Karl F. Hachenberg und Hellmut Ullwer. *Messing nach dem Galmeiverfahren—Drei Handschriften des 18. Jahrhunderts experimentell erläutert* [Brass Made by the Calamine Process—Three Eighteenth-Century Manuscripts Explained by Means of Experiments]. Hamburg: Disserta-Verlag, 2013. 704pp., Illus. ISBN 978-3-95425-174-2. Hardback. Price: 89.50 €.

The scientific study of brass used in historical brasswind instruments has captured the interest of several scholars in recent years. Restorers want to learn more about corrosion processes, such as dezincification and stress-corrosion cracking, in an effort to establish a scientific basis for their conservational procedures. Curators, faced with the task of restoring historical instruments, want to know which parts can be replaced or supplemented; they also seek guidance for the often frustrating task of establishing an appropriate time-frame for an undated instrument. Lastly, instrument makers hope to determine what type of material to use and how to process it for historically informed manufacturing.

The metal alloy used in pre-nineteenth-century brasswind instruments differs considerably from contemporary brass as regards its physical and mechanical properties. For the production of period brass sheet, different ores as well as different production processes were employed. Early craftsmen used the cementation method instead of the direct method, extracting the primary element zinc from the ore calamine. Further, the cast block of metal was not milled as in modern brass production, but was thinned to a sheet by means of multiple water-powered hammers. Since the details of production were closely guarded trade secrets, very little precise information about these processes has come down to us.

The relevant literature of the period, such as Johannsen Biringuccio's *De la pirotechnica* (Siena, 1540), describes some parts of the process correctly—although not entirely. Other major sources are the eighteenth- and early nineteenth-century encyclopedias, including Jean-Gaffin Gallon's particularly insightful *Die Kunst Messing zu Machen* (Leipzig, 1766).¹ Because the production processes were carefully guarded secrets, these authors could report only what they had seen first-hand, read, or heard from other people. Consequently, one can say that these primary sources offer an incomplete picture of the manufacturing process. Direct scientific study of historical brass objects therefore is imperative.

Although the archaeometallurgical study of early brass objects is well-established, it is primarily concerned with cast objects that are fundamentally quite different in consistency from historical brass sheet. Scholars such as Joseph Riederer of the Rathgen Institute in Berlin and Mark Pollard of the School of Archaeology of the University of Oxford have provided metallurgical data for thousands of historical art objects made of brass. The principal contribution of Hachenberg and Ullwer's *Messing nach dem*

DOI: 10.2153/0120140011005

Galmeiverfahren lies in the fact that their work is supported by data derived from three unpublished eighteenth-century sources written in the old German script known as *Kurrent*. Further, Hachenberg and Ullwer verify and validate the information provided by these authors by means of experiments with scale models of original tools and process simulations.

The most comprehensive of these sources is the *Vollständige Abhandlung von Messing Fabriquen*, a 180-page manuscript written by Markus Fulda in 1717. Fulda, who later became manager of the Bettenhausen brass foundry, traveled to several European brass foundries and described his observations in considerable detail. He supplemented his written observations with numerous scale drawings of machines and tools.

Two further sources include a nineteen-page anonymous essay, entitled *Messing-Prozess*, which describes the brass production at the foundry of Achenrain in Tyrol, and Mathia Ellmayer's *Mössing-Werk Rosenheim das ist Praktische Abhandlung vom Messingmachen* (1780). The last work, 120 pages in length, accurately describes the manufacturing process of brass at the Rosenheim foundry, where Ellmayer was employed. All three of these sources are transcribed at the end of the book.

In chapter 3 of their book, Hachenberg and Ullwer provide a historical context for these sources as well as detailed biographies of their authors. This chapter also describes important developments in the brass industry in central Europe up to the mid-eighteenth century, including detailed descriptions of important manufacturing sites such as Salzburg, Achenrain, Nürnberg, Grünau, Bettenhausen, and Rosenheim. By means of a concise discussion of the ores used in the manufacturing process in chapter 5, the authors guide the reader thematically to chapter 6, which is concerned with the melting process. This topic is further elaborated in chapter 7, which describes field-testing of Fulda's and Ellmayer's specifications, using a furnace reconstructed after Theophil Presbyter's description in *Schedula diversarum artium* (ca. 1125).²

In chapter 8, on the manufacture of brass sheet, Hachenberg and Ullwer elucidate this procedure based on descriptions given in the three manuscripts and field-tested by means of experiment. Chapter 9 is concerned with the production of brass wire, which is surely of great interest for the early keyboard scholar and provides an in-depth view of the topic. In the remaining two chapters, the authors draw the reader's attention to surface treatments, such as etching and scraping, and also to the use of water-powered machines.

Chapter 12 should be of considerable interest to brasswind scholars, for here the chemical composition of historical brass objects is discussed. Among the research objects are early brass coins, instruments, wires, and needles. Karl Hachenberg is considered one of the pioneers of metallurgical research as it relates to organology. Throughout most of his career he held executive positions at several metalworks in Germany. In addition, he at one time maintained an extensive collection of historical brasswind instruments. Helmut Ullwer was technical director at an important brass foundry in Germany. These two men, with their extensive knowledge and experience in the realms

of both technology and the history of brasswind instruments, have produced a work that is of great interest to brasswind scholars.

The length and detail of this book—not to mention that fact that it is written in German—might discourage some readers from delving into it. It is true that the authors assume a certain level of technical knowledge of the subject; however, the book has a detailed index and table of contents that will help the reader with limited knowledge of the German language find what he/she is looking for. Finally, the book is well illustrated with charts and graphics that amplify the text, and there is an excellent and comprehensive bibliography.

Hannes Vereecke

Notes

- ¹ Vol. 5 of a twenty-volume set entitled *Schauplatz der Kunst und Handwerk* (Berlin: Rüdiger, 1762–1805).
- ² Modern edition as *Theophili presbyteri et monachi libri III; seu, Diversarum artium schedula*, ed. Charles de l'Escalopier and Joseph Marie Guichard (Paris: Firmin Didot, 1843); Eng. transl. by John G. Hawthorne and Cyril Stanley Smith as *On Divers Arts: the Treatise of Theophilus* (Chicago: Chicago University Press, 1963).

Horns and Trumpets of the World: An Illustrated Guide by Jeremy Montagu. Lanham, MD: Rowman & Littlefield, 2014. ISBN 978-0-8108-8881-4. 256 pages. Price: \$75.00. Information

www.rowan.com

In a few years, Jeremy Montagu will celebrate his ninetieth birthday and he remains remarkably vigorous and productive. He is the current President of the Galpin Society, was recently elected a fellow of the Society of Antiquaries of London, and has continued to publish important research studies. Recent books include *Musical Instruments of the Bible* (2001), *Timpani and Percussion* (2002), and *Origins and Development of Musical Instruments* (2007); and now Rowman and Littlefield has released his newest opus.

On the surface, *Horns and Trumpets of the World* is a detailed catalogue of Montagu's own extensive and important collection of musical instruments. It is that, but it is also much more. While Western musical instruments are represented, non-Western instruments are prominent in this study and it is that focus that makes this book so valuable. The book is divided into thirteen chapters and includes several indexes. Some

of the topics covered are: trumpet and horn instruments made of various non-metallic materials (such as bark, cane, gourd, and even seaweed), side-blown instruments, shell trumpets, short end-blown trumpets and horns, large end-blown instruments, bugles, fingerhole instruments, technology of brass instruments, playing techniques, accessories and extensive lists of makers, important instruments, and musicians. All of this is supplemented by many illustrations.

Montagu traces the history of many of the instruments and instrument types and often includes fascinating descriptions of how these instruments are woven into the social and cultural fabric of the people who use them. The chapter on the multitude of shell trumpets is particularly illustrative. Montagu not only follows the trails of shell trumpets to every far-flung corner of the globe where they are played but also explains the subtle differences among them, in their construction and also in their functions in various cultures. This treatment is extended to many other types of instruments. Another important aspect of this study is Montagu's examination of ancient and medieval instruments. He shows cross-cultural influences in the development of many of these instruments, be it from Africa or other non-Western cultures. Asian trumpets and horns are also extensively discussed. While the majority of instruments examined are from Montagu's personal collection, he also includes trumpets and horns from other important museum and private collections.

In addition to the valuable information in this book, an added bonus is the author's charming conversational tone, manifested in the form of wonderful anecdotes about the acquisition of particular instruments in his collection. He offers insight into the thrill of amassing a large and important instrument collection as well as a detailed social and organological study of the instruments. Kudos to Jeremy Montagu.

Jeffrey Nussbaum

Trevor Herbert and Helen Barlow. *Music & the British Military in the Long Nineteenth Century.* New York: Oxford University Press, 2013. 353 pages. ISBN 978-0-19-989831-2. Price \$74.00.

Familiar to readers of the *Historic Brass Society Journal*, Trevor Herbert teams up with Open University (Milton Keynes, UK) colleague Helen Barlow in examining historical functions and philosophical considerations of military music history. In addition to familiar sources, including those of Johann Ernst Altenberg, Robert Hinde, James Hyde, James Turner, and Francis Markham, readers will also recognize nineteenth- and early twentieth-century references to J. A. Kappey, J. Mackenzie-Rogan, George Miller, J. Paine, and others—arranged in a single setting that is bound to be of aid to military music historians in particular and military historians in general. I was particularly

pleased to find numerous references to Henry George Farmer, whose work seems to be under scrutiny of late, but whose contributions are crucial to any scholarship dealing with Western and especially UK military music. The authors have also done their homework in terms of gleaning information from contemporary scholars—individuals within military history, military music history, and music history—and numerous official records: regulations, standing orders, memoranda, etc. With all referential material, the authors do a commendable job in remaining respectful—even when they disagree with the individual(s) being referenced—not always an easy job in print. The publishers' and/or authors' decision to use footnotes rather than endnotes is a welcome one, accommodating at least this reader's desire for quick reference.

Beginning their account with a chronicle of the utilitarian signaling properties of trumpets, fifes and drums, Herbert and Barlow continue on with a history of eighteenth-century British military "bands of music" based on the *harmoniemusik* model. To give further depth to their work, the authors paint their military music picture on a larger canvas of rich descriptions of social and political arenas—communal structures topped by aristocrats and gentry. Moreover, within these structures, they describe a "socially aspirational class" comprised largely of officers who bought their ranks through a purchase system which, the authors suggest, resulted in dedication to regimental structures and lineages, and the building of an environment that encouraged a tradition of bands funded by officers. Since these bands were regarded as private ensembles of the officer class, they became an extension of the civilian artistic patronage system. Consequently the authors argue that while bands became important for ceremonial drill, it was this system of concerted music attached to a higher economic status that placed bands firmly in regiments.

While filling officer positions with men eager to purchase their commissions apparently was not a difficult task, finding individuals to fill enlisted ranks was more so. As bands came to represent the regiments they served, military officials found that smartly dressed soldiers marching to the sounds of these bands had positive impacts on recruiting—not only for bands, but for regiments in general. In terms of recruiting musicians, Herbert and Barlow indicate that prospects for many recruits were more favorable within the military than in civilian circles since military musicians often played for huge audiences. They were also able to see the world while doing so—and were able to belong to well-funded, well-appreciated groups of like-minded comrades—not unlike the draws used to entice today's military musicians.

Other pieces of historical content that the authors outline are: 1) training—including the establishment of the Royal Military School of Music at Kneller Hall and interesting comparisons with civilian schools of music; 2) the close connections between the military and instrument makers (and developers) and music publishers; 3) the connections between military bands and the civilian brass band movement; and 4) the consumption of military music by the general public as a popular genre. All of these elements serve as the basis of what Herbert and Barlow regard as the relationship between the military and wider spheres of musical activity throughout the

nineteenth-century British Empire, and which are evidenced in three distinct phases. Grouping the first two together, the authors maintain that military music is a form of patronage that functioned in the interests of the army, and which also accrued significant benefits to the musical life of the country through recruitment to the music profession and by contributing to the development and sustenance of its commercial value. The combined themes of increased standardization, unification, and professionalization of military music, and a discernible change in its role and reception dominated the third phase, which began about mid-century.

Within this historical view, I think that one of the most thought-provoking arguments put forward by Herbert and Barlow concerns the shaping of British culture and the British people themselves. Reflecting on the funeral of the Duke of Wellington, the authors cite a contemporary news story from the *Illustrated London News* of 25 September 1852, wherein the writer suggests that "The English are said to be a people who do not understand shows and celebrations, or the proper mode of conducting them....[u]nlike the French and other nations of the Continent, they have no real taste for ceremonial...."As this is not the Britain that is apparent at the time of this writing, I was fascinated with the authors' presentation of how British culture and ritual developed throughout the century—and how military music aided with the task.

While this volume serves as an excellent synthesis of military music history, perhaps Herbert and Barlow's well-voiced and well-researched arguments concerning larger pictures of music culture are the element that will give their book staying power. Overarching themes of this nature suggest that military music: 1) had an enormous influence on music cultures throughout all social strata because of its pervasive size and the consequent dependence the music industry had on it for most of a century; 2) caused the largest expansion of the music profession up to the late nineteenth century; 3) was one of the major devices for imposing state authority through cultural means, since military music had an important and unique effect on crowds as well as on individuals. Using these themes as a basis, I shall be interested to see if researchers in a future generation take the next step by doing comparative work between these elements and those found in ethnomusicology, including the ten functions of music Alan Merriam investigates in *The Anthropology of Music* (Northwestern University Press, 1964)—especially "the function of enforcing conformity to social norms," "the function of validation of social institutions and religious rituals," "the function of contribution to the continuity and stability of culture," and "the function of contribution to the integration of society." It appears that Merriam and Herbert/Barlow are leaning in the same direction, and I think Merriam would be pleased with these additional lines of inquiry. While by its nature, military music also strongly connects with Merriam's other functions of aesthetic enjoyment, entertainment, communication, symbolic representation, and physical response, it is those cited above that are more in line with the direction Herbert and Barlow are taking.

The book concludes with five appendices, all of which I suspect will be invaluable as resources for further scholarship. Appendix 1: "Regulations, Standing Orders and

Circular Memoranda, etc., Addressing Music" is an excellent collection of statements from various governmental records dealing with military music from 1786 to 1912. Appendix 2: "Printed (Harmonie) Repertoire for Bands of Music, c. 1800: an Indicative List" includes composers, publishers, and instrumentation (various combinations of fife, oboe, clarinet, flute, piccolo, bassoon, trumpet, horn, trombone, serpent, drum, keyboard) for fifty titles of quick and slow marches, quick steps, and divertimenti. Most entries indicate the regiment for which they were composed, with the greatest number (eighteen) being composed by Charles Bridgeman and published by Broderip and Wilkinson in London for the Hertfordshire Volunteers. Appendix 3: "The Duke of Cumberland's Band Archive" is a table of compositions containing the word "military" in their titles or instrumental designation, held in the Duke of Cumberland's Band Archive, housed within the Hanover Royal Music Archive. Composer, title, instrumentation, publisher, and Hanover Royal Music Archive catalogue number are given. "Appendix 4: Indicative List of Band Instrumentations in the Late Eighteenth and Nineteenth Centuries" identifies various instrumentations for British, Prussian, Austrian, French, Spanish, Japanese, German, Russian, and Italian infantry, cavalry, and artillery bands, from the 1793 West Middlesex Militia Band to Spain's three marine division bands of 1894. Also included are various instrumentations from Boosey's Military Journal of 1848; Boosé's Supplemental Journal (previously Jullien's Military Journal) of 1878; representative Kneller Hall student bandmaster exercises of 1865, 1883, 1895, and 1907; representative arrangements by William Winterbottom, bandmaster of the Royal Marines, 1862-68; and instrumentations found in late nineteenth-century didactic manuals and reference works, including those by Charles Mandel (1869), Jacob Kappey (1886), and George Miller (1912). Appendix 5: "The Objects of the Military School of Music (From a Report Published in the Journal of the Society of Arts, 13 July 1866)" is a brief list of realized objectives as a result of the forming of the Military School of Music, which would later be labeled "Royal."

The well-ordered bibliography contains, in addition to citations categorized by "Official British Military Publications," "Parliamentary Publications of the British Government," and "Books, Articles and Other Printed Sources," a listing of thirty-one institutions consulted in the production of the book—museums, archives, records offices, libraries, history centers, and galleries.

An excellently researched, organized, and written work, Herbert and Barlow's *Music & the British Military in the Long Nineteenth Century* will surely find a solid place among the reference works of military history, music history, and military music history as well as within the arenas of cultural and social history. The main concept readers will glean is the importance of military music to wider aspects of music culture, a concept emphasized by the authors' adept removal of it from itself—and its placement within a wider context.

Elisa Koehler. Fanfares and Finesse: A Performer's Guide to Trumpet History and Literature. Bloomington, IN: Indiana University Press, 2014. 264 pp. ISBN 978-0-253-01179-4. Price: \$48.00 (eBook \$39.99). Information: www.iupress.indiana.edu

In the Author's Note, Elisa Koehler asks a fairly uncommon question. After acknowledging the recent publication of a slew of fine brass and trumpet history books, including Wallace and Herbert's *Cambridge Guide to Brass Instruments* (1997), Steele-Perkins's *Trumpet* (2001), the third edition of Edward Tarr's *The Trumpet* (2008), Cassone's *The Trumpet Book* (2009), Wallace and McGrattan's *The Trumpet* (2012), and the first two volumes of Sabine Klaus's five-volume series *Trumpets and Other High Brass* (2012–), she bravely asks: "Why do I have any business writing the book you now have in your hands?" Fortunately for us, she did write this book, because it is not merely another history of the trumpet, but a book with a special focus. Koehler felt that there was a need for a concise guide relating trumpet history to a contemporary approach to performance practice. The result very satisfactorily fills a lacuna not previously addressed. This is not a scholarly treatise. Koehler is well versed in trumpet history and offers many suggestions that the contemporary player might employ, all the while remaining conscious of the historical implications.

Fanfares and Finesse is divided into twenty-one chapters. After an informative introduction in which she outlines the importance of historically informed performance and the many developments in this area, including some very kind words about the Historic Brass Society, Koehler discusses the various types of instruments, the historical periods, musical styles, and other issues facing the contemporary trumpeter. Other topics include (2) the natural trumpet, (3) the modern Baroque trumpet with vent holes, (4) the cornetto, (5) the slide trumpet, (6) the quest for chromaticism, (7) bugles, flügels, and horns, (8) the cornet, (9) trumpets in transition, (10) smaller trumpets, (11) pitch, temperament, transposition, (12) the early repertoire and performance practice, (13) the Baroque repertoire, (14) the Classical repertoire, (15) signals and fanfares, (16) bands, (17) the modern orchestral trumpet, (18) jazz, (19) the solo repertoire, (20) brass chamber music, and (21) trumpeting in the twenty-first century. This is followed by five extensive appendices: (A) important musicians, (B) significant events in trumpet history, (C) museums and collections, (D) selected recordings, and (E) period instrument resources.

When addressing the use of a particular instrument, such as the natural trumpet, cornet, cornett, or slide trumpet, Koehler places it in its historical context and outlines the musical advantages as well as the challenges that it brings to the repertoire. She then treats issues that a contemporary player might have to face, such as how to emulate the tonal qualities of the old instrument on a modern trumpet. She also discusses ornamentation, articulation, phrasing, and tempo, as well as the problems the modern player might encounter when trying his/her hand (and lips) on the historical instrument. Koehler's account of Baroque trumpet music and the repertoire of Bach and Handel is particularly enlightening. Not only does she review the long line of

experiments, from the early nineteenth to the first half of the twentieth century, by instrument makers and players who explored this demanding repertoire, but she does so with a keen eye and respect for the original sound world of the composers. Koehler's tone is informative but conversational. She avoids the moralizing that sometimes enters debates on authenticity. There is no, "What!? You play Gabrieli on a modern Bb Bach trumpet. Never darken my door again, you swine!" Koehler explains the historical setting of the specific repertoire, offers insights into the sound quality of cornetts and sackbuts playing the music with appropriate articulations, but also offers advice on trying to embrace the esthetic even if one plays the music on a modern trumpet. While the book does reflect Koehler's fascination with trumpet history and ideas of how a modern player might learn from a historically informed approach, she also addresses other issues with which a trumpeter of the twenty-first century might have to contend, including orchestral trumpet playing and the contemporary solo and chamber music repertoires.

Elisa Koehler has given us a thoughtful and much needed reference book and guide for the contemporary trumpeter. Her gentle conversational style may convince more players to explore trumpet history and even the broader cultural history in which trumpet music is firmly placed.

Jeffrey Nussbaum

Instruments, Ensembles, and Repertory, 1300–1600: Essays in Honour of Keith Polk. Edited by Timothy J. McGee and Stewart Carter. Brepols Collected Essays in European Culture Series 4. Turnhout: Brepols Publishers, 2013. ISBN 978-2-503-54161-7 (print) ISBN 978-2-503-54200-3 (online). 340 pp.

This publication is a festschrift in honor of Keith Polk, one of the most distinguished scholars in the early brass community. He is a founding member of the Historic Brass Society, a Board member since its inception, a recipient of the Society's Christopher Monk Award, and a world authority on instrumental music in the Renaissance. Not only has he been a major source of guidance and influence for the HBS, he also has been a major influence in Renaissance music studies, as the essays by the twelve contributors to this book demonstrate. The publication of this book honors Polk, in the words of Frank D'Accone, "on the occasion of his entry into the ranks of the Emeriti" after an extensive and distinguished career in academia. As the title suggests, the book is divided into three categories; Instruments, Ensembles, and Repertory. Not coincidentally, these are three areas of research to which Polk has made major contributions and the contributors to this volume pay tribute to his important scholarly efforts.

The section on instruments is primarily concerned with the lute, fiddle, organ, trumpet, and trombone, instruments that Polk has researched extensively. Stewart Carter has pride of place with his article presented first in the book, "A Tale of Bells and Bows: Stalking the U-slide Trumpet." Drawing mainly on iconographic sources, Carter presents a convincing argument for a transitional brass instrument situated between the single-slide trumpet and the trombone. He calls this instrument the "U-slide trumpet" or "short-U-slide trombone." In the essay "The Medieval Fiddle: Tuning, Technique and Repertory," Timothy J. McGee examines the five-string fiddle through the late Middle Ages, noting its tunings, functions, and repertory as a direct predecessor of the Renaissance lira da braccio. H. Colin Slim's essay, "Lute Ladies and Old Men in Early Sixteenth-Century Flemish Paintings: Mirrors, Magdalenes, Mottoes, Moralities, Vanities, Allegories," presents a fascinating look at the social and musical significance of the lute. Andrew Kirkman's contribution, "Organs and Instrumental Performance at the Collegiate Church of Saint-Omer, Northern France, in the Later Middle Ages," brings to light a little-known extended study of the history of the Collegiate Church of Notre-Dame (now the Cathedral) in Saint-Omer. This survey reveals much of the history of the church, including rituals and musical provisions, as well as social and economic life.

Keith Polk's ground-breaking 1968 Ph.D. dissertation, "Flemish Wind Bands in the Late Middle Ages: A Study of Improvisatory Instrumental Practices," has set the bar for all subsequent research on this topic. The four essays in the Ensembles section of this book are clearly indebted to Polk's important work. Kristine Forney explicitly expresses her debt to and admiration for Keith Polk's pioneering archival work throughout Flanders in her essay "Renaissance Piety and Ceremony: Antwerp's Speellieden at Work." Forney extends our understanding of the role of wind bands and other instrumental ensembles in Antwerp. She has given us a fuller view of the range of their involvement in civic and religious musical life. Paraphrasing Gretchen Peters's view, music not only informed and entertained listeners in medieval European urban life, but also reflected and reinforced social and political structures. City patronage of musical forces of many sorts often promoted civic pride and a sense of independence. Her essay, "Music in Late Medieval Tours and Orléans: A Reflection of Political Allegiance in the Loire Valley," demonstrates how, in those two cities, civic independence was very much down-played and musical activity used to promote allegiance to the power of the French monarchy. Virtuoso wind player and scholar Adam Gilbert promotes his thesis using the technique of reverse engineering, a process often employed in other disciplines, including law, computer science, and archaeology. He defines this reverse engineering as, "the process of extracting know-how or knowledge from a human made artifact." Gilbert's essay, "Reverse Engineering Fifteenth-Century Counterpoint: Es solt ein man kein mole farn and Cançon de pifari dco. el Ferrarese," takes the reader on a tour de force trip through theoretical treatises and basse danse repertoire with regard to instrumental improvisation. Gilbert cites his experience in a workshop dedicated to the improvisation of fifteenth-century counterpoint and how Keith Polk provided

insights into the question of improvisation based on his deep understanding of the theoretical writings. Ross Duffin takes a similar turn to the possibilities of improvisation in his essay, "Ensemble Improvisation in the Fifteenth-Century Mensural Dance Repertoire." Duffin makes a strong case in favor of his thesis that "fifteenth-century professional improvisers were capable of spontaneously creating a stylish polyphonic piece out of a monophonic one."

The third section of this book, Repertory, contains four essays that not only display brilliant historical investigations but detailed, hard-core musicological analysis. Frank D'Accone, in his essay "Reclaiming the Past: Archbishop Antonio Altoviti's Entrance into Florence in 1567," examines the intricate details of political, religious, and courtly life, and the musical repertory that played such an important role in those facets of Italian Renaissance society—in particular, the relationship between Archbishop Antonio Altoviti, the Medici family, and the papacy. In her essay, "Out of the Shadows: the Doubling Canon En l'ombre d'ung buissonnet," Louise Litterick tackles a decades-old struggle, that of assigning authorship of particular compositions to Josquin. After lengthy research and analysis, Litterick comes to the tentative conclusion, "For now, En l'ombre should be counted among the relatively small number of extant secular vocal pieces by Josquin composed before 1500." David Fallows's essay, "A Hidden Arrangement of Gentil madonna," embraces similar intricate historical research and musicological analysis. Building on ground-breaking research by Polk, Fallows makes a strong argument for an early instrumental style based on the construction of this work. The last essay in this section is by the musical polymath Joshua Rifkin. In his essay, "Singing Josquin's Miserere in Ferrara: A Lesson in Ficta from Bidon?" Rifkin presents some guidelines to one of the thorniest issues in Renaissance music studies, that of musica ficta. These last four essays are not for the faint of heart. The analysis in these pages is not light reading. However, the rigor and intellectual depth here as well as in the first two sections of this festschrift are a fitting tribute to Keith Polk, who paved the way for much of the research that has been presented in his honor. Kudos, Keith!

Jeffrey Nussbaum

Sabine Katharina Klaus. Trumpets and Other High Brass: A History Inspired by the Joe R. and Joella F. Utley Collection. Volume 2: Ways to Expand the Harmonic Series. National Music Museum [NMM], University of South Dakota, 414 East Clark Street, Vermillion SD 57069, 2013. ISBN 978 0 9848269 2 6. 8½ x 11", xvii, 315 pages, 537 illustrations mostly in color, graphs, charts, DVD with musical examples. Price \$120.00, vols. 1 and 2 together \$190.00.

Text edited by Howard Weiner. Principal Photographer: Mark Olencki. Design: Jacqueline Block. Printing coordination: Joanne Bolton.

Trumpets and Other High Brass is a five-volume series that will end with the modern trumpet. The series is funded by the Joe R. and Joella F. Utley Foundation. Those familiar with Sabine Klaus's vol. 1 (on natural brass instruments), with its depth of perception and great detail, will not be surprised to see that with the present vol. 2 she has left virtually nothing out. Its six chapters are jam-packed with information. They are: (1) The Slide Trumpet. (2) The Cornetto. (3) The Serpent—A Member of the Cornetto Family? (4) The Invention Trumpet and the Stopped Trumpet. (5) The Keyed Trumpet. (6) The Keyed Bugle. Appendices follow: (1a) A checklist of pre-valve instruments in the Utley Collection. (1b) Index of NMM inventory numbers for Utley Collection instruments. (2) Cornetti in the 1589 inventory of the Stuttgart court chapel. (3) Bill of complaint from 1818 concerning the patent rights for Haliday's keyed bugle. (4) Excerpt from a letter by Henry Distin regarding the introduction of the keyed bugle in France and Russia. The volume is completed by a glossary of terms, a bibliography, a general index, and photo credits, as well as a DVD with musical examples recorded by noted specialists and available in the two formats NYSC and PAL (ISBN 978 0 9848269 3 3).

The existence of a single-slide trumpet during the Renaissance has been hotly debated ever since 1950, when Curt Sachs postulated its existence in a seminal article. Since no instruments of this type survive, scholars must turn to iconographical evidence. Sabine Klaus had the excellent idea of comparing various depictions from the late fifteenth century by Hans Memling, often cited as proof of slide trumpets, with slightly later ones from Middle Eastern illuminations showing military trumpets, which "cannot possibly be slide trumpets," being held in a similar manner. After weighing the evidence, Klaus comes to the conclusion: "Until further evidence comes to light, we cannot be sure that the slide trumpet existed [in the West] in the fourteenth and fifteenth centuries."

With the German Baroque slide trumpet, we are on firm ground. The German single-slide trumpet was fully chromatic above the fourth note of the harmonic series and was rather clumsy to operate, since the entire instrument had to be pushed out and in. The earliest surviving German slide trumpet, made in 1651 by Huns Veit, is now in Berlin's Musikinstrumenten-Museum. It was used in a Naumburg church. Indeed, German single-slide trumpets seem to have been used mainly in churches and their towers for the playing of chorales. It is therefore no accident that J. S. Bach's foremost trumpeter, Gottfried Reiche (1667–1734), left such an instrument at his death. According to Klaus (footnote I/38), Bach wrote parts for tromba da tirarsi in the following cantatas: BWV 5, 20, 46, 67, 77, 124, and 162. On the basis of our own work on the collection Bach for Brass and also Ulrich Prinz's book, Johann Sebastian Bachs Instrumentarium: Original quellen, Besetzung, Verwendung (Kassel etc.: Bärenreiter, 2005, an important publication missing from Klaus's bibliography), her list must be differentiated. Here follow the cantatas' titles as they appear in the original manuscripts, with the names of their respective copyists in parentheses:

```
BWV 5, 20: Tromba (J.A. Kuhnau) da Tirarsi (JSB), 15 Oct. 1724 and 11 June 1724
BWV 46: Tromba. ô Corno da Tirarsi (JSB, 1 Aug. 1723)
BWV 67: Corno. (J.A. Kuhnau) da Tirarsi (JSB), 16 Apr. 1724
BWV 77: Tromba da Tirarsi (probably J.C.F. Bach, 22 Aug. 1723)
BWV 124: Corno (JSB, 7 Jan. 1725); Tromba da tirarsi (anon., red ochre, after 1750)
BWV 162: Corno. da Tirarsi (JSB, 10 Oct. 1723)
```

The dates confirm the fact that Bach wrote for a slide trumpet only during his Leipzig period. (BWV 162 was first performed in 1715 or 1716 in Weimar, but without horn; the horn part was added in Leipzig.) We see that three of these indications bear the heading *corno da tirarsi*, although scholars generally agree today that such an instrument was probably identical to the *tromba da tirarsi*. Furthermore, Bach labeled the part in BWV 124 *corno*; the indication *tromba da tirarsi* was added only after his death. Klaus makes the good point that many other cantata movements as well must have been played on a slide instrument (to which we would add numerous final chorales). This must be true, since Bach added *da tirarsi* in three instances (BWV 5, 20, 67) during his revision of the parts just before their performance and must have announced other such movements orally in rehearsals.

Klaus deals in great detail with English slide trumpets. The early English flat trumpet of Purcell's time was fully chromatic throughout its entire range, due to the double slide that lay next to the player's left ear and was moved backwards. Nearly all the surviving music for an ensemble of four flat mournfull trumpets was written in 1695 by Purcell. The later English mechanical slide trumpet, invented around 1788 by John Hyde and made by Woodham, retained the U-shaped slide that was also moved backwards (not forwards, as with a trombone). Its slide could lower harmonic series tones by a whole step at the most. This instrument went through several models. The first were conversions of natural trumpets, and featured a double clock-spring return mechanism. The second model, with the same return mechanism, was associated with the names of the famous players Thomas Harper Sr. and Jr. and the maker John Augustus Köhler. The inscription "Harper's Improved" is to be found on many mechanical slide trumpets between 1835 and ca. 1896, although the nature of the "improvement" is not clear. The third model used first an expansion spring, and later an elastic cord, as a return mechanism. Later instruments from 1881-82 onwards were lighter in weight, lacking ferrules and bell garlands. Further improvements were the introduction by the maker Charles Pace of the compression spring, more durable than the expansion spring, and of the doubly-folded short model slide trumpet.

Klaus shows that in German-speaking countries, the only surviving slide trumpet, made after 1799 by Michael Saurle of Munich, was shaped like a small trombone with a forward-looking slide. Those made by others, presumably in the same shape, do not survive. The few existing French slide trumpets also have a forward-looking slide,

narrower than Saurle's. One made by Courtois was presented as a gift to "the winner of a student competition at the Paris Conservatoire" in 1846. Klaus does not mention the student's name, which was engraved on the bell. This was not just any first-prize winner, but Jules-Henri-Louis Cerclier (1823–97), who in 1869 succeeded his teacher Dauverné as professor at the Conservatoire. Klaus, who otherwise loves to "dig," could easily have found this out, had she consulted Constant Pierre's Le Conservatoire national de musique et déclamation: Documents historiques et administratifs recueillis ou reconstitués (Paris: Imprimerie nationale, 1900, also missing from her bibliography). It might interest our readers to know that Cerclier was always on the heels of J.B. Arban (1825-89), who later became the most famous cornet soloist of his day and author of a comprehensive method still in use. Arban was also a trumpet student of Dauverné's, with a first prize one year earlier than Cerclier (1845); he then became (the first) professor of cornet in the same year as Cerclier of trumpet, 1869. The chapter on the slide trumpet concludes with a discussion of instruments in Bb, an octave higher than the tenor trombone. Made by Conn, Buescher, and King, they originated around 1899 in American vaudeville circuits. Such instruments are manufactured even today by Getzen in the USA and Jupiter in Taiwan.

Chapter 2 on the cornett (which Klaus spells in the Italian way, "cornetto") is particularly good. It starts with the insight that the cornett originated in Scandinavian cow or goat horns provided with fingerholes, which date "as far back as the tenth century" and are still made today. "Representations of fingerhole horns are found in French illuminated manuscripts from around 1070, and in English church architecture from shortly thereafter." "Straight fingerhole horns were also known in German-speaking areas in the eleventh and twelfth centuries." Pictorial representations of the cornett "start to reflect surviving instruments more closely" by the fifteenth century. A section on "Cornetto Sizes and Types" discusses in detail the writings of Praetorius (1619–20), Mersenne (1636–37), Talbot (ca. 1690–1700), and later German treatises by Speer, Majer, and Eisel. Terminology concerning size and pitch differs from author to author, making the entire system extremely complex. In this connection readers should consult Klaus's article "Zinkengrössen: Überlegungen zur historischen Terminologie," listed in her bibliography, which goes into still greater detail.

More than one hundred curved cornetts covered with black leather or parchment and displaying an octagonal outer surface survive. In the section "Provenance and Makers," Klaus examines the hypothesis, originating in 1581 with Vincenzo Galilei, that such instruments may have originated in Styria and from there gone to Venice, which was to become the main center of cornett making. This hypothesis has otherwise not yet been explored by scholars. Klaus then mentions that members of the Bassano family established an outpost in London around 1538. More than fifty-five surviving instruments show marks that may have originated with Hieronymus, the founder of this family dynasty: one, two, or three groupings of "!" as well as "HIERO.S," "HIER.S," or "HIE.S." Klaus next discusses Nuremberg as another important center not only of brass instruments, but also woodwinds in general and cornetts in particular, up to the

early eighteenth century. The makers are generally to be found both among the city waits, who in the mid-sixteenth century were notably members of the Schnitzer family, and makers of specialized hunting whistles.

In discussing design and construction features, as well as alternative technologies, Klaus divulges pertinent information about leather and parchment making and also identifies several cornetts made from a single piece of wood. In differentiating between Italian and German models, she accepts our hypothesis that "the presence of a pronounced ferrule or cap on one or both ends of a cornetto would indicate an origin in German-speaking regions" and that the fingerholes for the left and right hands were farther apart on German instruments than on Italian ones, making forked fingerings generally necessary for c^I and c^2 . This comprehensive chapter terminates with a discussion of ivory cornetts and how their bores were drilled. It is a joy to see photos of the richly decorated instrument (NMM 7368) that Joe Utley was able to purchase in 1999 when it was auctioned off from the Rothschild collection. She also shows photos of a similar cornett in the Angermuseum in Erfurt, previously unknown to us, the engravings of which are reminiscent of the style of the Renaissance engraver Heinrich Aldegrever (1502–1555/61). Her intelligent guess is that such ivory cornetts probably "originated in Southern Germany" during the sixteenth century.

Klaus states that Bach's cantata BWV 95 (Christ, der ist mein Leben from 1723) calls for a cornettino. In the composer's manuscript, the part is labelled Cornio, which of course might be interpreted as Corn[ett]i[n]o. It displays a chromatic range from c^1 to a^2 , notated in concert pitch and slightly too low for execution on a cornettino (the lowest note of which is d^1). In the Bach-Compendium (4 vols., ed. Hans-Joachim Schulze and Christoph Wolff, Leipzig/Dresden: Peters, 1985, also missing from Klaus's bibliography), this instrument is referred to as a "Corno in G." Who is right?

In Chapter 3 Klaus takes issue with the traditional information that the serpent was invented around 1590 by Edme Guillaume, a French canon, to support congregational singing during church services. She accepts Herbert Heyde's opinion that large snake-shaped cornetts, several of which are preserved in the Paris collection, existed in Italy by the mid-sixteenth century. Their reason for existence had to do with the Italian Renaissance "interest in mythological figures, such as Hercules, Apollo and Orpheus," who "conquer dragons, snakes, and the creatures of the underworld." She goes on to state that Canon Guillaume's "invention" was actually [a] transformation from a zoomorphic to a purely functional instrument, making the serpent more suitable for the church." In her opinion, the serpent, having been developed from such lower-pitched snake-shaped cornetts, was indeed a member of the cornett family, although it soon began to lead an independent existence. The remainder of this chapter deals with designs and the regional distribution of the serpent, including a discussion of two interesting metal ones from the Utley Collection.

At the beginning of Chapter 4, Klaus explains that the invention trumpet "had crooks of various lengths which could be introduced in the middle of the instrument ... to enable a quicker change of key" and that the stopped trumpet was given a curved

body enabling "the player to place his hand in the bell to alter the pitch and expand the harmonic series." Designed for playing in the middle register, such instruments were first developed by the player Woeggel and the maker Stein, who probably began collaborating in 1773, when both were in Paris. With these new types of instrument, the old clarino style associated with royalty became passé. The ideal was a soft, mellow sound like the human voice. Hand-stopping had first been developed around 1750 on the horn by A.J. Hampel, a Bohemian player active in Dresden. Trumpeters took over this technique. The Prussian Karl Ba[r]gans elucidated hand-stopping on the trumpet in an article from 1830 with a long musical example. His ideal was "timbral equality of the open and stopped notes," but from our own experience we suspect this could not be completely attained.

Does hand-stopping lower or raise the pitch? Stefan Wachter of the Institut für Wiener Klangstil has shown that with the gradual insertion of the hand, the pitch is slowly lowered, but when the bell becomes fully closed and the tube length thus shortened, the pitch leaps upwards. In practice, by different degrees of partial stopping, trumpeters lowered the pitch by a half or whole step. The earliest surviving dated stopped invention trumpet was made in 1793 by A.F. Krause of Berlin. It is in G and comes with seven crooks, ranging downward from F to A. "It was found on a battlefield in Jena, where Napoleon defeated the Prussian army on October 6, 1806," and is now in the Grassi Museum in Leipzig. Its design, with crossed slide receivers making for easy blowing, was influenced by horns manufactured by Carl Türrschmidt. Further types of stopped trumpets were either round (trp. circulaire) or in half-moon shape (trp. demi-lune). A circular trumpet by Raoux dated 1820, used by Dauverné in 1820-26 in the Parisian orchestra of the Académie Royale de Musique, is now in the Musée de la Musique, Paris. Despite its French name, the trompette demi-lune probably originated in Germany. Surviving ones were made by J.G. Lintner of Augsburg after 1793 (Boston and Munich collections), by C.F. Eschenbach in Neukirchen (today's Markneukirchen) in 1802 (Musikinstrumenten-Museum, Berlin), J.F. Riedl of Vienna in 1815–25 (Utley Collection), and others, including Michael Saurle of Munich, who made the largest number. None of these display crossed slide receivers; a pair by Saurle survives in the Utley Collection. The latest dated half-moon trumpet, made in 1821 by J.J. Friedrich of Andelfingen (canton of Zurich), is in the Zurich Landesmuseum. The Utley Collection also possesses a highly interesting group of eight brass instruments by different makers that had constituted a mixed brass ensemble (Blechharmonie), a formation that arose during the first quarter of the nineteenth century. They include: two keyed bugles in C (to carry the melody), keyed trumpet in G, four natural trumpets in Bb, G, F, and Eb, respectively, and an ophicleide in C. Imagine them performing together!

In order to prevent this review from getting too long, I will limit my comments on the excellent Chapter 5 ("The Keyed Trumpet") to a few supplementary remarks. (1) In his treatise of 1795, J.E. Altenburg mentions seeing a trumpet belonging to the court trumpeter Schwanitz, capable of sounding a^t and b^t outside the harmonic series

by means of a single tone-hole that was covered by a leather slider when not in use. If that tone-hole in Klaus's opinion probably raised the instrument's pitch from C to D, then the a^{I} and b^{I} could only have been produced when the trumpet was played in C (and the D tone-hole was opened for only these two pitches): at would thus have been the sixth harmonic in D, and the b^{I} the too-flat seventh harmonic lipped down. It would not have worked the other way around, i.e., if the trumpet were played in D. We question this, since D was the key in which trumpets usually sounded in those days, but cannot offer any alternative. (2) In Klaus's discussion of "Transposing One-hole System[s]," it was very good to see the detailed photographs of William Shaw's trumpet from 1787 containing four tone-holes, for use singly when the instrument is crooked in Eb, D, C, or Bb. We miss a mention, however, of the natural trumpet by G. Haltenhof of Hanau (1790) with one tone-hole, now in the Frankfurt Historisches Museum; a photograph can be found in Detlef Altenburg's Untersuchungen, vol. 3, illustration 45. (3) If one regards the photos of Austrian and Bohemian keyed trumpets, notably the one in G by Alois Doke that was copied by Rainer Egger, one notices that the key nearest the bell is ca. 24.5 cm from it, and is separated from the second key by only ca. 10 cm; the third key is only another 5 cm away. One would think that opening the first key would raise the pitch by a whole step, but this is not the case. Furthermore, our practical experience shows that intonation is best when the instrument is crooked in Eb: opening these non-equidistant keys always raises the pitch by a respective half-step. When this trumpet is played in G, the half steps become full ones. In other words, despite its having been built in G, this instrument was obviously intended to be played in Eb. This phenomenon should have been explained in the section entitled "Acoustical, Structural, and Playing Characteristics of the Keyed Trumpet." (4) It is interesting that keyed trumpets from Germanic countries are generally fingered with the left hand, but those from France and Italy with the right. Not many English ones exist, since the mechanical slide trumpet and the keyed bugle predominated there. The two discussed here are quite different from Continental ones. They display the short form, are played in a vertical position with the loop below the bell, and have only three keys, which are depressed with the right hand. They also have a narrower bell flare and wider tone holes.

Chapter 6, on the keyed bugle, is the longest. Here too we shall make only a few comments. Klaus follows David Lasocki's recent research, showing that this instrument was first developed by George Astor, perhaps in collaboration with John Köhler, by 1800. Joseph Haliday of Dublin, credited by previous scholars with its invention in 1810, only made improvements in its design. His 1810 patent had five keys, and in 1813 he added an open-standing sixth key nearest the bell. This feature is "present on all surviving instruments." Later makers added further keys to this standard model. By the way, the instrument was often called the "Royal Kent bugle." This is because one of its dealers, John Bernard Logier, apparently had the instrument dedicated in 1811 to Prince Edward, the Duke of Kent and Strathearn (1767–1820). Two years later Logier published a method, which he also in his own words "most humbly dedicated to his

royal highness, the Duke of Kent." The duke, who was the father of Queen Victoria, was the head of British regimental forces. Through his recommendations, keyed bugles were common in most British bands by the occupation of Paris in 1815. The fact that the Duke of Kent is listed in the index only on p. 201, although the book mentions the Royal Kent Bugle several times (on pp. 84–85 and 198) without listing it there, set us on the search for particulars concerning this person.

Klaus describes differences in the appearance of keyed bugles built in various countries: England, France, Belgium, German-speaking territories (Bavaria, Saxony and the Vogtland region), and the USA, culminating in magnificent presentation bugles of silver made by E.G. Wright in Boston, fifteen of which survive, two of them in the Utley Collection. At the very end of her book, Klaus mentions how "in southern Germany and Austria bugle-type instruments with keys were transformed into valved brasses by the late 1820s and early 1830s" with the flugelhorn as the soprano. Valved and keyed instruments "coexisted for several decades." It is important to note that even today one can recognize (valved) instruments of this family in all pitches, from soprano to bass, most easily by the shape of the bell, which displays a wide bell throat and minimal flare.

In conclusion, let it be said that this volume adds much to our knowledge and upholds the highest standards first established in Sabine Klaus's Volume 1. Once again, sincerest congratulations.

Edward H. Tarr

Michael Münkwitz, Richard Seraphinoff, and Robert Barclay. *Making a Natural Trumpet, Herstellung einer Naturtrompete.* Ottawa, Canada: Loose Cannon Press, 2014. Paperback, 58 pp. 74 color pictures, one technical drawing. ISBN 978-0-9936881-1-9. English and German. Price \$15.00 US/Can, €11.00, £9.00. Order from loosecannonpress@gmail.com.

Do natural trumpets grow on trees and do they have pale green leaves in the spring? The book cover pokes fun at today's dubious terminology, showing green reflections on the sheet brass that is to become a natural trumpet; it is leaning on a tree trunk alongside an anvil in the Indiana State Forest. It is indeed awkward that we have become accustomed to calling the trumpet capable of playing a single harmonic series (without slides, keys, or valves—not to mention vent holes) a "natural trumpet" or a *Naturtrompete* in German, and the cover is a humorous reminder of the misleading nature of this term.

The making of the true natural trumpet with no vent holes—the trumpet as it was known until the late eighteenth century—is the sole subject of this book. Written in English and German, the occasion for putting it together is the twentieth anniversary of trumpet-making workshops for amateurs (now called "International Trumpet-making Workshop") conducted by Michael Münkwitz, Richard Seraphinoff, and Robert Barclay. These workshops have been taking place since 1994 on both sides of the Atlantic (USA, Austria, Finland, Germany, the Netherlands, and the UK), and are now approaching their fiftieth iteration.

Published by Robert Barclay's privately owned Loose Canon Press, it is a bilingual expansion of Richard Seraphinoff and Robert Barclay's *Making a Natural Trumpet:* An Illustrated Workshop Guide, published by the Edinburgh University Collection of Historic Musical Instruments in 2003. The bilingual concept embraces the two major language areas in which these trumpet courses are held. It is refreshing to realize that the texts in the illustrated main section (Section 2) are not mere translations but appear to have been written separately by the respective authors. This is occasionally noticeable when one gets some information in one language, but not in the other. For example, Figure 9 mentions that the work-hardened bell "must be heated and then quenched in water to soften it," while there is no mention of the quenching in water in the German text. On the other hand, the use of the term Zinnlot (tin solder) in Figure 18 identifies more specifically the actual material used than the term "soft solder" in English.

This new bilingual edition, like the original book in English, benefits from a detailed photographic documentation of all the major steps involved in making a natural trumpet as taught by the three authors in their courses. The images, mostly taken by Max Münkwitz, son of one of the authors, are informative, although compared with the 2003 precursor book, for which photos were taken by Raymond Parks and Jenny Nex, sometimes a bit too small and less clear. However, the increased number of details from a total of 50 to 74 figures immediately shows that the information was enlarged by almost fifty percent as compared with the earlier book, starting with a very informative photo that explains all the individual parts that will be used to produce the trumpet. Some technological improvements not found in the 2003 publication, in particular the Cerrobend container shown in Figures 33 and 34, are proof of the continuing technical refinements employed in these workshops. While the 2003 booklet was put together rather in the manner of a photo album after the workshops in Edinburgh in 2002, the 2014 edition is more clearly planned. Nevertheless, the owners of the earlier book will miss in the current edition some tools workshop participants used with great success, such as the hinged burnishing tool for the bell shown in Figure 16 (2003). The list of special tools used for trumpet making at the end is, however, very useful and an improvement over the 2003 publication.

The new book is enhanced by a section (Section 1) describing in detail the original trumpet by Hanns Hainlein, made in Nuremberg in 1632 (Münchner Stadtmuseum, Sammlung Musik, 67/95), the instrument that serves as model for the reproductions. The reasons for choosing this trumpet are explained, primarily the moderate flare of

the bell, which makes the shaping process easier and less labor-intensive than would be the case with later eighteenth-century trumpets, which have a more pronounced bell flare. Some background information on the craft of Nuremberg trumpet-making in the seventeenth century is presented, putting Hainlein's work into a broader perspective. Unfortunately, the common misconception that the Nuremberg trumpet makers were organized in a guild (German: *Zunft*) is repeated here. Guilds in the normal sense were self-regulated craft organizations, while the highly regulated metal crafts in Nuremberg were associations ruled by the city council with very little influence on their own fate.

Section 3 of the book deals with the history of the International Trumpet-making Workshop and is of particular interest to the many participants who have experienced the extraordinary week in their lives during which they turned a sheet of brass into a trumpet. Contrary to the illustrated Section 2, in which the picture headings were written independently in English and German, Section 3 appears to have originated as an English text, with some idiomatic expressions that do not translate well into German; here the reader is advised to read the English original if possible. The book concludes with notes on materials and a technical drawing of the Hainlein trumpet (Section 4).

The purpose of the book, as outlined in Section 1, is to document "what takes place at the International Trumpet-making Workshop and to whet the appetite of prospective future participants. There is no doubt that this book fulfills its purpose brilliantly: it is a must-have for past and future amateur trumpet makers, and for anyone else who is interested in the technicalities of making one's own natural trumpet.

Sabine K. Klaus

Holger Eichhorn. Johann Rosenmüller—Vesperpsalmen (Versuch einer Darstellung im Überblick mit Notenanhang erstmalig veröffentlichter Werke und einem komprimierten Werkverzeichnis) [Johann Rosenmüller—Vesper Psalms (Essay of a Synoptic Presentation with an Appendix Containing Works Published for the First Time and a Concise Catalogue of Works)]. Altenburg: Verlag Klaus-Jürgen Kamprad, 2014. ISBN 978-3 930550-77-7, hardback 17 x 24 cm, 424 pages, including an appendix of more than 150 pages containing a concise worklist and scores of five previously unpublished works. Price in Germany 39.80 €.

After many years and even decades of research, Holger Eichhorn has nearly completed the nine-part series of vesper psalm publications within his thirty-volume complete

edition of Johann Rosenmüller's works. Now Eichhorn has compressed his manifold observations and perceptions into a weighty book. It is nothing less than an attempt at a synoptic presentation of all aspects of Rosenmüller's vesper psalms, which one could call the mountain peak of this composer's highly important *œuvre*.

Rosenmüller was born in 1619 or more likely 1617 in Oelsnitz, where he received his first musical training. He studied theology in Leipzig, where he was assistant organist to the *Thomaskantor* Tobias Michael. In 1653 he was designated Michael's successor. In early 1655 he was imprisoned on charges of homosexuality (never proven), but he escaped and from 1657 to 1682 lived and worked in Venice. In 1657–59 he was a trombonist in S. Marco, and from 1678 to 1682 served as house composer for the Ospedale della Pietà. Otherwise during his Italian years he was a free-lance composer, and both the quality and the variety of his writing increased greatly. He spent the last two years of his life as chapelmaster at the court of Wolfenbüttel, where he died in 1684.

His unpublished compositions survive in manuscript (none of them autograph!) in collections north of the Alps, mainly in Germany. The largest of these, the Bokemeyer collection, with more than 200 of Rosenmüller's approximately 260 surviving works (copied between 1700 and 1720 by Georg Österreich), is housed today in the music department of the Berlin Staatsbibliothek. The Saxon Landesbibliothek in Dresden contains more than thirty works from Grimma, Löbau, and Pirna, and the Düben collection in Uppsala has thirteen; a few others can be found in London, Cambridge, and Oxford. The presence of Rosenmüller's compositions in Germany is largely responsible for the subsequent development of the German church cantata, and it is both singular and significant that his compositions were known, performed, and highly respected two generations after his death. For example, in his autobiography, Telemann stated that his most influential musical models had been "Steffani and Rosenmüller, Corelli and Caldara," three Italians who had worked at least for a time in German-speaking countries, and a German who had lived half of his life in Italy. Rosenmüller is definitely no second-rate composer, but must be regarded as one of the very few leading masters of his day.

Eichhorn, who has published excellent texts and/or CDs concerning Gabrieli and Bach, has concerned himself with Rosenmüller for at least twenty years. A CD of his ensemble Musicalische Compagney appeared (ambitus 97 949) as early as 1995. Entitled *Johann Rosenmüller: Venezianische Vespermusik*, it contains six works by Rosenmüller and one each by Tarditi and Schütz. Three years later he published an important article on Rosenmüller in *Dresdner Studien zur Musikwissenschaft*, vol. 13. Furthermore, his critical edition of Rosenmüller's works (*Kritische Ausgabe sämtlicher Werke*), begun in 2010, is planned for thirty volumes; ten have already been issued by Verlag Christoph Dohr, Cologne. His catalogue of the composer's works (*Rosenmüller-Werkverzeichnis*) is also in preparation.

The present book is a model of comprehensiveness. It could be described as a grand companion to Eichhorn's ongoing publication of Rosenmüller's complete works, with

each of the vesper psalms—a large group of nearly fifty works within the composer's approximately 220 vocal compositions—described in minute detail in five large chapters. He begins with a discussion of the disposition of the vesper psalms, five for each day of the week or 35 in all, of which 23 were most often treated by Rosenmüller and his Italian contemporaries. For each of these pieces, Eichhorn describes the source or sources, their transmission including the errors they contain, instrumentation, treatment of text, and noteworthy elements. He often mentions Rosenmüller's frequent adherence to the rhetorical principles that define the classical five-part speech: *exordium, narratio, propositio, argumentatio,* and *peroratio.* The book continues with a summary, glossary, bibliography, and table of contents, concluding with the abovementioned concise worklist and five scores.

The instrumentation of Rosenmüller's vocal works usually consists of strings (from two violins and continuo to two violins, two or three violas, and continuo). One or two cornetts (with or without three trombones) are often present, and several pieces contain a solo trumpet part. The bass line is often reinforced with a bassoon. Works with a large number of parts are often divided into three or even four separate choirs: string choir, cornett-trombone choir, and one or two vocal choirs (CATB), plus basso continuo.

Eichhorn shows that Rosenmüller wrote out most of his compositions only in separate parts, because complete scores, with exceptions, hardly existed during the composer's lifetime. This is because the conductor was usually the organist, whose part, with its elaborately figured bass, was sufficient for him to direct his musicians. A more complete source for some of these works was the new German organ tabhlature, in which all the parts were notated in a space-saving format. Georg Österreich's collection, mentioned above, consists mainly of study scores that he had transcribed from the existing parts and scores with varying degrees of accuracy; an often-occurring fault that arose for lack of space is that Österreich often left out the separate bass part, in the hope that the *basso seguente* derived from the various instrumental and vocal groups would suffice. When anyone begins to write out a complete score from the surviving parts, he or she encounters many difficulties, including varying numbers of bars and a great number of wrong notes.

Brass players will be interested to know in which vesper psalms their instruments appear. My abbreviations: trp (tromba, trombetta) = trumpet, ct (cornetto/i) = cornett(s), trb (trombono/i) = trombone(s); v (violino/i) = violin(s), va (viola/e) = viola(s), vtta (violetta/e) = violetta(s), vco = violoncino, bn = bassoon, org = organ, S or C ATB = the four vocal ranges, bc = basso continuo. For Eichhorn Ψ = psalm. E-numbers refer to Eichhorn's worklist. Brasses are included in the following fifteen works:

```
- \Psi 109, Dixit Dominus II in C (E88): trp or ct (+ 3 v, 2 vtta, va, CATB, org) [pp. 58–64]
```

⁻ Ψ 109, Dixit Dominus IV in B_ν (E90): 2 ct, 3 trb (+ 2 v, 2 va, bn; CATB 1–2, org), two sources [pp. 66–70]

- Ψ 110, Confitebor tibi Domine à 10 in F (E98): 2 ct (+ CATB 1–2, bc) [pp. 76–81]
- $-\Psi$ 111, Beatus vir à 9 in A (E102): 2 ct se piace, 2 vtta or trb (+ 2 v, CATB, bc) [pp. 81–85]
- Ψ 112, Laudate pueri I in F (E107): 2 ct (+ bn, 2 v, 3 va, CAB, org) [pp. 107–09]
- Ψ 112, Laudate pueri II in C (E108): trp or ct, ct (+ 2 v, 2 vtta, SSB, bc) [pp. 109–11
- Ψ 112, Laudate pueri IX in C (E115): trp (+ 2 v 1–2, 2 vtta, vco, CATB 1–2, org) [pp. 128–29]
- Ψ 112, Laudate pueri X in e (E116): trp, 2 ct, 3 trb (+ 2 v, 2 vtta, bn, S 1–4, ATB 1–2, bc), two sources [pp. 130–33]
- Ψ 114, Dilexi in g (E117): 2 ctti, 3 trb (+ 2 v, 2 vtta, va; CATB 1–2, org) [154–58]
- Ψ 116, Laudate Dominum I in D (E118): 2 ct, 3 trb (+2 v, 2 vtta, va, CATB 1–2, org) [pp. 158–60]
- Ψ 116, Laudate Dominum II in C (E119): trp (+ 2 v, 3 va, bn, CCATTB, bc) [pp. 160–62]
- Ψ 120, Levavi oculos in F (E121): 2 ct, 3 trb (+ 2 v, 2 vtta, va, CATB 1–2, org) [pp. 166–67]
- Ψ 121, Laetatus sum III in C (E124): trp, 2 ct, 3 trb (+ 2 v, 2 va, bn, CATB, bc), surviving only in a copy made by Carl von Winterfeld in 1812 during a trip to Italy [pp. 169–73]
- Ψ 138, Domine probasti me in Bb (E134): ct (+ v, CATB 1–2, org), two sources [pp. 221–24]
- Ψ 147, Lauda Jerusalem II in C (E137): trp, 2 ct, 3 trb (+ 2 v, 2 vtta, vco, CATB 1–2, bc, org), two sources [pp. 228–34]

Up to the musical appendix with its five scores, the first of which begins on p. 297, the entire book contains no musical examples whatsoever. Information concerning the composer's treatment of instruments and voices is thus dependent on Eichhorn's detailed explanations. The five scores in the appendix nevertheless demonstrate better than words the immense variety of styles present in Rosenmüller's works. They are: *Confitebor tibi à 10* (E99, with two cornetts), *Beatus vir à 9* (E102, with two cornetts and two trombones), *Introitus: Puer natus à 9* (E159, with one trumpet and one cornetto), *Misericordia Domini à 6* (E80), and *Domine ne in furore à 6* (E57), both without brass instruments. The first two are true vesper psalms, the remaining three are closely related liturgical compositions.

Confitebor tibi à 10 (E99) is a double-choir setting in which the two choirs (each with cornett plus CATB) mainly overlap, joining only occasionally at the end of a given section and at the beginning of "Gloria" (of the concluding "Gloria Patri"). That

Cornetto II heads Choir I and Cornetto I is at the top of Choir II follows a custom begun by Praetorius and Schütz (so-called creutzweise Aufstellung) that has nothing to do with our modern ideas of stereophonic sound. In Beatus vir à 9 (E102), the cornetts and trombones double the four string parts of Choir I; Choir II is the vocal choir CATB, and a separate organ part lies underneath. In *Introitus: Puer natus à 9* (E159), the trumpet and cornett enter at the concluding "Amen," mainly with sixteenth-note melismas in thirds and sixths, imitating a soprano and bass duo, echoed by the two violins. In this work (as well as in Dixit Dominus II in C [E88], which contains an identical "Amen" ending), the range of the trumpet part is from c^{l} to c^{3} . In most other Rosenmüller compositions containing a trumpet part, its highest note is rather a^2 or bb^2 ; the composer often employs the trumpet in related keys, for example a C trumpet performs in e minor. In Laudate Dominum II in C (E119) the trumpet is treated in two different ways: heroically as a symbol for representation and ruling, otherwise integrated within the ensemble, even in passages modulating away from C major, as mentioned. The appendix's final two works are for a solo soprano and bass, respectively, with fivepart string accompaniment and basso continuo. The first, Misericordias Domini à 6 (E80), with its clearly defined arias and recitatives, plus a concluding "Alleluia," could be termed a solo motet, whereas Eichhorn calls the second, Domine ne in furore à 6 (E57), a large-scale recitative with occasional concerted and arioso features. In both, the strings often interact with the vocal presentation and supply ritornellos.

To quote from my review of Eichhorn's book on Gabrieli (2006): "Holger Eichhorn is not only a first-rate musician and scholar, he is also an excellent musical calligrapher. All the ... full scores were penned by him." Eichhorn's book on Rosenmüller is written in a German style that initially might make foreign readers struggle, but with time his exactitude will further their quick comprehension. The author not only deals extensively with his main topic, Rosenmüller's vesper psalms; he also includes detailed information on related subjects. Readers will be particularly grateful for the worklist, the final part of which contains formerly lost compositions that have been rediscovered since 2001, incompletely preserved works, and even lost ones. Critical classification, comparative analysis, and deep reflection concerning numerous pertinent perspectives, aspects, and thoughts make this book an adventure for any thinking person. In sum, it is an extremely valuable compendium.

Edward H. Tarr

GUIDELINES FOR CONTRIBUTORS

The Historic Brass Society invites submissions of articles for its annual *HBS Newsletter* and annual *HBS Journal*.

- 1. The HBS publishes articles based on any aspect of brass instruments of the past—from Antiquity through the twentieth century and representing cultivated, vernacular, and non-western traditions. The *Journal* also publishes English translations of significant primary sources that shed light on brass instruments and their use, and it includes in-depth bibliographies and reviews. Most articles in the *Journal* are between 4000 and 6000 words long; shorter submissions (including brief reports of discoveries) are always encouraged, and longer ones may be considered as the subject and treatment warrant. Articles submitted to the *Journal* will be read by at least two expert referees who will advise the Editor and Editorial Board on acceptance or rejection. Contributors should aim for a concise, fluid style of English presentation that will be accessible to a broad audience of academics, performers, and interested amateurs. The HBS reserves the right to edit submissions for style and may return them to the author for extensive revision or retranslation.
- 2. Authors submitting articles for the *Historic Brass Society Journal* should send a CD in Microsoft Word for Macintosh or Windows or in "rich text" format to Historic Brass Society, 148 W. 23rd St., #5F, New York, NY 10011, USA (FAX/TEL 212-627-3820). Alternatively, authors may submit articles in Microsoft Word as attachments to e-mail, sent to the Editor at carter@wfu.edu, with copies to Howard Weiner at h.weiner@online .de and Jeffrey Nussbaum at president@historicbrass.org. The deadline for submitting articles for the *Journal* is 1 October, for publication during the following calendar year. Authors submitting material for the *Historic Brass Society Newsletter* should send a CD in one of the formats listed above to Jeffrey Nussbaum at president@historicbrass.org.
- 3. Accompanying graphics such as photographs, line drawings, etc., must be submitted as camera-ready artwork or graphics files on CDs; TIF format (at least 300 dpi) is preferred for graphics files. Musical examples must be either computer-typeset, engraved, or submitted as Finale© files on a CD or as attachments to e-mail, sent to the addresses given in item 2 above. Authors are responsible for any costs associated with obtaining and/or reproducing illustrations, and are further required to furnish proof of permission to reprint for illustrations that are the property of an institution or another individual. The number and size of graphics will be limited by our space requirements.
- 4. Authors are requested to place only one character space after every sentence and punctuation mark. Endnotes and bibliographic formats should conform to the guidelines given in *The Chicago Manual of Style*, 15th ed. (Chicago and London: University of Chicago Press, 2003).

- 5. Musical pitch names and designations should conform to the system given in the *New Harvard Dictionary of Music* (Cambridge: Harvard University Press, 1986), p. 640.
- 6. Upon acceptance of the article, the author will be asked to sign an agreement, stipulating that the material in the article has not previously been published, that it will not be submitted to another publication in the future without permission of the Editors of the Historic Brass Society Journal, and that the author will work with the Editors in a timely manner to prepare the article for publication. The author will further be asked to agree that while s/he retains copyright to her/his article, s/he grants permission to the Historic Brass Society to reprint the article in print or digital format. The author will be assigned an editor who may suggest revisions based in part on the referees' reports and in part on consideration of style. All revisions and changes should result from the ensuing dialogue between author and editor. When they have reached agreement on all revisions, the editor will send the author a revised version of the article. At this time any last-minute corrections should be made in consultation with the editor. Later the author will receive proofs in type, but the only changes allowable at this point will be corrections of any mistakes made during the typesetting process itself.
- 7. Submissions must include (as a separate file) an abstract of the article. If the article is accepted this abstract will be used in the major international bibliographical/abstract catalogues such as RILM. The abstract should be in English and be of no more than 350 words. It should summarize the content of the article and mention any major primary sources that are prominently interrogated. It should be written in such a way that readers will easily grasp the focus of the article and what its distinctive and original contribution to the subject is. It is worth taking into account that those who use abstract databases are not all historic brass scholars.