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BOOK REVIEWS

Stanley Sadie, ed. *The New Grove Dictionary of Musical Instruments*. New York: Grove's Dictionaries of Music, 1984. 3 vols. lxii, 2708 pp.; more than 1200 black-and-white illustrations. \$350.00

Because of its scope, The New Grove Dictionary of Musical Instruments merits more extensive consideration than is usually accorded a single publication. The following reviews are the first in a series that will examine specific aspects of the work.

In a society grown accustomed to "spin-offs," it is perhaps not surprising that the practice has reached into the intellectual domain. The sixth edition of the *New Grove Dictionary of Music and Musicians*, hailed for its technical innovations in musical lexicography when it appeared in 1980, has itself become a sire of scholarly offspring. In addition to the *Dictionary of Musical Instruments*, the publisher has reproduced a number of the extensive biographical articles as individual volumes, and has also announced a new dictionary of American music.

An impressive three-volume set, the *New Grove* comprises five broad classes of entries: classical Western instruments, instrument makers, modern Western instruments (mainly electronic), performance practice (in the Western tradition), and non-Western and folk instruments. This review will be concerned with only a part of the first classification—non-keyboard Western instruments.

Stanley Sadie points out in his preface that most of the articles in class one derive from the parent work, though he says that "few are directly reprinted." However, a survey of 129 consecutive entries (*bass-bar* to *bell*) reveals that of the twenty-six entries more than one line in length on classical Western instruments, ten (39%) are the same as in the parent work. Five entries (19%) have been altered, and the changes range from shortening an article by 4% to augmenting it by 20%. Of the eleven new articles (42%), five are longer than ten lines (the longest, one column), one has seven lines, and the remaining five are only two or three lines in length.

Sadie further states in his preface that in "several areas, for example that of medieval and Renaissance wind-cap instruments, most articles are altogether new; in others, notably Renaissance and Baroque plucked instruments, they have been extensively rewritten." In this one sentence the editor points out two signal aspects of the instrument dictionary: on the one hand, new, authoritative articles that were commissioned to fill lacunae or inadequate entries in the parent work, and on the other, ostensible revi-

sions of earlier entries. The new articles on wind-cap instruments resulted from Barra Boydell's extensive treatise on the crumhorn and related instruments, which was completed after *New Grove 6* had been finished.¹ The revisions, however, are less exemplary. A sampling of the articles on plucked instruments shows that the entry on the *colascione* is primarily new, but that on the *mandolin* is expanded by simply combining it with an earlier entry on the *mandore*. One would have expected the article on the *guitar* to show the influences of James Tyler's extensive work on the early history of this instrument,² yet only two of the six sections show any revision and this is slight, much of it the result of deleting an etymological section on the *gittern*.

This unevenness was probably the result of a number of factors, such as the ease with which articles already written could be readied for publication and the need to concentrate the efforts of the editorial staff on the greatly expanded coverage of non-Western instruments, instrument makers and electronic instruments. One might suspect a non-selective reliance on spin-off technique as the reason for the inclusion of tempo and dynamic terms as "performance practice" entries. Indeed, the decision to include general articles on performance practice in an organological work is itself questionable.

These weaknesses are somewhat offset by the inclusion of much new organological material, and to a great extent this is the strength of the new dictionary. For example, the increased coverage of instrument makers affords much information heretofore inaccessible, especially with regard to lesser-known makers who were not represented in the complete dictionary. Again, however, articles carried over tend to show little revision and often suffer the faults of those in the earlier work. Notable in this regard are articles on the major violin makers, which are not based on recent research, but are mainly compilations of material that has been available for years in the works of Lüttgendorf, Vannes, *et al.*

Vexing errors are evident in occasional instances where the articles were first written by non-specialists and repeated without reference to later specialized research, or where insufficient editorial supervision apparently failed to force resolution of a problem. The flaws seemed less obvious when the entries were buried in the twenty volumes of the parent work, but in this dictionary's compact form they are more noticeable. A couple of exam-

1. Barra Boydell, *The Crumhorn and Other Renaissance Windcap Instruments* (Buren: Frits Knuf, 1982).

2. James Tyler, *The Early Guitar* (London: Oxford University Press, 1980).

ples will suffice. In the article on the *basson d'amour*, the author of the European volume of the *Catalogue of the Crosby Brown Collection* of the New York Metropolitan Museum of Art is said to be anonymous, yet it is well known that this was the work of the English organological laureate Canon Francis Galpin.³ Incidentally, Galpin is not even listed in this dictionary, and it would seem proper to have devoted some space to the work of prominent organologists, just as the biographies of recognized musicologists were included in the parent set. Such figures as Curt Sachs, Galpin, John Henry Van der Meer, and Anthony Baines, among others, should have been included here.

More serious perhaps is the sort of error perpetuated in the article on the *hurdy-gurdy* where the reader is informed that the thirteenth-century treatise *Quomodo organistrum construat* tells us that the "outer drone or bourdon strings were tuned an octave apart, and the center melody string a 4th or 5th below the highest drone." In truth, the treatise tells nothing of tuning the strings, only of the division of the string length for the placement of the key tangents. Neither is there any substance to the suggestion that the name *organistrum* was derived from *organum*. This entry would have profited much from recourse to later research, such as the excellent study by Marianne Bröcker cited in its own bibliography.⁴

The pricing of the volumes (\$250.00 for the set) is commensurate with that of the full *New Grove 6*, and even owners of the parent dictionary will find the compactness of the instrument version handy. Purchasers inspired by the publisher's advertising may be a trifle disappointed to find that all of the promised improvements have not been delivered, but in spite of these shortcomings the *New Grove Dictionary of Musical Instruments* is a valuable, even necessary, addition to the library of any serious student of instruments.

CECIL ADKINS

3. Francis W. Galpin, *Catalogue of the Crosby Brown Collection (Europe)* (New York: Metropolitan Museum of Art, 1902).

4. Marianne Bröcker, *Die Drehleier: Ihr Bau und ihre Geschichte*, 2nd ed. (Bonn: Verlag für Systematische Musikwissenschaft, 1977).

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The combined coverage of non-Western and folk musical cultures and their musical instruments provided by both the twenty-volume sixth edition of the *New Grove Dictionary of Music and Musicians* (hereafter referred to as *New Grove 6*) and its three-volume spin-off *The New Grove Dictionary of Musical Instruments* (hereafter *NGDMI*) represents a major contribution to

the fields of ethnomusicology and organology. This review will provide a brief survey and general commentary on the non-Western and folk instrument coverage in the *NGDMI*, but it should be noted from the outset that only through the combined resources of *both* lexicons can a reader truly appreciate and begin to understand the complexities of the relationships among specific musical instruments, their indigenous cultures, their musical uses, and their cross-cultural distribution.¹

New Grove 6 editor Stanley Sadie clarifies the primary difference between the non-Western and folk instrument entries in the two dictionaries:

The intention has been to enter in the dictionary [*NGDMI*] all significant instruments from every culture. In the *New Grove 6* the treatment was more selective: the most important were included in the main alphabet but many more were considered in the context of the cultures to which they appertain.²

The scope of coverage in the *NGDMI* is overwhelming. According to Sadie, some 10,000 folk and non-Western instruments are included in the 2,708-page double-column lexicon. Whether or not this represents "all significant instruments from every culture," the *NGDMI* is the world's most compact yet comprehensive printed source for information concerning non-Western and folk musical instruments. It is not merely a reprint of articles from *New Grove 6*, but, particularly in the case of the non-Western and folk instrument entries, represents a compilation of new material "supplied or editorially prepared by scholars with specialist knowledge based on fieldwork in the regions concerned."³ John M. Schechter's objection that the "Pipe and Tabor" article in *New Grove 6* omits mention of any use of such instruments in Latin America,⁴ for example, has been rectified in the newly-revised *NGDMI* "Pipe and Tabor" article.

Although the dictionary strives to be objective as well as comprehensive, a distinctly Western selective bias may be detected. This is expressed by the comparatively greater length of certain articles, based not only upon the state or extent of scholarly research, but also, I believe, upon the relative popularity in the West of certain non-Western and folk instruments or the

1. For additional commentary on this, see the seventy-five pages of review of the *New Grove 6* coverage of both non-Western and folk musical cultures and their musical instruments offered by twenty noted ethnomusicologists in *Ethnomusicology* 29, nos. 1 and 2, (1985). William Waterhouse's review of the *NGDMI* in *Early Music* 13, no. 3, (1985) only briefly touches upon non-Western and folk instruments.

2. Stanley Sadie, *NGDMI* 1:viii.

3. *Ibid.*

4. John M. Schechter, "The New Grove—Latin America," *Ethnomusicology* 29 no. 2 (Spring/Summer 1985): 327.

cultures they represent. Editor Sadie's disclaimer for this bias states that although

instruments from every part of the world have been included, inevitably coverage is the most extensive for areas that have the largest number of instruments, for areas whose instrumentarium has been subjected to particularly close scholarly scrutiny, and for areas with longstanding, written theoretical traditions.⁵

For example, the four longest non-Western articles in the *NGDMI* are "Gamelan," eight pages, "Sitar," eight pages, "Vina," eight pages, and "Mridanga," seven and a half pages. As Jon B. Higgins observes in his review of the *New Grove 6* coverage on India, "the extensive treatment of Indian music and dance in the eight *New Grove 6* articles provides eloquent testimony to India's impact upon the musical life of the West."⁶

Similar emphasis is expressed in the *NGDMI*. Of the "top twenty" non-Western entries (based solely upon length), twenty-five percent deal with instruments of India (in addition to those already mentioned, "Tabla," four and a half pages, and "Sarangi," two pages, a total of some thirty pages of major articles), not to mention a plethora of shorter articles concerning Indian instruments. The Indonesian gamelan, of course, continues to have an influence on Western music educators, researchers, composers, performers, and designers of experimental musical instruments (see "American gamelan," section four, part three of "Microtonal instruments"). The "Gamelan" article plus the sixty-nine articles cross-referenced at its end yield a total of almost twenty pages devoted to the gamelan.

Other non-Western instruments receiving noticeably lengthy treatment include four Japanese instruments: *koto* (six pages), *shakuhachi* (three and a half pages), *biwa* (two and a half pages), and *shamisen* (two pages). Africa is represented by three relatively long articles: "Kora" (two and a half pages), "African harps" (two and a half pages, a sub-section of the article "Harp"), and much of the "Lamellaphone" article (six pages). Southeast Asia is represented only by a two-and-a-half page article concerning the Burmese *saung-gauk* (arched harp).

Other articles of comparatively substantial length concern the Islamic 'ud (five pages) and *zurna* (two and a half pages). "Latin American Harp" is a three-and-a-half page sub-section of the "Harp" article; the Chinese *ch'in* receives two pages; and there are three articles from a cross-cultural per-

5. Sadie, *NGDMI* 1:ix.

6. Jon B. Higgins, "The New Grove—India," *Ethnomusicology* 29 no. 1 (Winter 1985): 166.

spective: "Musical Bow," nine pages, "Rabab," six pages, and "Jew's Harp," two pages.

The remainder of the 10,000 non-Western and folk instrument entries are short, often a column or less. Some contain only a line or two identifying the general classification or type and geographical distribution, occasionally including a cross-reference to a related instrument type and only rarely including a bibliographic reference. This latter is a deficiency that should be corrected in future editions. For example, the unsigned entry "Midwinterhorn" (*midwinterhoorn*) reads simply, "Wooden trumpet of the Low Countries played in east Holland," a lexicographical dead-end. The appendage of a single reference to Jeremy Montagu's article, "The Construction of the Midwinterhorn," *Galpin Society Journal* 28 (1975): 71–80, would lead the interested reader to a wealth of technical, musical, historical, and social information about this unusual folk instrument.

Overall, the extent of the bibliographic citations varies considerably from no entries at all to the inclusion of works in progress. Many bibliographies have obviously had no updating since their preparation in the early 1970's for *New Grove* 6. The addition of historic and published field sound-recording citations to the bibliographic entries would have been useful, since, after all, the *NGDMI* deals with sound-producing objects. For example, how many readers know what a *saroz* sounds like? Yet a *saroz* may be heard on the Tangent recording of *Music in the World of Islam* (TBX 601) collected by Jean Jenkins and P. Rovsing Olsen.

Nomenclature difficulties are dealt with fairly well in the *NGDMI*. The basic policy of the dictionary is to enter each instrument

under its own name in the language of the ethnic or cultural group among which it is native rather than under an English equivalent. To pursue such an objective uncritically would, however, produce a catalogue of names—hundreds of thousands—too huge to be controlled, and it would obscure those relationships between instruments that it is the dictionary's role to elucidate. An attempt has accordingly been made to find a middle course that is both practicable and useful; where instruments of a like kind can sensibly be grouped and considered under a standard English language name, this has been done.⁷

For example, the "Lamellaphone" article cross-references almost 200 separate, albeit brief, entries in native languages. The "Musical Bow" article lists approximately 235 different native names of musical bows, all separately entered in the dictionary. The reader must not cursorily overlook such ge-

7. Sadie, *NGDMI* 1:ix.

neric articles, however, for they include much cross-cultural non-Western and folk material.

Some important articles of this type include: "Bagpipe," "Bell," "Court-ing Flute," "Drum," "Flute," "Friction Drum," "Goblet Drum," "Gong," "Handbell," "Harp," "Hourglass Drum," "Kettledrum," "Lute," "Lyre," "Panpipes," "Rattle," "Sacred Flutes," "Shaman Drum," "Slit Drum," "Stopped Flute Ensemble," "Talking Drum," "Trumpet," "Uganda Drum," "Xylophone," and "Zither," to mention just a few. However "sensibly grouped," this type of coverage will not be helpful to someone desiring to learn about the different types of drums in a particular culture. It is in instances such as this that coordination with related articles in the *New Grove 6* is essential. For *NGDMI* readers without access to the *New Grove 6*, however, it would have been helpful if the *NGDMI* had included an index of instrument names listed geographically by type, *i.e.*, all the names and entries for African drums listed together, and so on.

Another difficulty in nomenclature, the transliteration into English of various languages such as Chinese, has been effectively handled through cross-references. Since readers are familiar with the transliteration of many names of Chinese instruments through the older Wade-Giles system, these spellings are cross-referenced with the standard Pinyin system used in the *NGDMI*. Readers familiar with the transliteration *ch'in* will be referred to the article "Quin," *san-hsien* to "Sanxian," *cheng* to "Zheng," and so on. Sometimes it is not immediately obvious why an instrument is listed under a particular spelling. For example, the entry for the Greek *semanterion* is listed under "Semantron," although both Curt Sachs and Sibyl Marcuse list *semanterion*.⁸ Furthermore, the Greek musicologist and organologist Fivos Anoyanakis uses the spelling *simandro* (*semanterion*) in his monumental study of Greek folk instruments.⁹ This study, incidentally, includes a nine-page entry for the instrument. The *NGDMI* entry of thirteen lines includes no bibliographic or pictorial references at all.

One of the most useful aspects of the *NGDMI* non-Western and folk coverage is the inclusion of many diagrams and photographs, not only of instruments by themselves, but also in performance with native musicians. Many of these have been reprinted from *New Grove 6*, some are apparently newly published, and some are recognizable from standard sources such as

8. Curt Sachs, *Real-Lexikon der Musikinstrumente* (New York: Dover, 1964), 342; Sibyl Marcuse, *Musical Instruments: A Comprehensive Dictionary* (New York: Norton, 1975), 465.

9. Fivos Anoyanakis, *Greek Popular Musical Instruments*, translated by Christopher N. W. Klint (Athens: National Bank of Greece, 1979), 95–104.

Buchner's *Folk Music Instruments*.¹⁰ It is unfortunate that it was not practical for all entries to include diagrams or photographs.

According to editor Sadie, "it is in the coverage of non-Western music that this dictionary chiefly breaks new ground."¹¹ This is true, and now that the ground is finally broken, perhaps the sowing and reaping of new ethnomusicological and organological harvests will continue at a somewhat quicker pace, either through the medium of the printed page or, as Frederic Lieberman suggests, through a new technological medium in keeping with our computer age.¹²

MARGARET DOWNIE BANKS

10. Alexander Buchner, *Folk Music Instruments* (New York: Crown Publishers, 1972).

11. Sadie, *NGDMI* 1:xii.

12. Frederic Lieberman, "The New Grove—Overview," *Ethnomusicology* 29, no. 1 (Winter 1985): 141.

James Coover. *Musical Instrument Collections: Catalogues and Cognate Literature. Detroit Studies in Music Bibliography*, no. 47. Detroit: Information Coordinators, 1981. 464 pp. \$25.00.

Scholars of Western musical instruments and curators of instrument collections need to gain an historical perspective on collections themselves: what the aims of the collectors and curators were; what kinds of instruments were acquired; how important exhibitions were organized; and how historical instruments were evaluated, described, grouped, compared, and treated in the market place.

In attempting to address these and related questions of historiography, one confronts bibliographic problems galore. Many of the primary sources (catalogues and checklists of collections, records of auctions, and notices concerning regional, national, and international exhibitions) are difficult to find. The secondary sources, particularly foreign publications from the late nineteenth century, are widely scattered. Fortunately James Coover has made the task of gathering such research materials easier with the publication of his extensive bibliography.

The bibliography is organized into two large sections. The first contains items pertaining to the holdings of institutions as well as to temporary exhibitions of instruments from various sources, public and private. Private collections, including those considered as such for the sole purpose of auction,

are covered in section two.¹ Within each section appear numerous headings arranged in alphabetical order, by city and institution or exhibition in section one, and by the owner's last name in section two. Under these headings the citations are divided into as many as three categories: catalogues and descriptions of holdings; articles and books concerning the collection or items in it; and museum and exposition guides, descriptions, and reports containing sections dealing with musical instruments. The entries are listed in chronological order, and each is given an item number printed in boldface type in the left margin.

In working with the bibliography I found a shortage of cross-references within section one. A representative case concerns the loan of some instruments from the Doane Collection of the Cincinnati Art Museum and the Stearns Collection of the University of Michigan to the Toledo Museum in 1952 for a temporary exhibition entitled "Musical Instruments Through the Ages." Contrary to expectations, the item number of the Toledo exhibition catalogue (1498) does not appear under the headings "Cincinnati" and "Ann Arbor." Incidentally, because the entries in section one are arranged by city, users who do not know the specific geographical location of a given collection or the name of that collection's principal benefactor will find the general index of no value. In other words, assuming the person consulting the bibliography knows only that the University of Michigan has an instrument collection and does not know that the university is located in Ann Arbor, he will search the index in vain for "Michigan, University of." Remember, the user does not know that the collection is named in honor of Frederick Stearns, who is indeed listed in the general index. Likewise, he must know at the outset either that Bucknell University (not indexed) is located in Lewisburg, Pennsylvania, or that Harold E. Cook (indexed) donated that university's collection of historical instruments. All this before he can consult the bibliography!² A better, more complete index would

1. In his review of Coover's book in the *Galpin Society Journal* 36 (1983): 144, Edgar Hunt suggests that section one could be subdivided more usefully into two categories: permanent collections and temporary expositions. Section two might then be reorganized to distinguish private collections which exist today from those which are now dispersed, and from those which Hunt characterizes as "collections after the event," i.e. auctioneer's catalogues. These are sound suggestions that should be considered before a second edition of the bibliography is published.

2. Along similar lines, I see no reason to employ the library codes of the *National Union Catalog* to indicate the locations of the publications most difficult to find, particularly since there are seldom more than two or three such locations for any citation. Why not print this useful information in full, though perhaps in a smaller type, and save the user a trip to another section of the library, or to a different library altogether?

have made the book more accessible to the general public, which I take to include undergraduate and most graduate students.

My principal reservations³ about the book concern its coverage of secondary literature and the sufficiency of its annotations. With regard to secondary literature, book reviews in particular are underrepresented. This shortage is nowhere more critical than in the case of musical instrument catalogues, where reviews have helped to establish current standards of description and evaluation. Moreover, some articles relating to important instruments in certain collections have been overlooked.⁴ One expects a more complete survey of the literature in such a specialized bibliography. Regarding annotations, there are simply too few. It would be useful to know, for example, that volumes six and eight of the *Bulletin of the Brussels Museum of Musical Instruments* (Coover item no. 297) concern bagpipes, and that Anthony Baines reviewed both in the *Galpin Society Journal* 35 (1982): 162–64.

James Coover's control of the sources of this bibliography is truly remarkable, and he has produced a useful guide to research. However, the problems inherent in the organization of the main sections and the insufficient general index detract from the book's value particularly to the non-specialist.

JAMES M. BORDERS

3. My confidence in the complete accuracy of the entries was occasionally shaken by errors in citation. For example: *Art Review* for *Scottish Art Review* (Coover item no. 560); *Die europäischen Musikinstrumente im Germanischen Nationalmuseum Nürnberg* for *Verzeichnis der europäischen Musikinstrumente . . .* (Coover item no. 1128); and an incorrect page reference for Cary Karp, "Baroque Woodwinds in the Musikhistoriska Museet," *Galpin Society Journal* 25 (1972): 9–96, rather than 80–86 (Coover item no. 1431).

4. For example, Jürgen Eppelsheim, "Das Denner-Chalumeau des Bayerischen Nationalmuseums," *Die Musikforschung* 26, no. 4 (1973): 498–500.

Mantle Hood. *The Evolution of Javanese Gamelan. Book 2, The Legacy of the Roaring Sea*. International Institute for Comparative Music Studies, Berlin; Pocketbooks of Musicology, 63. Wilhelmshaven: Edition Heinrichshofen, 1984. (U.S. Distributor, C. F. Peters Corporation) 211 pp.; 15 black-and-white plates. Paperbound, \$11.00.

"For nearly 2,000 years, the most powerful symbol of Javanese authority has been the gamelan. . . . [I]n the late 19th century, gamelan and the related arts . . . sparked the spirit of revolution, leading to Indonesian inde-

pendence." These statements in the opening paragraph of the second book of Mantle Hood's trilogy on the evolution of the Javanese gamelan (p. 9) set the tone for its contents.

Hood views history "not as a chronology of social events but as an accumulative record of values" (p. 13). Discussions of values (such as *epic identity*, which is central to Hood's interpretation of the thrust for independence) are intertwined with a generally diachronic organization of material. Book Two is concerned primarily with the history of gamelan from the time of the colonization of Java by the Hindus. Hood's theory of the origin of the gamelan was presented in Book One, and a generative grammar for Javanese music is promised for Book Three.

Hood briefly describes the musical instruments depicted on the immense eighth-century Buddhist stupa, the *Borobudur*, which he considers both the "first significant source of documentation for the performing arts in Indonesia" (p. 24), and "musical evidence of social unrest" (p. 13). There are many representations of early Indian instruments, none of the Javanese gamelan as an ensemble (a few of its less important instruments are depicted out of context), and one large relief (at the bottom of the monument, which in stupa architecture signifies low status) of instruments and dance of the common man. According to Hood's thesis, the comparative absence of the gamelan is deliberate neglect (p. 38); he speculates that the "types of musical instruments, their manner of depiction and their number supply a kind of 'negative' evidence . . . [of] powerful but latent political implications associated with the music of the Javanese nobility" (p. 26).

Hood notes that later the gamelan became an intrinsic part of Hindu-Javanese ceremonies, and that still later it was accepted in Islamic contexts. He considers the representations of gong chime instruments in reliefs at Angkor Wat as evidence of Javanese influence on mainland Southeast Asia prior to the Majapahit Empire (late thirteenth to sixteenth centuries), and devotes considerable attention to comparing certain aspects of Balinese gamelan (which, from Bali's colonization by this empire, retains more of some aspects of Hindu-Javanese culture than now exist in Java) to several Javanese gamelan. He proposes a late fifth- or early sixth-century date (pp. 86–87) for the making of a gamelan called gamelan Majapahit, located in Tenggarong, Kalimantan (Borneo), and finds "convincing circumstantial evidence" for a twelfth- to fourteenth-century date (prior to the adoption of Islam) for the making of the gamelan Sekati (p. 96), which is integral to the celebration of *Sekaten* (the Islamic Holy Week), arguing that both of these gamelan must have been renamed to suit changed circumstances.

A significant contribution to available knowledge of Javanese gamelan is

the presentation in English translation of portions of the manuscript of the palace of the Sultan of Yogyakarta that Hood was permitted to microfilm in 1958. Although not written until late in the nineteenth century, the manuscript not only provides a basic prescription for performance practice but also constitutes a repository of relevant oral history and tradition. This material, extensively quoted and discussed in the text, occupies five appendices (pp. 126–84).

Appendix V is of particular interest to organologists. It identifies twenty-three gamelan, including the one to which the trilogy refers, His Royal Highness the Venerable Roaring Sea (translated in Book One as His Royal Excellence the Venerable Roaring Sea) by name; tonal system, *i.e.*, whether *pélog* or *sléndro* (in some cases spelled *suréndro*); occasions for which each is to be played; which king ordered it to be made and in what year; and, for the few not to be housed in this palace, the intended location, *e.g.*, the residence of the Crown Prince, or, on loan, the palace of the Prime Minister.

The palace manuscript lists the specific instruments in twenty-two of the twenty-three gamelan, but unfortunately for readers of this book, the lists are omitted, and only the total number of instruments in each ensemble is given. As originally ordered to be made, these gamelan ranged from eight to forty instruments; a few were subsequently enlarged by a later king. The largest number of instruments in one gamelan is fifty-three, and the total number of instruments is more than six hundred.

Of the fifteen figures (the last one is numbered 17, but there is no 8 or 9), figures 5, 6, and 7 are especially relevant to organology. These are reproductions of drawings in the palace manuscript of a *rebab* (two-stringed bowed lute), a *kenong* (a type of horizontally-mounted, bossed pot-gong that is used both singly and in sets), and four types of *tabuh* (beaters). The beaters are identified (as are component parts of the instruments) in Javanese script, from left to right, as beaters for the *gambang* (xylophone), *bonang* (another of the types of horizontally-mounted, bossed pot-gong sets), *saron*, and *gong*, though they are also used for the other idiophones of similar type.¹

Because of frequent references to Book One (1980), analytically-inclined readers will want both books at hand. The inconvenience of the lack of a glossary, and the numerous inaccuracies in quotations, citations, and

1. I am indebted to Hardja Susilo, who also made the initial translation of the whole palace manuscript for Hood, for translating the beater identifications for readers of this review.

spelling present problems similar to those in Book One (reviewed in this *Journal* 11 [1985]: 192–95).

Though many scholars will disagree with some of Hood's conclusions, it is quite fascinating to follow him as he explores the relatively small amount of firm evidence and seeks relationships to substantiate his belief in a longer history and a more significant social role for the Javanese gamelan than most scholars have ascribed to it.

BARBARA B. SMITH

Laurence Picken, ed. *Musica Asiatica*. Vol. 4. Cambridge, England: Cambridge University Press, 1984. vi, 270 pp.; 46 black-and-white illustrations. \$49.50.

This volume, the fourth of a five-volume series, considerably broadens the scope and extends the amount of material included in the earlier volumes of *Musica Asiatica*. Although previous issues dealt almost exclusively with early Oriental historical musicology (a collective total of eighteen articles with only two outside this context), four of the seven articles in the present volume are concerned with organological subject matter dealing with contemporary, or at least twentieth-century, material. And three of these have areas other than East Asia as their principal focus.

Laurence Picken is the author of three of the articles in the book and co-author of two others. In an earlier book commemorating Picken's seventieth birthday,¹ the editors stated that their intention was to reflect the three primary concerns which have occupied the major part of his scholarly interest: his perception of musicology as true science, his principal interest in Far-Eastern historical musicology, and his great interest in music of many other diverse types. The articles in this volume are most certainly consistent with these concerns.

The first article, by Jonathan Condit, completing his survey (to 1600) of Korean scores of mensural notation, is not within the scope of this review, nor is Picken's article "Music for a Lion-Dance of the Sung Dynasty." The remaining five articles deal with musical instruments in diverse ways and in a variety of highly interesting formats.

In the article, "The Making of a *Khāen*: the Free-Reed Mouth-Organ of

1. D. R. Widdes and R. F. Wolpert, eds., *Music and Tradition: Essays on Asian and Other Musics Presented to Laurence Picken* (Cambridge: Cambridge University Press, 1981).

North-East Thailand," Picken, C. J. Adkins, and T. F. Page give us a brief description of a visit in 1972 to a small mountain village in the area where this aerophone is crafted. A detailed discussion of the instrument follows, and after a short presentation on the etymology of the instrument's name, an exhaustive description is given of the materials used in its construction, including even the appropriate coins that are melted down to produce the bronze reeds. Next we learn of the method of constructing the *khāēn*, which consists of reeds, pipes, and a windchest. Included are careful descriptions of the work done by native craftsmen and discussions of the successive steps involved in producing the instruments, as well as numerous photographs, drawings, and tables. Finally, methods of sound production and tuning are considered, as is the geographic distribution of subtypes.

Picken's interest in the organology of this area is further exemplified in his article, "The Sound-producing Instrumentation of a Village in North-East Thailand." In this instance he visited another small rural village "to invite the inhabitants to make every kind of musical and sound-producing instrument known to them, whether in child or adult use." He describes in detail the results of this highly entrepreneurial exercise, while pointing out that many of the instruments may soon be only of historical interest, as they are being replaced by transistor radios "dispensing urban 'pop' from Radio Bangkok." He then gives detailed physical descriptions of the instruments created in this large-scale, short-term project; clear photographs and several printed musical examples are included.

The remaining article by Picken, "Instruments in the Orchestra from Pyu (Upper Burma) in 802," is a revised and updated commentary on an earlier translation of a document of the period describing the instruments and their tunings. This article, of interest mainly to specialists, concerns instruments for a troupe of thirty-five singers and dancers presented to the Chinese throne.

Roger Blench's "The Morphology and Distribution of Sub-Saharan Musical Instruments of North African, Middle Eastern, and Asian Origin" offers "a preliminary survey of those instruments which may have been introduced by Arabs, or from Asia by other intermediaries." After pointing out principal areas of contact (the southern edge of the Sahara and the East African coast), the author discusses various influxes of Asian peoples, giving the approximate historical periods of their visits or immigrations. The main portion of the highly detailed and scholarly account consists of physical descriptions, photographs (only five, somewhat unclear, compared to the seventeen in the *khāēn* article—more would have been welcome), methods of construction, African names, and functional uses for thirty idiophones, membranophones, chordophones, and aerophones. The Horn-

bostel-Sachs classification numbers given are helpful, as are indications of the areas from which each instrument is thought to have come. A clearly drawn map of Africa showing the locations of peoples and regions identified in the text is included, and there is a comprehensive bibliography.

In the article "Anatolian Drum and Shawm Come to a Greek Smuggler's Village" by Michael Fortescue and Picken, the reader is transported into the realm of vivid and dramatic historical narrative: scholarly details are relegated to the authors' detailed footnotes. The body of the article is Fortescue's perceptive translation of a chapter from the historical novel *Basil the Albanian* by Stratis Myrivilis, which deals with an event in the Young Turk Revolution of 1908. The narrator is a young boy, and the location is an island near the Anatolian coast. The excerpt is of musical and folkloric interest because of vivid descriptions of the sounds of the *darvul* (drum) and *zurna* (shawm) and their psychological effect on the listeners and the colorfully-described dancers:

Those huge drums and shawms produced a wild and monotonous sound, deep and intoxicating. It befuddled a human brain to hear it and it filled [us] with a melancholy that enchanted us. It made one grip stones until one's hand went numb with pain, weep, and cry out to heaven with enthusiasm. [The sound] entered the brain, ignited the blood. One no longer cared for violins and lutes to quench the heart's unbearable sorrow. It would have been the old strains of blood which awoke within [us] and missed the ancestral rhythms.

The combination of a gripping prose narrative with informative footnotes (which should be read only when *rereading* this exciting description of wild music and dance accompanied by the drinking of *raki* and the sound of gunshots) makes for compelling reading.

With the exception of this last article, this book will likely be only interesting skimming for the general reader lacking a specialized interest in the areas covered; but it is a valuable work for specialists and for those interested in a reference source done with thoroughgoing, comprehensive, and detailed scholarship.

ROBERT WASHBURN

Howard Schott, ed. *The Historical Harpsichord: A Monograph Series in Honor of Frank Hubbard*. New York: Pendragon Press, 1984. xii, 125 pp.; 2 black-and-white plates, 5 figures, 3 tables. \$27.50.

After the death of Frank Hubbard in 1976, Robert Koff and Gustav Leonhardt presented a concert for the benefit of a "Frank Hubbard Memorial Committee," the proceeds of which were to fund a suitable memo-

rial. Thereafter it was decided that a volume of papers would best serve the purpose; but as Howard Schott, the editor of the present volume, noted, so much material was offered that the committee changed its plan and established a monograph series instead. The present volume, then, is the first of a series in honor of Frank Hubbard, and it is most fitting that the place of honor be given to Hubbard's lecture, "Reconstructing the Harpsichord," which he presented in 1974 at Indiana University in Bloomington. The lecture is at once a reminiscence, a thoughtful description of the questions that a restorer must settle in his own mind before he even touches an instrument, and a statement of principles. Hubbard reminds us once again that materials matter, design matters, and meticulous craftsmanship matters if we are to approximate the sound and the spirit of a harpsichord as contemporaries of its maker heard it.

Almost three-quarters of this volume is given over to a survey by William Dowd of all the known products of the Blanchet workshop: original instruments, rebuilt instruments, and *ravalements*. This too is most appropriate because Dowd was Hubbard's collaborator when historically minded builders first began making performers aware that carefully made reconstructions of sixteenth-, seventeenth-, and eighteenth-century harpsichords were simply better musically than those produced, say, by Pleyel or Dolmetsch. It is curious that the attitude of makers such as the latter two that "what we do today is better than what they did in the past" was an eighteenth-century attitude. Hubbard and Dowd, however, were, in the late 1940s and early 1950s, romantics in the sense that they chose to respect the old methods, the old designs, and the old materials. Indeed, their approach was music historical, itself a romantic attitude.

Dowd's long essay gives us a compact list of "all the [Blanchet] instruments known to me which I believe to be genuine"; a history of the Blanchet establishment and the beginnings of Taskin's; a description of how the author measures instruments; and, occupying the bulk of the article, descriptions of ten instruments by Blanchet, three by Pascal Taskin (who as Blanchet's successor continued the tradition), four *grandes ravalements*, and four other instruments known to have been rebuilt in Blanchet's shop. Dowd's candor throughout is reassuring. He admits, for example, that he has great difficulty in distinguishing wood species where the specimen is some 250 years old and covered with a patina, which he reminds us is a euphemism for plain old dirt. Following the descriptions is a conclusion in which the author presents an overview of the more important design and construction changes that took place during the seventy-six years of the

shop's existence. The essay includes a table giving the most important dimensions of seven Blanchet and three Taskin harpsichords. In addition there is a table showing bridge dimensions, one giving the stringing list for a 1733 Blanchet on which many of the original strings survive, and finally a series of drawings showing the details of wrestplank mountings, mouldings, and key ends.

One difficulty with this study is that because Dowd describes the instruments one by one, it is hard for the reader to correlate the information, even though he describes the physical characteristics of each in about the same order. The presence of references in the first pages of the article to the various tables and drawings at the end is some help, as is the final summary. Nevertheless, this reader might have preferred more extensive tables preceded or followed by comments organized by topic rather than by instrument.

The tables include abbreviations that are not explained in the tables themselves, nor in the text, as far as I can see. The abbreviations are doubtless obvious to experienced harpsichord builders, especially those familiar with Dowd's methods, but the absence of a simple list explaining the abbreviations will cost the attentive beginner some time and trouble. Of course, those to whom this article is addressed are more concerned about the information than about ease of use. Nonetheless, this study will be of great importance to those who would design and build instruments true to the spirit of the past. One hopes that this series will present others.

The book concludes with "In the Direction of the Beginning," an attempt by Christopher Page to explain why the harpsichord, "a mechanized psaltry," might have appeared during the late fourteenth or very early fifteenth century. Page speculates that such an instrument may have been part of a tendency towards what he labels "plurilinear" musical performance (polyphony in the usual sense). Though organs were capable of producing such music, most were too large to be easily moveable. The invention of the harpsichord met, in Page's view, the desire for an instrument that would be, if not portable in the sense that a lute is, then at least transportable. This is indeed an intriguing speculation. Possible? Certainly. Probable? Who knows?

HOWARD SERWER

Adolf Heinrich König, ed. *Alte Meistergeigen: Beschreibungen, Expertisen*. Vol. 5–6, *Die Schule von Neapel. Die Schulen von Rom, Livorno, Verona, Ferrara, Brescia, und Mantua*. Frankfurt am Main: Verlag Das Musikinstrument, 1980. 404 pp.; 396 black-and-white and color illustrations. DM280.

Vol. 7, *Die Geigenbauer der Guadagnini-Familie. Die Turiner Schule*. 1981. 260 pp.; 240 black-and-white and color illustrations. DM198.

Vol. 8, *Französische Schule und deutsche Meister*. 1982. 240 pp.; 176 black-and-white and color illustrations. DM198.

The publishing firm Verlag das Musikinstrument continues its impressive series of *Alte Meistergeigen* with these volumes of detailed descriptions, evaluations, and photographs of violins from many schools and makers. The publisher has spared little expense, for these volumes are beautifully bound and have been printed on fine paper; the German text is clearly printed, and the photographs, mostly in black and white, are exceptionally fine.

The scroll, top, and back views of each instrument are shown in wonderful detail; and occasional photos of details of specific instruments successfully highlight elements of stylistic significance of certain makers or schools. Moreover, the top and back of each instrument are shown in ultra-violet photography: the study made by the latter means by those who evaluated the instruments gives greater weight to their conclusions.

The introduction by Arnold Sprenger (in German, French, and English) and the foreword by Max Frei-Sulzer set forth the objectives, methodology, and criteria used in the series. The primary goal was to arrive at a means of analyzing and judging stringed instruments objectively, using the Italian Classical School of violin making as the starting point for the evaluative process. Fortunately, access was had to a large number of instruments. A scientific analysis of those instruments was designed to determine whether they were still in their original states or had been altered. The details analyzed for each instrument include the type of wood used for the top, back, scroll, ribs, and purfling; the scroll or head found on the instrument; the label found in the instrument (whether authentic, a facsimile, or false); the back (whether made in one or two pieces); and the varnish. Although the analysts were able to evaluate accurately the wood used in the instruments, they explain the difficulties they had in analyzing the varnish and in describing the many fine shades of color.

Of special interest are the ultra-violet photos of each instrument. The purpose of this analysis was to attempt to make some statement on the var-

nish, in order to see if all the parts of the instrument belong together, and to try to identify characteristics of that instrument as belonging to a particular school or period. Some of the results of ultra-violet inspection allowed the analysts to make statements on the source of various parts of the instrument, retouching, substitution of parts (if any), ingredients used in staining the wood (*i.e.*, acids, lyes, or metallic salts), the age and hardness or brittleness of the wood, and the degree of solution of the colored resin (which the analysts emphasize is an important criterion of authenticity for certain schools or masters).

In addition to the detailed data, the analysts present their interpretations and conclusions drawn from the study made for each instrument, offering the results of the ultra-violet study and their opinions both on the stylistic characteristics of the maker and on how much of the instrument is original, and concluding with a summary of all aspects of the examination and a general stylistic assessment.

These volumes constitute important source material for any serious student interested in the history of violin building. One can revel in and enjoy the splendor of the creative output of such master luthiers as the Gagliano and Guadagnini families, Gasparo da Salò, Maggini, Tecchler, Stainer, Lupot, Gragnani, Tomasso Eberle, Camilli, Albanus, Vuillaume, and others. The color photographs are especially rich and capture the wonderful golden hues of many of the fine Italian and French instruments; the ultra-violet photos offer the viewer a unique opportunity to see beneath the surface of an intact instrument, something not hitherto possible. Despite some stilted English translation and an almost total absence of photographs of the labels, these volumes are impressive and a must for all aficionados of violin building and violin makers.

MYRON ROSENBLUM

Rien de Reede, ed., *Concerning The Flute: Ten Articles about Flute Literature, Flute Playing, Flute Making, and Flutists*. Amsterdam: Broekmans and Van Poppel, 1984. 128 pp.; 12 black-and-white illustrations. \$20.00.

Concerning the Flute is a collection of ten diverse articles presented to Frans Vester on the occasion of his retirement from the Royal Conservatory in The Hague on June 15, 1984. The articles, in English, German, and Dutch, reflect Vester's wide interests in all aspects of new and old flutes and their repertory, and his commitment to intelligent and accurate performance based on a careful and informed reading of the score.

Jane Bowers' article on the Hotteterre family and their instruments is a much expanded version of her entry for the *New Grove*. Particularly useful and interesting are the additional material on Jacques "Le Romain," the most important member of the family, and a section on the instruments themselves. The three famous instruments in Berlin, Leningrad, and Graz with their anchor trademark are well known, but less known are several other instruments such as Dr. Rosenbaum's alto recorder with its six-pointed star over the name N HOTTETERRE. The footnotes also increase our knowledge of the instruments and their makers and provide sources for further reading. A separate fold-out contains a family tree; and a list of all extant instruments identified by trademark, materials, and location is appended. One wishes for more opportunities to see such complete research in the case of other topics that the editors seem not to have thought worthy of the fullest coverage.

A performance-practice article by Betty Bang Mather treats the subject of trills in French baroque dance music. She begins with an apt quotation from Saint-Lambert which sums up the philosophy of many of the French writers of the age relative to the choice of ornaments: "Good taste is the only law that one can follow." The proliferation of signs and descriptions in French baroque treatises is both discouraging and sometimes disheartening, both because a likely solution will frequently be contradicted by another author, and because performers on baroque winds are constrained by the physical limitations of cross-fingerings that actually preclude the successful execution of certain ornaments. After presenting evidence for "correct" interpretation from Lully to Couperin, Mather concludes with a modern version of Saint-Lambert's axiom: "After studying and playing the numerous trill executions specified by Jean Rousseau, d'Anglebert, Hotteterre, François Couperin, Boismortier and numerous other composers, a performer can rely on his intuition—an intuition based on experience, knowledge and sensitivity—to guide him. At that point, most trills will 'come out right' without forethought." This advice should be applied more widely to the playing of ornamentation of all periods as well as to other aspects of music making.

David Lasocki brings us up to date on the life of John Loeillet (1680–1730), perhaps the first important English baroque flutist and composer, not to be confused with the Ghent composer Jean-Baptiste Loeillet (1688–1715). John Loeillet, an oboeist as well as a flutist, began his career in England playing the music of Purcell at the famous Drury Lane Theatre where he was joined by his student, La Tour. Lasocki's detailed examination of Loeillet's life as a musician in the first three decades of the eight-

eenth century in England allows us an excellent opportunity to use this microcosm to study the general tenor of musical life at this particularly interesting time and place.

Nikolaus Delius writes here about two flute concertos in *G* and *D* (*pace* Mozart) by Pietro Nardini that are additions to the trio sonatas of Nardini listed in the Vester repertory catalogue and elsewhere. (These pieces are, however, listed in Vester's new *Flute Music of the 18th Century*, published by Musica Rara, 1985, an excellent gift for any serious flutist.)

John Gunn's *Art of Playing the German Flute*, one of the most important post-Quantzian treatises, is the subject of Mirjam Nastasi's essay. She makes an interesting analogy between art and music in both the literal sense (use of common terminology) and the figurative (the "art" of musicianly performance). She also reminds us that Gunn's treatise, an extraordinary document concerning classical flute playing, provides insight into many areas of music making of its time and is known to have influenced later instrumental treatises, which contain references to it.

A short article in Dutch by Rineke Smilde surveys articles on flutists, flutes, and flute music that appeared in the *Amsterdam Courant* from about 1740–1760. Karl Ventzke writes of F. L. Dulon, son of a flutist, who was blind almost from birth. Dulon, whose precocious musicality and phenomenal memory brought him great attention, traveled extensively particularly in England and in Russia, where he remained until 1798. Upon his return to Germany he wrote an autobiography; Ventzke deals here with the provenance, printing history, and contents of that volume.

Karl Lenski provides background material and analysis concerning the relationship between Debussy and Pierre Louÿs, author of the poetry which inspired Debussy's *Bilitis* songs and the *Six Epigraphs* for flute and piano. The work was done in preparation for the new edition of these pieces to be published by Universal.¹

At the beginning of the volume Peter van Munster introduces Vester, a "learned musician" in the Quantz tradition, with a short essay on his education, professional life as a teacher and performer, and publications. Vester is well known to Americans as a superb teacher and as the flutist with the Danzi Quintet, which he helped to form in 1956 for the express purpose of performing the Schönberg Quintet. The repertory of that ensemble ranged from music of the classical period played on original instruments to contemporary works commissioned by the Quintet, particularly works

1. The *Chansons de Bilitis*, Universal edition 16954, are listed in Blackwell's *Music Bulletin* 55 (1985).

commissioned from Dutch composers. Vester has also been tremendously influential as an editor of works from Haydn and Mozart to Frank Martin. His own article on publishers, editors, and editions appropriately concludes this volume. He stresses the importance of the quality of the editions we use, and castigates editors for the bad editions of early music perpetrated by "nearly all American and French publishers." He chooses an excellent set of interesting and instructional examples: a flute part for the Poulenc sonata composed in 1958, "edited" by Jean-Pierre Rampal, that makes no reference to the location of the autograph; and errors in the Ur-text editions of such well-known works as the Bach B-minor Sonata and the Schubert Variations. He suggests that where there are no autographs, as is the case with the Bach E-major and E-minor Sonatas, the articulations may originate with the copyist, so that Schmitz's suggestion (in the preface to the Urtext edition) that we use them as examples for Bach's other works for flute is questionable. In this article we see the exceptional musical intelligence that has characterized Vester's musical life.

Concerning the Flute stands as an example of the kind of scholarly publication that the flute world has discussed but not produced for the past several years. The articles are well researched and interestingly written, and they cover a range that would make some of them, at least, valuable to any reader seriously interested in the flute. The book is of value not only as a *Festschrift* for Frans Vester and as a gathering of fine articles, but as a model for future collections of studies on the flute.

JANE P. AMBROSE

Henry George Fischer. *The Renaissance Sackbut and Its Use Today*. New York: Metropolitan Museum of Art, 1984. x, 61 pp.; 25 black-and-white illustrations. Paperbound, \$4.50.

The trombone has the reputation of having changed very little since its invention some five centuries ago. The comparative stability of its design has proved beneficial to the revival of renaissance music, since the skills of modern trombonists are immediately transferable to reproductions of earlier forms of the instrument. These same performers naturally bring with them some anachronistic musical and technical predilections; and their demands, along with modern methods of fabrication, have had a profound influence on the nature of available reproductions. As a result, the typical

modern sackbut masquerades as a copy but differs considerably from an original instrument.

Noted Egyptologist Henry George Fischer, himself a devoted amateur trombonist and sackbut player, has spared few pains in his attempt to discover the true nature of extant originals, with the ultimate aim of finding an acceptable reproduction. Despite his opening claim that "this booklet is primarily addressed to amateur trombonists and sackbuters," the questions he raises and the answers he finds should be of vital interest to anyone involved with the history of the sackbut or performance on it.

The bulk of Fischer's text concerns the physical nature of the instrument; his few comments concerning performance practice betray a rather limited view of its original functions. He is quite frank in expressing his bias towards its use as a soft-toned instrument. Although he admits that it was also employed as a loud instrument in ensemble with shawms, he suggests that "this need not imply that it was particularly suited to accompany loud woodwinds; it may initially have assumed this role for want of a better alternative." The truth is, of course, that it continued to be a member of the shawm band until the latter's demise; if it was perceived as inadequate, no complaints seem to have survived! In any case, Fischer is convinced that some of the sackbut's constructional peculiarities, such as the extremely thin metal of its bell and the use of non-rigid stays, are intended to facilitate soft playing, and he generally ignores or discredits alternative explanations. The thinness of the bell, which it shares with the early trumpet—a loud instrument—may be the natural result of flaring the end of a straight-sided cone; and the reason for the curiously loose construction of the sackbut, which allows it to be easily disassembled, may well have been a simple need for compact storage. The members of the mounted band in the *Triumph of Maximilian I*, plates 77–79, are provided with "holsters" for their instruments that would fit in the case of the sackbuts only if they were knocked down.

The reasons for these features may be irrelevant if they have a significant acoustical effect. Just how significant that effect might be is likely to remain the area of greatest controversy concerning this publication. It seems to me that further acoustical study is necessary to ascertain the nature and degree of difference made by the thinness of the bell, the non-rigid stays, the work-hardening of the bell by hammering, and other factors—to determine, in short, to what extent their effects are perceptible to players and listeners not already predisposed to discern them.

Despite this skepticism concerning one of Fischer's main points, I feel that there is much valuable information in this short book. The beautifully

reproduced photographs alone are worth far more than the modest price. They are supplemented by a few charts, woodcuts, and nicely drafted line drawings. It would have been more convenient for the reader, however, if the figures had been individually captioned; one must refer constantly to the list of illustrations. Of great interest are the details Fischer provides on a tenor sackbut mouthpiece whose provenance and date (Anton Schnitzer, 1581) can be established with comparative certainty—a rare circumstance, as he points out.

Appendix 1 is a list of several surviving original sackbuts, with their bore and bell diameters. Tenors are divided into narrow- and large-bore categories; the narrow bored outnumber the large bored by approximately three to one. Although the list does not pretend to be exhaustive, it strongly supports his conclusion that there is no discernable progression from either type of bore to the other: early and late dates are found in both categories.

Appendix 2 is an annotated list of all eleven of the contemporary manufacturers for whom Fischer could find data, giving their addresses, models, and prices, with comments on typical waiting periods, the availability of lacquering, cases, mouthpieces, and other accessories. Any personal experiences Fischer may have had with the products are also mentioned. Details of the list are obviously subject to change, but it will remain for some time a useful guide to comparison shopping for a modern sackbut. Appendix 3 lists nomenclature in English, French, and German for the parts of the sackbut and its mouthpiece, with schematic drawings provided for reference.

Although Fischer's greatest emphasis is on the physical nature of the sackbut, he does take up one fundamental issue of historical technique. This is the important question of nominal pitch, a matter of considerable modern controversy. Some writers give B \flat as the key of the tenor, while others point to the early sources which put it in A. Two of these, Aurelio Virgiliano and Daniel Speer, are unequivocal in specifying positions in A.¹ Michael Praetorius, on the other hand, has been quoted by members of both camps, for the range he gives for the tenor can be viewed as compatible with both systems.² Advocates of the A system reckon the positions diatonically, as do Speer and Virgiliano, while advocates of the B \flat system assume seven chromatic positions, as on the modern trombone, giving a

1. Aurelio Virgiliano, *Il Dolcimelo*, c. 1600, facsimile ed. (Florence: Studio per Edizioni Scelte, 1979); Daniel Speer, *Grund-richtiger . . . Unterricht der Musicalischen Kunst* (Ulm, 1687, 1697).

2. Michael Praetorius, *Syntagma musicum* 2 (Wolfenbüttel, 1619).

further semitone extension. Thus E, given by Praetorius as the lowest "natural" note, can appear as the lowest note in either system.

Fischer notes an inconsistency in Speer's description of the relationship of the lower positions to the bell, suggesting that this discrepancy might mean that systems in *both* B \flat and A were in use. While Speer's inconsistency cannot be denied, expanding it to a complete alternative set of positions seems, at the very least, a long leap. Fortunately Praetorius provides further information, hitherto ignored in the literature, it would seem, which eliminates any ambiguity and definitely establishes A as the tonality. While never specifying the positions for the tenor, Praetorius does specify those for the next larger size, the so-called *Quart-Posaun*. In his plate 8, next to the slide of no. 2 we find listed the notes available from different extensions. From this it is clear that this instrument was in D. Since the relationship between the *Quart-Posaun* and the tenor can be either a fourth or a fifth, the tenor must be in either G or A; of these, only the instrument in A fits the specified range.

Despite my doubts about specific conclusions, I admire Fischer's dedication and perseverance in pursuing his topic. He has produced a practical guide to the sackbut that should prove extremely valuable to the performer of early music, and in so doing, has contributed significantly to organological research.

HERBERT W. MYERS

Robert Garofalo and Mark Elrod. *A Pictorial History of Civil War Era Musical Instruments and Military Bands*. Charleston, W. Va.: Pictorial Histories, 1985. viii, 116 pp.; 20 color, over 200 black-and-white illustrations; plus a 7-in. 33 $\frac{1}{3}$ -rpm recording. Paperbound, \$9.95.

Garofalo and Elrod have made an excellent contribution to the small but growing amount of material available about nineteenth-century wind instruments and bands. The history they discuss in some seventeen pages of text is generally accurate, and brings together a lot of pertinent information and references for the first time.

Most important, however, are the ninety-five pages of photographs documenting instruments, bands, and bandsmen. There are about twenty color photographs, all, except for the cover, of drums or drum materials exclusively. The more than 200 black-and-white photos are about evenly

divided between brass instruments and reproductions of pictures of bands and bandsmen.

The visual highlights of the book are the drum photographs provided by George Carroll. Many of them show excellent detail, and the views showing drum equipment such as sticks, straps, and beaters of various kinds are particularly useful. The wind instrument photos are excellent documents of types, designs, and equipment, but are less successful visually. Most are reasonably clear, but some are not the best exposures, and a few others have distracting shadows and backgrounds. The reproductions of original photographs of bands and bandsmen are also reasonably good in quality, and are outstanding documents of the bands of this period. All of the photographs have excellent captions, with useful information that is really the outstanding feature of the book.

Mark Elrod has had many years' experience working with the instruments and historical materials of this period, and he knows the sources well. Robert Garofalo is an excellent scholar who took several years to study the available material, work with the instruments and music, and finally select and edit what has gone into this publication. Their book is divided into three main sections: the first dealing with brass instruments, the second with percussion instruments, and the third with bands and bandsmen. Both the wealth of photographs, many never published before, and the excellent text and notes make it an outstanding historical document. A discography and bibliography that list the best and most useful materials are included as well as an index. An excellent sample recording comes with the book.

There are many uses for a publication of this kind: it is a fine reference for anyone interested in the Civil War, a concise summation of what is presently known about American band history up until Sousa, a beautiful album of photos useful to many historical societies (photos of bands and bandsmen from twenty-one states and the District of Columbia are included), an outstanding guide for groups forming Civil War period bands, and an excellent source of photos and information about makers for collectors of early American musical instruments.

A few deficiencies and inaccuracies deserve comment. Wind instrument specialists will be disappointed by the lack of any color photos of the brasses. The drums are certainly colorful and demand color photos, but the brasses have colors of interest as well. Brass of this period was not highly buffed and was seldom perfectly clean. Its surface appearance was a richer, mellower, and more varied color than the strident ultra shine we are accustomed to today. Many of the instruments of brass also used Ger-

man silver for bell garlands, braces, and mounting plates, giving the instruments contrasting colors and a distinct outline. Keyed bugles offered even more color: deep reddish copper was used for the body of the instrument and light golden brass for the bell garland, keys, and other trim.

The implication on page 2 that the addition of a third valve was a later improvement is incorrect. The necessity of three valves for some instruments was mentioned by the inventors in the original patent documents; and indeed a three-valve trombone was one of the first instruments made by Bluhmel in 1818. Instruments had three valves instead of two not because three was an improvement, but because some, like the horn and trumpet, could get by with two (playing as they did from around the fourth harmonic up), while others (playing from around the second harmonic) needed three.

I doubt that the soft metal had much to do with the tuning problems brought on by "changes in humidity, temperature, and exposure to sunlight or rain" (p. 8). Changes in tuning related to the softness of the metal were more likely to occur when the instruments were dented and bent out of shape.

The first successful chromatic brass instrument was the B \flat or C keyed bugle, not the E \flat (p. 10). Even in the United States where the instrument came into use a little later, the first well-known player, Richard Willis, played the B \flat instrument and bought B \flat instruments for his band. The high range of American brass bands was probably due to the practice of later soloists such as Ned Kendall and Eben Flagg, who preferred the E \flat instrument and who formed and led the first brass bands.

As Herbert Heyde has shown, a drawing of the early version of the twin-piston valve was published in the *Allgemeine Musikalische Zeitung* by Christian Friedrich Sattler of Leipzig in 1821. The valves identified as Vienna twin-piston valves on pages 26, 28, 31, and 58 should properly be called Sattler valves. The Vienna twin-piston valves patented by Leopold Uhlmann in 1830 were undoubtedly the improved version common to this day in which the sliding tubes are completely enclosed and only the activating rods extend out of the casing.

Few people as yet appreciate the role of bands in spreading musical literacy across the early United States. For many Americans during the nineteenth century bands were their music schools, dance orchestras, concert entertainment, community- and political-event crowd gatherers, and generally their only readily available functional music. They were also a pretty good way to stay out of trouble in war time. This book addresses an important segment of this history, and to some extent speaks not only about

bands during the Civil War, but also reveals something about their place and importance in the communities from which all of these musicians came, and to which they returned after the war. It is an excellent book, important to the library of every music historian and well worth the \$9.95 price.

ROBERT E. ELIASON

The following communication has been received from Albert R. Rice.

In his excellent article, "Johann Sebastian Bach's Pitch Standards: The Woodwind Perspective" in this *Journal* 11 (1985), Bruce Haynes suggests (p. 64 and note 59) that it was the recorder or oboe to which J. C. Denner and his colleague Johann Schell referred in their 1696 application to the Nuremberg council for a *Meisterrecht* to make for sale the "French musical instruments . . . which were invented about 12 years ago in France."

Herbert Heyde has found an important document, the 1687 *Römhilder Kammerrechnungen*, associated with the *Kapelle* of Duke Heinrich of Sachsen-Römhild (who reigned from 1680 to 1710), which verifies the demand in Germany for two new "French" instruments, the "hautbois" and the "chalimo." It records the following instruments ordered from Nuremberg: "ein Chor Chalimo von 4. stücken" and "ein Chor Hautbois bestehend in 5. stücken."¹ If these instruments were ordered from J. C. Denner, as Heyde suggests, then they were probably among the earliest German-made instruments at French chamber pitch. The document also seems to support Doppelmayr's assertion in 1730 that J. C. Denner was responsible for improving the chalumeau.²

Haynes states that Bach apparently wrote no music for the clarinet, and that no clarinets by Leipzig makers are known to survive (p. 74, note 106). While it is true that neither the chalumeau nor the clarinet seems to have been available in Leipzig during the early eighteenth century, there is extant at least one two-keyed clarinet by Gottlieb Crone of Leipzig, whose instruments include a trumpet dated 1744 and a jagdhorn dated 1750.³

1. Herbert Heyde, *Historische Musikinstrumente im Bachhaus Eisenach* ([Weimar]: Bachhaus Eisenach, 1976), 193. The document is found in the Staatsarchiv Meiningen, according to information received from Heyde in correspondence.

2. Cf. Colin Lawson, "Chalumeau," *The New Grove Dictionary of Musical Instruments* 1:328.

3. Lyndesay G. Langwill, *An Index of Musical Wind-Instruments*, 6th ed. (Edinburgh: The Author, 1980), 34. Crone's clarinet is in the Rijksmuseum of Amsterdam: see *Historische Blaasinstrumenten: De Ontwikkeling van de Blaasinstrumenten vanaf 1600* (Kerkrade: Haags Gemeentemuseum, 1974), 28.

Albert R. Rice has also sent the following communication.

In the article in this Journal 11 (1985) by Peter J. Bukalski and myself, "Two Reed Contrabasses (*Contrabassi ad ancia*) at Claremont," p. 115, it is stated in note 1 that Curtis W. Janssen developed the nation's first course for the training of musical supervisors. According to E. B. Birge, *History of Public School Music in the United States*, 2nd ed. (Washington: M.E.N.C., c. 1937), pp. 115 and 139, Julia Ettie Crane began training music supervisors in 1884 at the Normal Music Institute at Potsdam, New York.

The Editorial Board invites comment on the following communication from John W. Coltman.

I would like to add my strong support to the recommendation by Arnold Myers in "Pitch Notation: A Plea to End Confusion," *Newsletter of the American Musical Instrument Society* 14 no. 2 (June 1985): 5. I hope that the Editorial Board of this *Journal* will see fit to use the standard notation adopted by the U.S. A. National Standards Institute.

As most musicologists are aware, in the past a variety of systems have been used to designate the octave in which a given note falls (such a designation is a requirement, for example, in describing the range of notes that a particular instrument covers). Often it is uncertain just what note an author intended, since the same symbol may have different meanings in different systems.

The "Helmholz" system presently used by the *Journal* employs a mixture of upper and lower case letters, double letters, and superscript primes, e.g. GG, D, c, a', b''', etc. The clumsiness of this system, its lack of clarity to the uninitiated, and its susceptibility to printer's errors are well known.

The U.S.A. National Institute in 1960 adopted as standard a simple system in which capital letters are used for all notes, with numerical subscripts running from 0 upwards to designate the octave. Thus the lowest C on the Piano is C₁ (the lowest A is A₀) and middle C is C₄, each note above the C in any octave carrying the same subscript.

Thus A₄ is the A above middle C, and is A-440. The occurrence of the 4's in the A₄ equals A-440 provides an easy way to remember the basis of the system.

The system is easy to interpret, simple to pronounce and type (the subscript may be placed on the same line if necessary without loss of clarity), and free from the ambiguities that plague the older systems. Especially

convenient is the ease with which intervals can be calculated. For example, the flute with its range from C_4 to C_7 has a range of three octaves (7-4).

The U. S. A. National Standard system is now in widespread use in literature dealing with musical acoustics, both in this country and abroad. *The Galpin Society Journal* has adopted it within the last few years and uses it exclusively. The *Journal of the American Musical Instrument Society* would, by adopting this system, be doing a favor not only to its present readers, but especially to those in the future who will refer to its articles for research information.