyond). Those who have followed Haynes' work for the past three decades will recognize material from his numerous periodical articles, much of it unavoidably redundant within this equally specialized but considerably larger context. His discourse on performing practices (phrasing, tonguing. vibrato/flattement, embellishment, and dynamics) may also appear a bit reiterative, even donnish, to musicians who already have been schooled in the finer aspects of performing early music. But his discussions of the basics (posture, breathing, embouchure, tone production, and hand position) will no doubt appeal to newcomers who have yet to become immersed in the study of baroque performance practice or have yet to establish a rapport with the baroque oboe. Certainly, teachers of all early instruments would do well to review his chapter "Playing the Hautboy," as Haynes' interpretation of primary source material is pertinent to music-making in general and not to oboe playing in particular.

As to the mechanics of the text, nit-pickers might object to the abundance of footnotes at the bottom of nearly every page, which tends to give the work the feel of a dissertation. On this same subject, Haynes' use of a dual system to cite his sources—some by footnotes, others by a parenthesized reference in the text to a source in the bibliography—is initially baffling, when one method would seem to have sufficed. When a revised edition of the book is planned, Haynes may wish to abandon the system of parenthesized referencing following authors' names—e.g., on p. 440, "Lasocki (1983: 869)"—in favor of footnotes.

Because Haynes ardently desires to communicate most of what he knows about a given topic, his compositional style at times suffers from the interjection of material that is superfluous or irrelevant. These interjections interfere with the flow of the text and not infrequently detract from the very point he wishes to make. Although the book is full of useful information, Haynes' style of delivering fact after fact with little in the way of narrative structure to carry the story along can make for heavy reading. Clearly, this book is not for the faint-hearted: at times, readers must be able to absorb highly detailed information while simultaneously crossing national boundaries and processing decades worth of chronology (e.g., chap. 1, \P A.1).

A most positive feature of the book is the inclusion of primary source material in its original language, with parallel translations by Haynes. For the most part, his translations are reliable, though woodwind specialists may quibble about a word or two or find that he occasionally inserts a quoted passage in an inappropriate context. For example, in a para-graph describing "the poorer sort of *Hautboisten*," those who were freelancers, "playing for weddings, funerals, etc." (p. 160), he cites a passage from Hanß Friedrich von Fleming's Der vollkommene teutsche Soldat which he translates as "It is not good for the health of Trumpeters, Hautboisten, and suchlike to play too loudly. . . ." Not only has he trans-lated the passage a bit too liberally but also he has utilized it incorrectly to illustrate a point. Fleming is not referring to the poorer sort of musi-cian. Rather, in a passage where he remarks that a genteel young man should choose musical instruments that suit his disposition and lend themselves to the kind of profession and mode of living he envisions having, he observes that: "Trumpets, oboes, and similar [instruments] which make all too great a sound (*i.e.*, noise), [should be avoided because they] are not all too beneficial to the mind and health, [as] they exhaust the lungs, and distort the face, [causing] the cheeks and eyes to puff out; a recorder, a violin, lute, guitar, viola d'amore, viola da gamba, and others instruments of this sort are preferable and more popular." (Interested readers should also note that this passage is found on page 22 of Fleming's text and not on page 20 as indicated in Haynes' citation.) One might niggle further over some of Haynes' assertions. For example, his impression that "It is axiomatic in modern woodwind playing that instruments play in tune without embouchure corrections ..." (p. 187) is bewildering because the acoustical nature of the oboe is such that modern oboists find it necessary to make frequent embouchure adjustments in order to meet rigorous standards of intonation.

Inevitably, in a work of this magnitude, material is left out or errors filter in. Surely when the book goes into its second edition, Haynes will want to add the name of Mary Kirkpatrick to his bibliography. Not only

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has she written about the baroque oboe, but also she has measured (and executed a drawing of) Haynes' oboe by Naust! Additionally, he might wish to expand the list of works he cites by Anthony Baines, adding in particular *European and American Musical Instruments* (London, 1966), which is rich in both content and illustrations. And to Appendix 1, a listing of "Hautboy players 1600–1760," he probably should add the names of two seventeenth-century British "hoboys": Isaack Staggins (appointed 1660 "for the treble hoboy") and his son Charles Staggins (appointed 27 January 1685 as "musician in ordinary for ye tennor hoboy with fee").

All criticism aside, Bruce Haynes is to be justly commended for his skill in bringing such a multi-faceted project to fruition. His sheer industriousness calls to mind a comment attributed to Vincent van Gogh that "Great things are not done by impulse, but by a series of small things brought together." Such is the method adhered to by Haynes in preparing his book. Given its depth and comprehensiveness, *The Eloquent Oboe* should serve as the definitive text on the hautboy's history for some decades to come.

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Annette Otterstedt. *The Viol: History of an Instrument.* Translated by Hans Reiners. Kassel: Bärenreiter-Verlag, 2002. 294 pp.: 7 color plates, 35 black-and-white illus., 28 musical exx. ISBN 3-7618-1151-9. 34.90€ (hardcover).

Setting out to write the history of an instrument is surely a labor of love. Annette Otterstedt, a professional viola da gambist, has used her years of experience and the knowledge gained from scrutinizing hundreds of original sources to write an informative, and equally provocative, history of the viol. In this revised, English edition of the author's original study, *Die Gambe: Kulturgeschichte und praktischer Ratgeber* (Kassel: Bärenreiter-Verlag, 1994), Otterstedt reaches out to both amateur and professional performers and instrument makers, as well as organologists. In addition to a new essay on the reception of the viol in the twentieth century and fresh insights into specific performance practices, Otterstedt has expanded her essays pertaining to original viol construction and the art of purchasing an instrument and bow. While musicologists looking for scrupulous documentation of sources or an extensive list of secondary literature and critical editions of the music may be disappointed with some elements of Otterstedt's method and organization, this book provides useful discussion of a number of difficult questions and is clearly a welcome addition to the present-day body of literature on the viola da gamba.

The Viol: History of an Instrument is staged as a play, complete with a prelude ("Daughter of Orient and Occident") and conclusion ("Beauty in Eclipsa"), and is divided into three main acts: "The Life and Opinions of a Princess," "Meeting the Family," and "Maintaining a Princess in Style." Each section consists of short essays: the first section focuses on specific regions, periods, and composers; the second on instrument types, specific repertoires, elements of performance practice, and details of construction; the third serves as a practical guide for the performer and viol owner, covering topics such as varnish, soundpost setting, strings, and the bow. The essay format makes the study very approachable. Yet, while it may seem advantageous to non-specialists to separate topics relating to cultural milieu from more technical discussions of organology, there are instances where the instrument's history and repertoire become scattered, where information from the first two "acts" could have been combined to render a more comprehensive presentation. For example, in the "Viol in France, 1550–1630" (pp. 28–31), Otterstedt presents an iconographic example and briefly mentions the consort repertoire, but then does not provide any specific musical examples and avoids a more detailed account of French instruments until the second part of her study (pp. 161-165). Similarly, the author mentions the demise of the treble viol in her essay on England after 1630, "Years of no Grace in the Country" (pp. 48-51); at this point, however, we haven't yet encountered the smaller instrument in Otterstedt's study, and the treble's place in English consort music is not well established until an essay in the second section, "Sweet, but too Weak: The Treble Viol" (pp. 143–145). One wishes the author had found a way to combine such discussions in adjacent essays, so that the viol-in all its details of construction and repertoire-would be seen as emerging from the cultural milieu.

In some places, Otterstedt could have made her study more practical for the reader who wishes to learn more about the various repertoires for the viol. For example, the author's discussion of viol consorts, in "The Respublica of Consort" (pp. 114–129), is confusing. Instead of presenting a synthesis of the tunings and sizes of viols that would have ap-

peared in consort, specific to different regions, based on treatises, tutors, iconography, and the music itself, Otterstedt approaches consort playing in general terms only. Separated into sections entitled "The 16th century," "The 17th century," "Instrumentation," "The Instruments," "The Role of the Organ for the Viol Consort," and "The Music," the discussion is of little value to performer or scholar. To understand the regional differences in consort playing in specific European contexts, the reader must piece together information from various other essays throughout the book. Likewise, Otterstedt's chapter on ornamentation in "The Salt and Mustard of Music" (pp. 192-204) could have been more effective had the author presented it in the context of a particular repertoire, in a specific region or culture, during a given period. How one should ornament in consort playing, precisely what type of figure is appropriate or even expected, how one might add dynamics to shape a musical linethese are all valuable questions that the author raises. But the essay leaves the reader with quite a bit of sorting out to do if the techniques are to be implemented in actual performances.

On a more technical note: the use of endnotes, rather than footnotes, is inconvenient, the more so since Otterstedt supplies only the author's last name and a page number reference, so one must refer to the bibliography to complete the citation. While the addition of an index, along with a list of illustrations, is an improvement over the German version, the new index remains incomplete, as it features important persons but not places or things.

The author tackles a number of difficult questions surrounding the history of the viol, knowing full well that her findings may not be the "only" answers and that, in seeking to fit together some of "the incongruent bits and pieces before us" (p. 16) the task will not be an easy one. Not surprisingly, there are several occasions where the author is forced to simplify a complicated issue, for example, in her discussion of the origins of the viol (pp. 20–23), the migration of viol-playing Jewish Spaniards to Italy (pp. 39–42), and the music of central Europe in the second half of the seventeenth century (pp. 64–72). It would have been helpful in these cases if she had referred readers to additional secondary literature and critical editions by Ian Woodfield, Peter Holman and Roger Prior, and Eva Linfield and Charles Brewer, respectively. Otterstedt's desire to work primarily with original sources is commendable, but she could have made a greater effort to call the reader's attention to such useful secondary sources.

Perhaps the most controversial area in viol research today surrounds the music for viola bastarda and lyra viol. In the past, organologists have asked whether these terms represent special types of viols, or if they refer to specific repertoires for the bass viol. Otterstedt addresses this issue in part two of her study in the essay, "No Less Swift than the Violin itself: The Bass Viol" (pp. 130–137). After examining the writings of Rognoni and Praetorius, Otterstedt argues that a smaller type of bass viol would be appropriate for playing music composed for viola bastarda. But this conclusion is questionable for a number of reasons. Otterstedt overlooks the fact that Praetorius's description of the instrument, as a slightlylarger "Tenor Viol de Gamba" (Syntagma musicum II, Chapter XXI, p. 47), actually calls for an instrument larger-not smaller-than what we today consider a typical bass viol tuned in D. Otterstedt also misreads Praetorius's Plate XX in *Syntagma musicum II*, labeling the instruments as "bass viol, tenor viol, and treble viol" (Illustration II, 1, p. 117), when in fact Praetorius's caption states only "1.2.3. Violn de Gamba." Moreover, she takes too literally Praetorius's five tuning suggestions for "Viol Bastarda" (Syntagma musicum II, Table XXI, p. 26), which include fourths and fifths, as well as thirds, and she fails to point out that these peculiar tunings are English lyra viol tunings and that Praetorius has conflated tunings for two solo repertoires under the single rubric "Viol Bastarda."1

The origins of the English lyra viol, according to Otterstedt, "are much less cut and dried" (p. 134). Again relying too heavily on Praetorius, Otterstedt calls attention to the sympathetic strings which she claims were a prominent feature of the instrument in its early development. Without citing any English sources that mention this innovation, however, Otterstedt does not build a convincing argument. In fact, English sources show that the lyra viol is essentially a bass viol or smaller variation thereof, and that what gives it a specific identity is its chordal style of playing and diversity of tunings. Otterstedt's treatment of this instrument would have been better had she gone into more depth on the various tunings and the specific repertoire, including reproductions of

1. For a more complete discussion of the viola bastarda, see Jason Paras, *The Music for Viola Bastarda* (ed. George Houle and Glenna Houle; Bloomington: Indiana University Press, 1986), a valuable secondary source which Otterstedt does not include in her bibliography. See also Joëlle Morton, "The Early History and Use of the G Violone," *Journal of the Viola da Gamba Society of America* 36 (1999): 40–66. Morton suggests that a larger bass viola da gamba tuned in GG, i.e., Praetorius's "Klein Baß-Viol de Gamba," would be the most suitable instrument for performing viola bastarda works which require notes below the D of a modern bass viol.

the tablature, rather than calling attention to the brief experiment with sympathetic strings. $^{\rm 2}$

These criticisms aside, there are a number of excellent moments in Otterstedt's book. The author ventures into the world of feminist scholarship with "An Unseemly Instrument: Viol Playing Women" (pp. 84–89), in which she combines her own experience with observations from original sources. The essay is earnest and particularly well researched, as the author draws conclusions from contemporary writings by Baldassare Castiglione, Roger North, Thomas Mace, André Maugars, and Johann Mattheson, as well as from dedications of compositions by Vicenzo Bonizzi, William Corkine, and Tobias Hume.

In addition, the author (aided by her translator) does an excellent job of explaining the complexities of musical temperament. In "The Well-Tempered Viol" (pp. 184–191), she first describes the various tuning systems in the sixteenth and seventeenth century, and then asks "What has this got to do with us?" After examining the various types of keyboard temperaments, she goes on to advocate tuning viols in equal temperament, strongly suggesting that we make an effort to stop "relapsing into mental patterns today which did not emerge until the 18th century: the uncompromising acknowledgment of keyboard domination" (p. 191). She comments that although some may find "it is dreary as a motorway . . . on the fretted instruments this dreariness is amenable to enlivenment by the left hand, which can pull up or push down the strings. It is well-documented that such corrections were expected of the players, and thus the system which looks so regular on the fingerboard turns out to be quite flexible" (p. 191). Here Otterstedt is at her best, combining her experience as a performer with a close reading of original tutors to make a convincing argument.

Otterstedt's practical advice in "Aspects of Playing Technique" (pp. 204–221) is a godsend for the performer. She compares different methods of holding the instrument, positioning of the feet, left-hand technique, whether to use open or stopped strings, changing positions,

2. Otterstedt overlooks the sole English author who mentions sympathetic strings on a lyra viol: John Playford, in *Musick's Recreation on the Viol, Lyra-Way* (1661), in which he states that using sympathetic strings on the viol was the short-lived experiment of Daniel Farrant. For a more thorough discussion, see Peter Holman, "An Addiction of Wyer Stringes beside the Ordenary Stringes': The Origin of the Baryton," in *Companion to Contemporary Musical Thought* (ed. John Paynter [et al.]; New York: Routledge, 1992), 1098–1115. bowing, types of articulation, and slurs, basing her observations on comments from original tutors. However, in the absence of specific English or Italian sources, she tends to exaggerate late Baroque French aesthetics, applying concepts such as *inégalité* to non-French repertoires. Thus, it behooves the reader to take careful note of Otterstedt's citations and to remember that not all techniques apply to all styles of music.

In the third "act," Otterstedt's discussion of the bow is especially enlightening (pp. 251–258). The author advocates a return to a clip-in or fixed-type frog rather than the screw-type so prevalent today. After pointing out that "a screw mechanism for moving the frog was invented some time after 1720, but was not generally accepted until late in the 18th century, so that all editions of Leopold Mozart's tutor *Gründliche Violinschule*, for instance, show exclusively fixed-frog bows" (p. 254), Otterstedt then poses a challenge to viol players, one that is in fact applicable to all string instrument performers of early music today: "Why do viol players fight tooth and nail to keep their bows with the screw . . . ? The iconography is unequivocal in denying movable frogs. It shows that the invention, which seems so practical to us nowadays, did not succeed in making its presence felt for a long time. . . . This in itself ought to be enough to convince us" (p. 255).

One of the stronger essays in *The Viol* is Otterstedt's new and improved discussion of viol construction (pp. 151–170). The author takes seriously the findings of Karel Moens, who has suggested that "there is not a single Renaissance viol preserved in a state sufficient to permit any conclusions about their [sic] original shape or manner of construction" (p. 154). One by one, Otterstedt examines early extant viols through Moens's scrutinizing method, which utilizes ultraviolet and infrared light and takes into account dendrochronological evidence. The author strikes a perfect balance between technical detail and accessibility in this chapter: the viol enthusiast will find the descriptions interesting, and the organologist will be pleased with the range of extant instruments she examines.

Otterstedt never fails to challenge her audience to think critically and to question what has been taught in the past. She makes clear early in the book that one of her aims is "to disseminate doubt, not for the sake of dissension, but for kindling discrimination and enhancing knowledge" (p. 16). A true humanist at heart, she argues passionately that a return to original sources will be the antidote to what she sees as our present state of cultural stagnation. In her conclusion, "Beauty in Eclipsa" (pp. 259–262), she laments, "Today the viol is in a desperate situation, for it is not itself. Its musical condition is that of a derivative of the violoncello. . . . With depressing predictability player after player . . . keeps aspiring back to a totally un-viol-like sound of robust clarity with no accidental noise components, which is really that of the modern violin family. . . . Played with historical means, including flat bridges and an even tension of all the strings, the viols sounds completely different" (p. 259). Otterstedt is surely right in this respect, and her level of commitment is unquestionable.

Otterstedt's quest for knowledge and her ability to communicate are commendable. Despite some of the book's shortcomings, her efforts should serve as an inspiration for gambists. Thanks to Hans Reiners's serviceable translation, those who seek to present a more meaningful and authentic performance of a vast body of solo and consort literature, as well as the more general reader who pursues a better understanding of the viola da gamba's place in history, have a new and worthwhile source to consult.

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Michael Fleming. *Viol-Making in England c. 1580–1660 (VME CD-ROM).* Ph.D. dissertation, Open University, Milton Keynes, U.K., 2001. Published in two volumes on one compact disk by the author (13 Upland Park Road, Oxford OX2 7RU, U.K.; e-mail: viols@flemingoxford.co. uk), 2002. 245, 261 pp.: 108 color illus., charts. £15.00 (includes postage in the U.K.).

In examining the art of the past, which in many cases comes down to us with little documentation of its creators' methods or intentions beyond what can be gleaned from the objects themselves, it can be tempting to generalize theories about artistic intention. If we find the golden section in a musical instrument, does that mean the maker consciously used it? Old English viols have enjoyed an excellent reputation—they are favorite models or inspirations for modern makers of the instrument—yet the limited numbers that survive and the difficulties encountered in trying to establish their original condition and appearance make it very hard to make scientific generalizations about them. Theories may abound, but proof is difficult to provide. Michael Fleming, in his *Viol-Making in England c. 1580–1660*, assiduously avoids the temptation to

theorize far beyond what might be safely inferred from the surviving instruments and other documentation.

Fleming sets himself the goal of studying every possible trace of surviving evidence that documents the construction of viols in England between 1580 and 1660, from the instruments themselves, to public records regarding the lives of viol makers, to guild rules of related trades. His work is divided into two "volumes," presented as separate files on a single CD-ROM. The first is divided into five chapters on the form of the viol, extant viols, iconography, viol making, and the makers themselves. The second volume provides over one hundred pages of tables and appendices in addition to the illustrations. Fleming is thorough in his investigation, and in the process has created a wonderful trove of information which is unlikely to be surpassed soon as a reference for English viol making of this period. His medium of publication (which I will discuss later), the CD-ROM, has made it possible for him to include a vast number of high resolution images and copious appendices, while maintaining a modest cost to the reader.

For me, Fleming's most surprising finding is that viol makers in England in this period did not form a coherent group, and that many of them were probably not specialists in the way we might expect. There were no guilds for instrument makers in England at this time, nor was instrument making seen as a full-time specialty. This is in distinct contrast to violin making in Italy or, say, harpsichord making in Flanders.¹ Many, but not all, viols made in England at this time were built by joiners or other tradesmen who had basic woodworking skills but not necessarily extensive knowledge of or experience with musical instruments. There were no schools or associations of makers. It would have been possible for a noble or other wealthy amateur to commission a viol or chest of viols from a local cabinetmaker who may or may not have had prior experience making an instrument.

Fleming doubts whether English viol makers of this time would have relied on specific geometric principles of design for their instruments. He states that the "main branches of mathematics that might be of use to a viol maker are geometry and arithmetic, but neither of these were

1. See Grant O'Brien, *Ruckers: A Harpsichord and Virginal Building Tradition* (Cambridge: Cambridge University Press, 1990), 13–15, on harpsichord makers in the Guild of St. Luke in Antwerp. It is interesting to compare O'Brien's book with Fleming's work, since each author has focused narrowly on different aspects of instrument making at roughly the same time in history.

routine accomplishments for artificers any more than they were for their most elevated clients" (p. 155). To my mind, this view seems too closely tied to the modern concept of formal education, where mathematics is viewed as difficult, and few people learn or practice advanced artisanal skills. How can we actually be so sure that makers did not know how to draw or appreciate geometric constructions with a compass and a straight edge, just as medieval masons and joiners could? These geometric techniques, now learned as a part of formal education but forgotten by most adults because they have no reason to practice them, could have been passed along informally in the same way that children were taught to use other tools of their trades.² Even if makers did not consciously use mathematics to design their instruments, would this fact rule out the possibility that there might, for reasons not yet understood, be underlying points of mathematical similarity between instruments which would merit study?

Fleming has fascinating points to make on the measurement of instruments. He develops and explains his own Viol Data Protocol (VDP) for taking and recording data from instruments, which would be a good model for others to follow. One aspect of this protocol is that to make meaningful comparisons of measurements of different instruments, the measurements must all be taken by the same person. In his chapter 2 and Appendix 3a he shows that, even if great care is taken, when different people measure the same instrument they get different numbers. His discussion of why the current measurements of an old instrument cannot accurately reproduce the original dimensions of the instrument is enlightening. Any wooden object that is three to four hundred years old will have changed due to shrinkage (which is greater perpendicular to the grain than parallel to it), but it is impossible to know how much an individual instrument has altered. Moreover, even in the short term. dimensions fluctuate measurably with changes in temperature and humidity. Fleming takes particular issue (on pp. 23-24, and passim) with

2. Fleming (p. 155, note 740) cites Lon R. Shelby, "The Geometrical Knowledge of Mediaeval Master Masons," *Speculum* 47/3 (July 1972): 395–421, as evidence of how little formal education masons had, but then disregards Shelby's explanation of how they "would normally have acquired their geometrical knowledge in the same way that they acquired the rest of their knowledge and skill in building—by mastering the traditions of their craft" (p. 398). I was able to download Shelby's entire article, including illustrations, on a publicly accessible website, which proved convenient, since this journal is not necessarily available in a music library.

Kevin Coates, *Geometry, Proportion and the Art of Lutherie* (Oxford: Clarendon Press, 1985), bringing up very good points about some of the flawed logic in Coates's arguments. For example, he shows that Coates gives a false impression of symmetry in old instruments by using one side of the outline to generate the other rather than making a tracing all the way around the instrument. Further, Coates has a habit of rounding measurements in the most convenient way to give the impression of simple ratios between parts of an instrument.

The actual number of extant English viols built between 1580 and 1660 is very small—Fleming provides photographs and documentation on thirty-eight instruments here—so it is not surprising, but it is impressive, how much material he has been able to gather from sources other than the instruments themselves. Fleming seems to have left no stone unturned in searching out iconographical sources in all sorts of media, and he discusses them both in terms of what we can learn from contemporaneous depictions of viols and how imagery available to the makers might have influenced their work. Unfortunately, of the 108 items that appear in the list of illustrations, twenty-seven could not be included in the CD-ROM publication because of difficulties in obtaining reproduction rights (although these images were included in the complete copy of this work that was submitted as a dissertation). Enough information is provided so that a determined reader could track down the missing illustrations, though some of them might take time to find. In the final chapter of volume 1, Fleming has gone to great lengths to piece together and analyze the scarce, disparate bits of information about the obscure men who made viols in England.

Because of the newness of the technology and its unfamiliarity to many readers as a publication medium for scholarly work, I want to discuss the presentation on CD-ROM. The two volumes are presented as separate PDF (portable document format) files, viewable with the Adobe Acrobat Reader, software for which is also included on the CD-ROM in both IBM-PC and Macintosh versions. The author includes a brief, helpful "read me" file with instructions for those unfamiliar with this technology. Additionally, he provides various partial versions of each PDF file to make browsing easier on computers with limited memory. I found this helpful in making it more convenient to move between the bibliography, which is at the end of the long (60 megabyte), and therefore sluggish, second volume, and the main text in the first volume. These files are formatted as typical European-format A4 pages (i.e., slightly longer and narrower than American letter-size), which maintain the pagination of the original, complete thesis. It must also be pointed out that there is some discrepancy between the page numbers seen on the pages and those assigned for reference purposes by the Acrobat Reader, especially when viewing volume 2. It is possible to print any page or pages of the thesis to whatever printer the reader has available, though printing from the images is very slow due to their all being part of one very large file.

This method of publication has many advantages and holds much promise, yet some opportunities were missed. In book form the cost of this work, with its many illustrations, would have been prohibitively high. The photographs of instruments are not all uniformly lit and some have distracting items of furniture in the background, but as presented on CD-ROM the resolution is excellent, allowing one to zoom in and see more detail than would be possible if they were printed on paper. Further, the well-labelled "bookmarks" and the "find" feature of the Acrobat Reader make it very easy to move to different sections or search the text for a word or phrase. This becomes a particular advantage when one considers that most printed dissertations do not even have an index. On the other hand, Fleming did not take advantage of digital features such as Hypertext links, which would allow easy navigation between different pages dealing with the same maker or same instrument. This could have been especially helpful as a means of linking photographs of the instruments with descriptions of them and their makers. As it stands, the pictures of the instruments are labelled only with Fleming's own "VME" numbers, so it can be cumbersome to link a picture with a description, or even to know who is thought to be the maker of a given instrument while viewing its picture. It would also be helpful if footnotes were hyperlinked to the main text. On my computer, with only a fifteeninch monitor, it is not possible to view an entire page at once at full size, so that to read footnotes at the bottom of the page for text on the upper half of the page it is necessary to scroll back and forth between the two, which makes it hard to keep one's place.

Overall, Fleming's dissertation makes a very valuable contribution to the literature on the viol. It is well written and is chock full of information. I recommend it highly.

> John Moran Peabody Conservatory

Howard Schott, editor. *The Historical Harpsichord, volume 4* [containing two essays: Sheridan Germann, "Harpsichord Decoration—A Conspectus" and Richard Rephann, "A Fable Deconstructed: The 1770 Taskin at Yale"]. Hillsdale, NY: Pendragon Press, 2002. 241 pp.: 270 black-and-white photos. ISBN: 0-945193-75-0. \$54.00 (hardcover).

As has happened before in this series, the book contains more than one essay. Here we have two of very unequal length, namely 213 and 27 pages respectively; nevertheless, the second essay can partly be seen as an exemplar of one of the main topics of the first, and so can justify the editor's decision to pair them.

Sheridan Germann has established herself as a skilled practitioner of, and authority on, harpsichord soundboard painting. Ever since her articles in this Journal 4 (1978) and *Early Music* (7/4 [October 1979], 8/4 [October 1980], and 9/2 [April 1981]) there has been the hope that her findings would be put into book format, and now, several years after the Pendragon Press preliminary announcement, this has finally been done.

In her introduction, the author summarizes the various elements that constitute the complete aesthetic appearance of a musical instrument, and the reader becomes aware that the essay is going to embrace many more topics than might have been initially anticipated. The use of marquetry, intarsia, veneering, printed papers, and sculptural features, both integral and applied, are considered, in addition to the various types of painting that these objects have been subjected to over the years. The design of stands and of music desks (and even the lack of the latter) are also discussed. The decision to divide the subject contents into five main sections, based on the geographic origin of the instruments concerned, is alluded to by the editor in his introduction. Features discussed are therefore under the headings of Italian (including Iberian), Flemish (including Dutch), French, German (including Austrian and Scandinavian), and English (including Irish and North American). This may be considered all rather arbitrary, but it keeps the topic within bounds, though it is amusing to read that Dr. John Henry van der Meer commented in a private communication to the author that "God did not invent the harpsichord five times."

This reviewer must immediately confess to disappointment that all the illustrations are in black and white, with a fair proportion of them less than perfect in quality for their chosen role of illuminating the text. The illustrations are not individually numbered, so that where there are sev-

eral stretching across two facing pages (as quite often happens), tracing the reference is not an altogether user-friendly process. In addition, because of the need for the illustrations to be printed on glossy paper, they are all collected together in the latter part of the essay.

Embarking on the first section of main text (Italy), this reviewer soon realized that, although it read as a thoughtful continuous essay by an author skilled in the use of art-history terminology, there was no reference at all to the illustrations at the back. Noticing that the illustrations themselves had quite sizeable captions, he then decided to soak himself in that latter section instead. This method worked better; so the book was then read in alternating sections (i.e., Italy captions and pictures, Italy text, Flanders captions and pictures, Flanders text, etc.). A snag with the method, though, was that occasional *recherché* art terms were met with before they were discussed in more detail in the main text. Certainly, a detailed glossary of both art and harpsichord terminology could most usefully have been appended, for one would hope that the book will interest a much wider readership than museum specialists. Quite often the photo captions duplicated what was said in the main section, so that more and more the reviewer wished that the illustrations had been integrated into one text only, the whole printed on paper suitable for both text and photographs.

Of course, illustrations in color would have added to the expense; nevertheless it is impossible to avoid frustration when reading seductive descriptions of painting color schemes, particularly those in eighteenthcentury France, while having only black-and-white pictures to look at: one is almost back to publishing as it was fifty years ago. The reviewer seems to remember that the cost of Claude Mercier-Ythier's sumptuous *Les Clavecins* (Paris: Expodif Editions, 1996)—a much larger book including some fine color illustrations of soundboard and lid paintings was only about half again the price of the present one. But obtaining first-rate color photos from reluctant museum curators is not the easiest of tasks, and no doubt the author had to use what she was offered, or what she already had. Nevertheless, let us be grateful that her important work is now in book form.

One of the subjects discussed by Ms. Germann is that of identifying later alterations to instruments (especially those subjected to *ravalement*) and even of deciding which instruments are "fakes," by using clues from various artistic disciplines, including knowledge of changing styles of painting. This same topic of deception is at the heart of the first part of Richard Rephann's essay, where his detailed study of the putative history of the elaborately-decorated 1770 Taskin harpsichord at Yale becomes almost a detective story. He examines in detail the lid's decoration in his attempt to demonstrate the false association of the instrument with Voltaire's mistress, Mme. du Châtelet, in the 1730s. (It is rather strange that Ms. Germann herself did not mention the Yale instrument in her essay, and it would surely have been useful to have had her opinion on the lid paintings.) He also shows that the depiction of Mme. du Châtelet's residence on the inner side of the lid flap is almost certainly based on a nineteenth-century lithograph, and appends an undated later photograph of the building, which shows definite structural differences. An authentic early eighteenth-century representation would, of course, have helped his proof much more, if it could have been found.

The second part of Mr. Rephann's essay considers the unusually wide register gap in this instrument, and is devoted to a discussion of the number and disposition of the registers. Here a strong case is made that the two 8' registers originally would have had each jack fitted with two plectra facing in opposite directions, one quill and the other *peau de buffle*.

This reviewer admits to having found the writing occasionally difficult to follow. Consider the following statement:

The Yale Taskin is a two-manual harpsichord with three choirs of strings: 2x8', 1x4'. The lower manual controls a down-looking 8' and a down-looking 4'; the upper manual controls an up-looking 8'. The handstops on the 1770 Taskin have up-turned-spatulate ends. The 8' on the lower manual and the 8' on the upper are controlled by a pair of handstops with up- and down-pointing upturned-spatulate ends. (p. 218)

This is an extreme case of verbal infelicity, admittedly, but it illustrates how a reader can be confused, and perhaps even misled.

When the author is referring to photographs of the instrument, again, as in the first essay, one cannot make out clearly what is being described due to rather poor reproductions (this time printed on the same paper as that used for the text). Yale's own catalog of its exhibition of musical instruments in 1960 even contains a clearer general photo than the one provided here, and has in addition two other photos (of the barring and the decorated soundboard) which could have been useful. It is a pity that those negatives were not, or could not be, used again. In addition, we learn that in an investigation in 1957 (as part of a so-called "restoration"), the extremities of the central panel of the top of the lid were ex-

posed, showing that it was indeed part of an earlier painting. However, it is not made clear how the lid was left after the later 1974 restoration. A recent photograph would have helped.

Yet another way in which it is difficult to chart one's way through the logic of the text is by constantly being referred to substantial footnotes, which need to be read fully if the argument is to be completely understood. Footnotes are here often as important as the main text. Two instances will suffice. Footnote 27 contains the only reference to plate 9, and it is only there that one can deduce how the quilling was left after its 1974 restoration—namely, with wide jacks with *single* plectra. Rather strangely, footnote 31 solves completely an uncertainty expressed in the text. Attributions and citations apart, it would have been worthwhile for all the other footnotes to have been subsumed into the main text.

One is also slowed down by an unfortunate mix-up in the labeling of the plates and figures. Three captions should be moved: that on page 230 to page 226, that on page 233 to page 230, and that on page 236 to page 233.

Nevertheless, many interesting and important structural features are discussed in detail. For instance, in this instrument, Taskin cut vertical slots into the 4' jacks (and possibly into the missing original 8' jacks also), the length dependent on their position in the compass, so that the bass jacks were made slightly heavier than those in the treble. It was also particularly useful that the Russell Collection's 1769 Taskin was so close in date to the instrument under discussion that it was able to be used for detailed comparison. This really becomes one of the most important parts of the essay.

Kenneth Mobbs Mobbs Keyboard Collection Bristol, U.K.

Jeremy Montagu. *Reed Instruments: The Montagu Collection, An Annotated Catalogue.* Lanham, MD, and London: Scarecrow Press, 2001. xx, 183 pp.: 8 black-and-white drawings. ISBN: 0-8108-3938-5. \$60.00 (hardcover).

This volume is the first issued in a proposed series of catalogs of Jeremy Montagu's collection of almost 2500 musical instruments. It will take its place as Volume IV, Part 2, when the series, arranged according to the order established by Curt Sachs and Eric Hornbostel, is completed. According to the author these volumes will not be long in coming, as they are based on his already completed ledger catalog, which was begun in preparation for an exhibition that he mounted at Sheffield in 1967.

Montagu's collection dates from the early 1960s, when he began to expand his small accumulation of percussion instruments to include instruments of all types from around the world, with the aim of acquiring material suitable for illustrating lectures and for organological research. His eclecticism is evidenced by his description of himself as an ethnoorganologist, which he defines as someone with a global view, an interest in how instruments work, and an interest in their intercultural relationships. Perhaps an even more apt personification is that of a musical magpie, which he called himself in a 1997 lecture: "A musical magpie," he said, "is someone who eschews shiny objects for those that make noise." This is certainly manifested in his collection, for many of the objects described and cataloged in this gathering of "reed instruments" challenge one's understanding of the term "musical instrument" as much as it challenged the author to find a niche for such objects within the confines of the Sachs-Hornbostel Systematik. Consider, for example, item V 138a, which is classified in section 412.14 under the rubric "Ribbon Reeds. Bark Reeds, etc." This is described as:

Fox Call, Burnham Bros., Marble Falls, Texas. Close range model. A rubber band between two pieces of mottled brown plastic; the band subsequently perished and has been replaced, courtesy of H. M. Royal Mail; the bands which they use to bundle letters are exactly the right size. In its original box with a descriptive leaflet of how successful the Burnham family are at catching coyotes, racoons, and foxes with such calls. Also an instruction leaflet and price list of other calls and instruction recordings. OL 88, OW 15, th 9, centre of gap 3 (the same on both sides, unlike III 114a). Bought at Harry's Sport Shop, Grinnell, Iowa. Two were bought and one was given to Laurence Picken... (pp. 157–158)

Each entry in the catalog includes the name of the instrument in English, its place of origin, and, where appropriate, a non-English or ethnic name. These are followed by a physical description of the instrument, its provenance, some basic measurements (which usually include the length, diameter, fingerhole sizes, and other points appropriate to the specimen being discussed), and a negative and/or slide number, if

^{1.} The sixth John Blacking Memorial lecture, "The Magpie in Ethnomusicology," given by Montagu (as President Emeritus of the European Seminar in Ethnomusicology) at the thirteenth ESEM conference (1997) at Jyväskylä, Finland. The complete text is available at *http://perso.wanadoo.fr/esem/6thJBML.HTM.*

the item has been photographed. The order of these items fluctuates throughout, probably due to the serial nature of the original ledger catalogs, where the items were listed as they came to hand, and because the author emphasizes those aspects about which he has greater knowledge and interest. There is no documentation in the catalog, hence no page numbers for the works of authors cited in the text, though their books can be found in the bibliography.

Although many of the instruments may not be of interest to everyone, on almost any page can be found a description, commentary, or incidental essay that will engage the reader. Some of the instrumental commentaries are very matter-of-fact, describing, for example, the construction of a Thai tenor shawm bell: "The bell is made in three parts, soldered together quite roughly with soft solder . . ." (p. 32–33), while others are quite colorful. Often the two will be mixed in the same entry, as is the case with this tenor shawm, which begins:

Dark-stained wood, which appears to have been worm-eaten before it was turned and varnished . . . the bottom of the body lapped with string to hold it in the bell. This arrangement derives from the Burmese *hnè*; whether the *hnè* originally had its bell fairly firmly attached in this way, or whether the Thai are a tidier-minded people who prefer not to have the bell flopping as loosely as the Burmese, is perhaps a matter for further research. (pp. 32–33)

Each section is prefaced with an essay that offers commentary of a general nature on the group of instruments at hand (e.g., the definition and description of forked shawms on page 16), or takes Sachs and Hornbostel to task for the imperfection or illogicality of their taxonomy. Such is the case in his introduction to aerophones, where Montagu rails successively at Sachs and Hornbostel and at his French colleagues in CIM-CIM for their redevelopment of the *Systematik*, "which had all the faults of the Hornbostel & Sachs, plus a great many new ones of its own" (p. 3). Sharing insights and knowledge gained during forty years of building a collection, Montagu gives us a first-hand view of the difficulties encountered in applying such an imperfect system.

At other times—and there are many of these—Montagu conveys, often with infectious if droll humor, the great love he has for his instruments. At the end of his description of item V 150a/b, "The Wonderful Double Throat or Swiss Warbler Bird Call," he writes:

A packet of four (a) were bought in a shop in Oscaloosa, Iowa, for 15 cents and four more (b) in a pink and transparent plastic box were bought from a

slot machine in a gentlemen's lavatory at a Howard Johnson restaurant on the Pennsylvania Turnpike (eastbound) for 25 cents. Two of (a) were given to Laurence Picken.... (pp. 158–159)

He comments elsewhere that he and Picken often purchased cheap instruments as gifts for one another when they were traveling. Picken's acquisitions are cited in Montagu's text with their CUMAE (Cambridge University Museum of Archaeology and Ethnography) collection number.

The catalog is more useful for the insights of its author as to how the items function or are constructed than for the quality of the instruments described. Montagu's treatment of the instruments is very evenhanded, whether he is describing a Triébert oboe, one of his sixty-eight shawms, a device made to demonstrate the principle behind an instrument, or an instrument retrieved from someone's dustbin. His wide-ranging interests have resulted in his cataloging all sorts of devices, and this too will be useful to someone confronted with an unknown thingamajig. Among the more exotic items, I noted some salvaged from his granddaughter's birthday party, and the final entry (item XII 100), consisting of a plastic binder strip, which Montagu identified as a retreating reed instrument² and dubbed the Eliphone—its musical capabilities having been discovered by Eliezer Treuherz, his two-and-a-half-year-old grandson.

Finally, the misspelling of Catalogue as "Catlogue" on the cover in no way blemishes the content of the book. I mention it here only that the Gentle Reader not find me remiss in the oversight.

> Cecil Adkins Denton, Texas

Brigitte Bachmann-Geiser. *Europäische Musikinstrumente im Bernischen Historischen Museum: Die Sammlung als Spiegel bernischer Musikkultur.* Schriften des Bernischen Historischen Museums, 3. Bern: Verlag Bernisches Historisches Museum, 2001. 308 pp.: 5 color plates, 50 black-and-white plates, 325 black-and-white photos, 4 line drawings. ISBN: 3-9521573-5-X. 53.00€ (hardcover).

This is a splendid volume. An illustrated catalog of the musical instrument collection at the Historical Museum in Bern, this book has features

^{2.} Montagu defines the retreating reed as a flexible medium with longitudinal slits that dilate and contract when blown, producing the sound as the air stream exits the instrument rather than as it enters.

that make it a model for future undertakings of this sort. First and foremost are the illustrations, all of them reproductions of highest quality. The instruments are shown here with utmost clarity, many of them from multiple perspectives, with details such as makers' identifications and other markings given in close-up. Secondly, the book is superbly organized throughout in "user-friendly" ways-from the table of contents, in which each instrument is listed individually, to the glossary at the end. Especially noteworthy in terms of reader convenience is the fact that one can find instruments within their organological categories by glancing at the right-hand edge of the book, where these are indicated, dictionarylike, in horizontal bands that result from labels in gray shadings on the right-hand margin of each page. Cataloging the instruments, furthermore, is done in three separate listings, each helpful: (1) a table of instrument classifications and their numbers in the Sachs/Hornbostel system, into which the Bern instruments are placed in context (pp. 14-15); (2) a table of the instruments by catalog numbers, with details such as acquisition numbers, an instrument's alternative local nomenclature, its maker, its provenance, and its date of manufacture (pp. 17-21); and (3) the illustrated instrumentarium that constitutes the bulk of the book.

A third feature of this catalog that makes it a model for emulation is its approach to musical instruments as material culture—as items made for use in specific contexts. Thus, iconographical evidence animates consideration of the instruments: pictorial information from sculptures, porcelain statuettes, book illustrations, decorative wedding plaques, etc., and, in the nineteenth and twentieth centuries, from lithographs and photographs of actual persons engaged in playing instruments. A caveat, however: Iconographical evidence can be problematic as well as helpful, for two viewers of the same item may interpret it differently. For example, Bachman-Geiser's caption to plate 24 (p. 139), a drawing of the Collegium Musicum of Thun in 1737, identifies the wind instrument on the table as a clarinet, whereas I see it as an "unclear conical wind" that is more likely an oboe. The same is true of plate 33 (p. 169). Where Bachman-Geiser identifies the pictured dance ensemble as a trio of clarinet, transverse flute, and "basset" (a bass bowed instrument), I see her "clarinet" as undoubtedly an oboe. Regarding plate 25 (p. 141), Bachman-Geiser takes into account music making in only one section of this bipartite picture. She identifies the dance ensemble in the scene at the top (cittern, violin, and "bassett") but fails to point out the presence of one of the instruments (the cittern) in the scene below, a group of men dining and drinking around a table. Surely the same meticulous care that goes into assessing and documenting the instruments themselves needs to be applied to iconographical evidence.

The illustrated instrumentarium has a chapter devoted to each of the following organological categories: idiophone, membranophone, chordophone, aerophone, megaphone, electrophone, and "archaeological instrument." Every chapter begins with an introduction to its category, accompanied by a pictorial representation from Bern or its surroundings of an indigenous instrument in this category, showing it being used. For example, chapter 1, "Idiophone," provides a full-page photo (plate 2) of the wood carving by Niklaus Manuel (1525) of a jester playing hand clappers, found in the choir stalls of the Bern Cathedral. Relevant organological subcategories and their constituents are then introduced, supported with local history of the instruments. Listings of the Bern instruments in that grouping follow, with photographs and descriptions giving information about size, pitch, provenance, date, maker, and any literary references. Historical and iconographical documentation of an instrument type in its local context is often quite extensive, as, for example, on the topic of bells for sheep and cattle, which discussion includes a reproduction of the oldest known Swiss depiction of sheep with bells (from Diebold Schilling's *Spiezer Chronik*, 1485) and a more recent image of a cow wearing a bell (1772). Other examples might be cited, for example, the essays on violin making in the Canton of Bern (pp. 124–125) and on the Musettenbass (pp. 208-210). Any kinds of documentation present on the instruments themselves, furthermore, including iconographical details, are provided in the illustrations.

The many pictures included in this catalog offer valuable information about uses of music and musical instruments. A topic we can look at here concerns relationships between gender and music. For example, in the section on chordophones, the illustrations show these instruments as associated with both men and women. But women here outnumber men in playing keyboard and plucked instruments such as guitar, dulcimer, autoharp, harp, and the Emmental zither or *Hanotterre*. Aerophones, idiophones, and membranophones, by contrast, are seen here only in the hands of men. Though this book may offer too small a sample to warrant definitive conclusions, we can gather several bits of specific information: We come to know, for example, that from the mid-nineteenth century on, women dulcimer players in Bern were a tourist attraction, especially Anna Bühlmann-Schlunegger (1811–1897; plate 16, p. 87), and that the seventeenth-century clavichord in the collection (no. 74) originally belonged to an Ursuline convent. A nineteenth-century illustration (plate 18, p. 93), furthermore, shows a schoolmaster playing a square piano to accompany the singing of his students, who are both girls and boys.

A glance at the shaded areas along the right-hand edge of this book shows that by far the largest group of instruments at the Bern Historical Museum is that of the aerophones, followed by chordophones, with idiophones and membranophones together constituting a distant third. The idiophones are mainly bells: small ones for animals, large ones for churches and towers, the earliest dating from the fifteenth century. Music boxes, a set of clappers, and a toy piano-called "keyed xylophone" (Klaviaturxylophon)-complete this category. The membranophones are mainly snare drums, dating from the seventeenth to nineteenth centuries. Chordophones represented in the Bern collection are many and varied: high points include the various autoharps and zithers, mainly from the nineteenth century; a seventeenth-century clavichord and a plethora of pianos from the eighteenth and nineteenth centuries; two eighteenth-century hurdy gurdies; a spectacular viola (tenor violin) and a bass (Kontrabass), both from the seventeenth century; a selection of plucked, necked zithers (Emmentaler Halszither or Hanottere) from the nineteenth century; an eighteenth-century mandolin; two nineteenthcentury guitars; and an eighteenth-century harp. The aerophones include twentieth-century free-reed instruments (mouth organ, accordion, harmonium, and barrel organ), an eighteenth-century house organ, and nineteenth-century musical clocks. Alongside several nineteenth-century transverse flutes and a piccolo there is a stunning flute in A by Christian Schlegel from the early eighteenth century and a nineteenth-century English flageolet-cum-piccolo. Other highlights are eighteenth- and nineteenth-century clarinets, oboes, and bassoons, including three instruments whose lowest note is C below middle C: from c. 1850, a Bariton-Oboe (bassoon-like in shape), and from the eighteenth century, six examples of Musettenbass (a large oboe) and eight Liebesfagotten (small bassoons "d'amore"). Among the many types of horns (animal horns, shepherd horns, alphorns, Büchel, and signal horns), the earliest may be a curved conical instrument made of iron sheet metal, which could date from as early as the fifteenth century (if it is not a nineteenth-century fake, as one scholar claims); it is identified here tentatively as "Harsthorn (?) in B." Eighteenth- and nineteenthcentury hunting horns and other brasses complete this category.

Highlights include a trombone made in Nuremberg in 1700, a bass serpent apparently from the eighteenth century, and new inventions of the nineteenth century such as the ophicleide, the helicon, the cornet, and valved horns and trumpets. In the category "megaphone," there are three from the nineteenth century. Only two instruments make up the category of "electrophone," namely, an electronic organ and a Hawaiian guitar. "Archeological instruments" include three small iron bells from Roman times (first to fourth centuries c.e.), one small ceramic bell and four globular ceramic rattles from around the tenth century b.c.e. [*sic*], six bronze open rattles (round, with slats to enclose a pellet or pellets) from around the seventh to sixth centuries b.c.e., one iron jew's harp from some time in the medieval period, and one three-holed flute (of the recorder type) made of a sheep's shin bone, which dates from the thirteenth century.

This fascinating collection of instruments is heavily weighted toward those of local provenance in Bern (city and canton), with some exemplars from neighboring regions of Switzerland, Germany, and Austria, and a very few each from France, the Netherlands, England, and Italy. The choices for iconographical and historical clarification derive mainly from local sources as well. Thus, we have preserved in this volume a valuable view of music making with instruments in a relatively small area of the world. It behooves us as organologists at this point in our researches, I believe, to concentrate on bringing alive just such local traditions as are here delineated.

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