For years, even generations, trumpet scholars were so preoccupied with the importance of the music of J.S. Bach and the contribution of his singularly talented senior city piper, Gottfried Reiche, that they overlooked the wealth of material in Vienna, seat of the Hapsburg emperors, and the virtuosity of its leading court trumpeter, Johann Heinisch (Hainisch). In recent years this has slowly started to change. Reine Dahlqvist has treated this repertoire in his dissertation. Peter Brown has called attention to the trumpet music of Caldara and other Viennese court composers in two important articles, and the undersigned has made a CD recording of instrumental music by F.T. Richter, Caldara, and Reutter, court composers all.

In their operas and church music, eighteenth-century Viennese court composers wrote trumpet parts that are unquestionably among the most difficult ever written for the natural trumpet. Whereas Bach’s parts ascend frequently to $c'''$, often to $d'''$, but only once (in Cantata no. 31) to $e'''$, those by Fux, Caldara, and Reutter go a third higher, often to $e'''$ and with disturbing frequency to $g'''$, sometimes by leap, with numerous sixteenth-note triplets and ubiquitous trills on any note of the value of a quarter note or longer. Since such a fascinating level of virtuosity was never equaled anywhere, it is obvious that in Vienna there must have been some sort of training school for ongoing trumpeters; and since it was the Hapsburg emperors who between 1623 and 1767 issued or confirmed the Privilege for the Imperial Guild of Trumpeters and Kettledrummers—or the Trompeter- und Pauker-sozietät, as the Court Trumpeters’ and Timpanists’ Corps was called in Vienna—there must be a connection between the school and its seat.

Enter Andreas Lindner. Already well-known to scholars through his master’s thesis on Anton Weidinger, Lindner is probably the best-informed person in the world on the various archives located in Vienna, and he has spent hours, days, months, even years, sifting through them to come up with the present publication. Basically, the book consists of alphabetically arranged biographies of each trumpeter or timpanist ever associated with the court between 1700 and the dissolution of the Sozietät in 1878, based on entire passages from their archival dossiers quoted in extenso. Introductory and concluding chapters, including facsimiles and transcriptions from further documents, such as the Privilege (1747 version), and graphs showing the membership of the Society year by year, place the biographical information in its proper perspective. The book is a model of thoroughness and cannot be recommended highly enough to anyone even remotely interested in not only the workings of the Viennese court musical establishment, but also the archives themselves, during the
period in question.

It is impossible to give a critical review of this book, for a reviewer will repeatedly lapse into applause and tirades of praise. The following remarks show just a few of the interesting bits of information presented by Lindner on the court trumpeters’ corps and their individual members. I shall not discuss the archives themselves here, but recommend pp. 19-23 as required reading for an understanding of their structure and growth.

The ascent of the Hapsburg dynasty to that of a major European power led, at the beginning of the eighteenth century, to a previously unthinkable display of Imperial power and riches in all aspects of culture, including art, architecture, and music. (Certainly Versailles and St. Petersburg, and perhaps London and Lisbon, would be the only centers remotely comparable. Do not forget that at the end of the War of the Spanish Succession, the Hapsburg empire also included Spain; it was a huge realm.) The trumpet corps’ main duty was to see that the emperors and their retinue were adequately praised; and an elaborate court ceremonial protocol dictated on just which name days, birthdays etc., of the Emperor and the Empress four, or just two, “musical” trumpeters (not a compliment but an official title, reserved to a very few) should perform in operas or oratorios, together with the court orchestra. In addition, the trumpeters and timpanists symbolized their rulers’ absolute executive power; trumpet signaling was crucially important to the many battles of the seventeenth and early eighteenth centuries and did not fail to enhance further the trumpeters’ and timpanists’ already healthy sense of self-worth.

It is important to note than in eighteenth-century Vienna, as in other courts as well, the trumpet corps was not yet part of the court orchestra (Hofkapelle), with its singers, string players, organists, etc., but rather reported to the Chief Stable-Master’s Office (Oberstallmeisteramt). This establishment consisted of 350 members, including a stable-master; a food manager (Futtermeister); twelve noble boys (Edelknabenpartey) with their teachers of various subjects, riding school with its personnel, saddlers, and smiths; and further personnel, including twenty-four lackeys, eight porters, twenty grooms (Reitknecht), two shoeshine boys, a gate-guard, fifty stable boys (Reitknecht), four superior and twenty-two ordinary coachmen, eighteen two-horse coachmen, twenty-seven advance riders (Vorreiter), twenty-four litter bearers, five hay binders, etc., . . . and twelve court trumpeters and two court timpanists! Conditions for employment as a court trumpeter, by the way, besides ability to play the trumpet, included horsemanship, a good appearance, and a certain stature.

At the ascension of Joseph I in 1705 the court trumpeters’ corps consisted of twenty trumpeters and two timpanists (p. 802). In 1712 Karl VI brought six trumpeters and a timpanist with him from Barcelona to Vienna. The corps then had its largest membership, with twenty-five trumpeters, two Chief Court Trumpeters (Oberhoftrompeter), and three timpanists. The group must have been too expensive, however, for in 1718 the Emperor decreed a reduction of its numbers to twenty. (At this time, Eleonore Magdalena, the widow of Joseph I, also had her own trumpet corps.) Toward the middle of the century, the trumpeters’ contribution to the Imperial displays of pomp and splendor reached their apogee. There was so much trumpet music during church services, however, that Pope
Benedict XIV reacted in his encyclical *Annum qui* of 1749, forbidding the liturgical use of trumpets, timpani, horns, and flutes—thus effectively cutting off a lucrative source of extra income for those musicians. The huge expense of the wars against the Turks called for financial savings at court and thus further reductions in the number of trumpeters. In 1751 the number of “musical trumpeters” was reduced by decree to five, and in 1757 these positions were entirely abolished.

Changes in society, including the philosophy of the Enlightenment, led to a further reduction in personnel to the final number of six trumpeters and one timpanist, valid throughout the nineteenth century until 1870. Under Chief Court Trumpeter Peter Neuhold (c. 1724-1801, Anton Weidinger’s teacher), the Society of Trumpeters and Timpanists, traditionally arch-conservative and backward-thinking, gradually turned its attention to worthy causes, in particular the care of widows and orphans of deceased members. In addition, from 1807 on the trumpeters were considered to be members of the court orchestra. In 1848 the corps’ employer became the Chief Court-Marshal’s Office (*Obersthofmeisteramt*). By 1878, comprising only three members and five widows, the corps was dissolved. In subsequent years the functions of the erstwhile Society of Trumpeters and Timpanists were taken over by the Life Guards Corps.

There were various other Guards’ and regimental groups of trumpeters associated with the court in some way or another, but on a lower level, and from whose ranks many a court trumpeter was recruited: the trumpet corps of the *Hartschieren- und Arcièren* Life Guards (which existed under various related names and included various groups from Maximilian I’s time until that of Maria Theresia), the Royal Hungarian Noble Life Guards (1760-1850), the Royal Lombard-Venetian Noble Life Guards (1839-1856), and the Northern Austrian Countryside (*N.Ö. Landschaft*, ?-1784.) Lindner gives biographies, drawn from archival documents, of their members, too.

Two miscellaneous pieces of important information turn up almost as if by chance. (1) In 1740 the court trumpeters requested (and subsequently received) sixteen new silver trumpets, to be made by the Leichamschneider brothers as in 1717, when they had been given twenty-three silver instruments, besides half-tone crooks and mouthpieces; the sopranos in the court choir had complained that the trumpeters were pushing the pitch up, and thus in the Imperial chapel the “Cornet Thon of the trumpets was lowered half a step by means of crooks.” (2) The trumpeter who gave the first performances of some of the earliest pieces for solo valved trumpet and/or flugelhorn may have been Carl Bardolff (18/1/1816-29/12/1882), because, after military service in various regimental trumpet corps between 1832 and 1850, he was first trumpeter in the Theater an der Wien and the Wiedner Theater, also from 1863 in the Hofburgtheater, places where much experimentation was going on. Adolf Müller, conductor of the Theater an der Wien, attested in 1849 to Bardolff’s exceptional artistic capabilities on the flügelhorn, and Müller’s successor Franz von Suppé, who is known to have written a work for solo trumpet or flügelhorn, also attested to his virtuosity.

A search through the biographies reveals the names both of the Chief Court Trumpeters and of the most talented Musical Trumpeters, the latter not necessarily being identical to the
former. Who were these particularly gifted trumpeters? The Empress herself gave us a clue in 1745, in a decree stating which four trumpeters and one timpanist should accompany her on a trip with the rest of the court orchestra. They were the trumpeters Joseph Holland, Johann Hainisch, Ernst Bayer, Ferdinand Weidlich, and timpanist Leopold Denck.

(Johann) Ernst Bayer (?-28.3.1773) is first mentioned in 1727-30 as a pupil of Joseph Holland. He was Imperial Court Trumpeter in 1730-73 and Musical Imperial Court Trumpeter in 1733-56. In 1733 he performed a duo together with his teacher and received a bonus payment. It is repeatedly mentioned in archival documents that he “performs very good musical services.”

(Johann) Leopold Denck (fl. 1725-57) was trained in 1723-24 by Imperial Court Timpanist Johann Gottfried Denck (?-1732), who, despite the same family name, was not his father; perhaps he was an uncle. By 1725 he was Court Timpanist to Grand Duchess Maria Elisabeth, when she left Vienna to rule in the Netherlands. He was Imperial Court Timpanist in Vienna in 1737-1757 and Musical Imperial Court Timpanist in 1739-56. It was said of Denck that he “was not only a musical timpnaist, but also a virtuoso one.” He was pensioned off retroactively in January 1757, as of 1 November 1756. His birth and death dates are unknown.

Johann (Baptist) Hainisch (Heinisch) (?-30.10.1751) was unquestionably the greatest trumpeter of his time. Not only the consistently unanimous praise given to him in the surviving reports, but also and especially the technical difficulty of the parts he was required to play and the apparent ease with which he did so, suggest that his prowess may have surpassed even that of his older contemporary, Gottfried Reiche. Be that as it may, he was a pupil of Chief Court Trumpeter Franz Anton Küffel in 1725-27 and served as Imperial Court Trumpeter from 1727 until his death (and as Musical Imperial Court Trumpeter from 1730). It is furthermore interesting that he was the teacher of the Salzburg court trumpeter Johann Caspar Köstler, although he did not have the title of Field Trumpeter and therefore, according to the Imperial Privilege, was technically not allowed to teach. (This remark also applies to most of the other court trumpeters and timpanist mentioned here. The Vienna court must have had a special dispensation from this proviso.) Since I have dealt with Hainisch/Heinisch in another place, I will not repeat that information here. Here are some pertinent quotations and bits of information: In 1727 Fux stated that “with his talent” he performed “particularly distinguished and excellent musical services” and in 1730 that “with his particular talent” he “would deserve a much higher” salary, resulting in his appointment to Musical Trumpeter; in 1732—after Hainisch’s petition that he had “not only performed on extraordinary occasions in the church, in opera performances, serenades, and at table,” but also “recently in a Serenade in the Favorita, where Your Majesty not only deigned to notice my diligence, but also allowed complete pleasure to be discerned from [my performance]”—his supplementary pay as Musical Trumpeter was doubled from 200 to 400 guilders; in 1733 this was raised to 600 guilders; in 1737 the Emperor granted him a raise from 600 guilders to 800 (instead of the mere 700 recommended by the court treasurer) “in consideration of his particular art.” Even after his death it was confirmed that “Heinisch [was] the best Musical Trumpeter.”
Franz [Anton] Joseph Holland (c. 1687-31/10/1747) was in Hanoverian service until 1710, when he was appointed Imperial Court Trumpeter in Vienna; a year later he became Musical Imperial Court Trumpeter. In 1718 Fux applied for a substantial pay raise for Holland because “he particularly distinguishes himself more than others on his instrument.” He was Ernst Bayer’s teacher from 1727 to 1730.

Ferdinand Weidlich (?-14/2/1758) is first mentioned in 1739-41 as an Imperial Court Scholar (trumpet pupil of Franz Anton Küffel). In the brief period of his activity he was Imperial Court Trumpeter (1741-56), Musical Imperial Court Trumpeter (1745-56), and Imperial Chief Court Trumpeter (1756-58). In 1745 the Empress raised his supplementary salary (musikalische Besludung) from 50 to 150 guilders, on account of his particular talent (wegen seiner Virtu). Two years later he was repeatedly called “the best Musical Trumpeter after Heinisch.” Heinisch was apparently absent from his services due to illness during the last year of his life, and Weidlich substituted for him. After Heinisch’s death Weidlich was apparently “the only one usable for solos” (der Eintzige ist, so zum Solo zu gebrauchen). During the last year of his life, Weidlich suffered from a nervous disorder (Nerwen:Krämpfe) that required cures in Carlsbad.

Further trumpeters worthy of mention are Johann Dessary, Anton Khayll, Franz Anton Küffel, Peter Neuhold, and three members of the Weidinger family, including Anton Weidinger, the famous keyed-trumpet virtuoso.

Johann Dessary (?-18.6.1841), also known from short compositions of his for trumpet ensemble featuring natural trumpets in various pitches, was a trumpeter in the Royal Hungarian Noble Life Guards until the middle of 1816, when he became an Imperial Court Trumpeter. An excerpt from the protocol of his audition reveals the particular qualifications necessary for court employment. Court Music Supervisor (Hofmusikgraf) Ferdinand von Kueffstein (fl. 1797-1818) wrote: “I am . . . in agreement [with Court Music Director Salieri’s’ recommendation] that Johann Dessary earns preference on all possible accounts. It is true that Anton Khayll and Joseph Weidinger, each of whom was heard with a solo on the keyed trumpet, also particularly distinguished themselves and have every right to an honorable mention. Weidinger is still a youth, seventeen or eighteen years old at the most, and still has time to receive the appropriate training. Khayll, too, is a relatively young man who would earn preferential treatment in a future audition, because of the particular capabilities that he has demonstrated. Dessary alone, however, seems to be the one who should be favored most, since he has already served for several years in the cavalry, has received two decorations, yields to none of the others in expertise, as a cavalrman is capable of serving on horseback, and seems unquestionably to be the most excellent among all [the others], both in respect to his handsome appearance (guten äußeren Bildung) and his other qualifications.” Both Khayll and Weidinger later became professional trumpeters, at court and in the North Austrian Life Guard trumpet corps, respectively.

Anton Khayll (7/4/1787-28/4/1834)—not to be confused with the Prague hornist and teacher of valved trumpet and trombone, Josef Kail—was a member of a prominent musical family. His brothers Joseph (1781-1829) and Aloys (1791-?) played oboe and flute in the court orchestra. Schilling deemed all three of them worthy of inclusion in
his *Musikalische Lexikon* of 1837. Before 1816 Anton Khayll was a trumpeter in the Court Theater, and in 1819-34 he was an Imperial Court Trumpeter. The three brothers performed often in the Vienna area and were well received. The first record of an appearance of theirs at a Lenten “chamber concert” at court is documented for 4 March (repeat performance on 25 March) 1817 in a concertino by an unnamed composer. A program of another similar concert of the following year included a “Trio for Flute, Hoboe [sic], and Trumpet by Weiss, performed by the three Khayll brothers”; another such concert from 1820 featured them in a Polonaise by Leidesdorf. In these works Anton probably performed using the technique of hand-stopping.

Franz Anton Küffel (?-20/5/1754) had been Chief Court Trumpeter in Spain under Karl III; in 1711 on Karl's accession to the throne of Holy Roman Emperor (as Karl VI) he was transferred from Barcelona to Vienna, with his status being confirmed, effective 1 April 1712. In addition, from 1711 he was a Musical Imperial Court Trumpeter. He “excels in his profession or art before others” (31/12/1712). Küffel must have been a particularly good teacher, for the two most brilliant trumpet soloists of the Viennese court were his students: Johann Hainisch (1/1/1725-31/1/1727) and Ferdinand Weidlich (1/1/1739-1/1/1741). Küffel was succeeded as Chief Court Trumpeter by his pupil, Weidlich.

(Johann) Peter Neuhold (c. 1724-19/11/1801) was accepted as a trumpet pupil of Sebastian Margi in 1744; in the same year he participated in a military expedition against Prussia as a member of Field Marshal Count Franz Esterhazy's Cavalry Regiment. He was released from his articles two years later. In 1757-60 he served in Prince Löwenstein's Cuirassier Regiment and in 1760-66 was in the Royal Hungarian Noble Life Guards trumpet corps, before being appointed an Imperial Court Trumpeter in 1766. From 1780 until his death he was Chief Court Trumpeter, and as such J.E. Altenburg found him worthy of mention. In the latter position Neuhold also was president and treasurer of the Trumpeters' and Timpanists' Society. The surviving records of the Society show him to be both diligent and forward-looking. In the year of his appointment, for instance, he reorganized the Society. He taught four pupils, among them Anton Weidinger, all of whom later received appointments as court trumpeters.

Several members of the Weidinger family should at least be briefly mentioned. These are Anton Weidinger (9/6/1766-20/9/1852), his two brothers Joseph W. (c. 1757-23/2/1829), Imperial Court Trumpeter from 1812 after ten years (!) of waiting without pay as Expektant, and Franz W. (fl. 1778-1806), trumpeter in various military regiments for some twenty years and in the Court Theater from c. 1798; his two sons Joseph W. (c. 1798-1832), trumpeter in the Northern Austrian Countryside trumpet corps before 1816 to an unascertained date after 1827 and teacher in an orphanage, and Ferdinand W. (19/10/1818-19/3/1895), Imperial Court Timpanist from 1855 to 1888; and his daughter Karoline W. (c. 1820-?), about whom little is known.

Anton Weidinger's role in the development of the keyed trumpet and his first performances of the concertos by Joseph Haydn and Johann Nepomuk Hummel are well known and will not be repeated here. Of interest, perhaps, are the various positions he held during the course of his career. 1785-87, trumpeter in the Curassier Regiment of Prince
Czartorisky, 1787-92, trumpeter in the Dragoon Regiment of Crown Prince Joseph, 1792-?, trumpeter in the court Theater; 1796-99, Expektant in waiting for a court position; 1799-1819, Imperial Court trumpeter; 1819-50, Imperial Chief Court Trumpeter. That he was not yet a Court Trumpeter when Haydn’s concerto was written (1796), as can often be read in print, may still be relatively unknown.

All this display of talent, however, should not divert our attention from the “shadow side” of employment at a Baroque court. Many trumpeters developed problems with their teeth and could hardly play in later years; yet the court administrators did not retire them, requiring them instead to continue their service in one way or another. Retirement pay was extremely small, and widows had to write pitiful supplications for financial support for themselves and their children; the sums allotted to them were often so small that they amounted to mere alms.

Lindner’s work renders former studies obsolete, because none of them utilized the entire collection of surviving documents. Köchel’s famous tome of 1869\(^7\) was based merely on the notoriously unreliable court payment records, and Brown’s two articles mentioned above are in particular need of revision, as concerns the structure of the various institutions containing court trumpeters.

Andreas Lindner, all historically interested trumpeters are in your debt for having provided us with this thorough and perceptive book. It is every bit worth its prince, and I hope that many scholars, institutions, and libraries will order it.

Edward H. Tarr

NOTES

1 Bidrag till trumpeten och trumpetenspelets historia från 1500-talet till mitten av 1800-talet med särskild händyn till perioden 1740-1830, 2 vols. (diss., University of Gothenburg, 1988), Studies from the Gothenburg University Musicology Department, no. 17, 1: 75-79, 258-70, 2: 570, 580.


3 Die kaiserliche Trompete / The Emperor’s Trumpet (Christophorus CD 74 558), with the Franz Liszt Chamber Orchestra, recorded in Budapest in 1989. The works recorded: Ferdinand Tobias Richter, Sonata à 7 in C; Antonio Caldara, Sonata con 2 Clarini, 2 Violini e Viola in Concert and Sonata con 2 Clarini e 2 Violini in concert, both in C; Johannes Sperger, Concertos No. 1 and 2 in D; Georg von Reutter II, Trumpet Concertos No. 1 in C (with frequent ascents to g”’) and No. 2 in D, Servizio da tavola No. 2 in C (with two solo trumpets that often ascend to e”’, a note that is sometimes approached by leap and is even trilled upon).

4 Possible exception: certain works written by Michael Haydn and Carl Biber for the Salzburg court trumpeters. C. Biber’s trumpet works often ascend to e”’. Of M. Haydn’s two trumpet concertos, No. 1 in D features a single g”’ (or sounding a”’, the “world record” high note for a natural trumpet), and No. 2 in C ascends repeatedly to e”’ and once to f”’. The Salzburg court trumpeters were quite good
indeed, and one of them, Caspar Köstler, was even a pupil of Heinisch (see text above). Quantitatively, however, the Salzburg trumpet works do not come close to those written in Vienna.


6 Under the somewhat longer but more accurate title of Die kaiserlichen Hoftrumpeter und -pauker in Wien von 1700 bis 1900: Quellenstudien im Archivbestand des Haus-, Hof- und Staatsarchivs Wien, the present work originally appeared in 1998 (in three volumes with 808 pages) as Lindner’s doctoral dissertation. The differences between the dissertation and the book reviewed here are negligible and require no particular comment, except that the short dissertation chapter (pp. 18-20) containing the names, titles, and years of activity of the various administrative officials mentioned in the archival documents has been omitted from the printed book. The documents consulted by Lindner survive in the archives mentioned in the dissertation’s title. Their titles fill five closely printed pages (pp. 24-28) of the printed book.

7 On p. 12 of his introduction, Lindner mentions eleven trumpeters and two timpanists, but on p. 80, in an archival document referring to one of them, Johann Franz Bonn (fl. 1708-60), the names of only six trumpeters (including Bonn) and one timpanist are mentioned, a more plausible number.

8 Published under the title Divertissement für obligat Trompet, for trumpet (in low F) and band by McNaughtan-Verlag, Coburg (MCN 30021). Since publishing that edition, I have discovered through research in Vienna that the work was originally conceived not for low F trumpet and band, but for B-flat flugelhorn and orchestra, as part of the incidental music for a theater piece. It was also well known during the nineteenth century under the title Des Hirten Morgenlied (Die Liebe zum Volke), Op. 10 (published by André in Offenbach).

9 In my book, Die Trompete, still available in its third, revised German edition (Mainz: Schott, 1994), whereas the French and English translations are currently out of print.

10 Available in a modern edition from the Haas-Verlag, Cologne.

11 The only true error I could find in Lindner’s work is that he gives Anton’s date of birth merely as “c. 1787,” whereas Schilling’s lexicon (see following note) gives the precise date, known also to Dahlqvist, Bidrag, 1: 380.

12 Gustav Schilling, Encyclopädie der gesammten musikalischen Wissenschaften oder Universal Lexikon der Tonkunst, 6 vols. (Stuttgart, 1835 et seq.), 4: 83. Dahlqvist also dealt with the trumpeter Khayll in his dissertation; see Bidrag, 1: 380-82 and 2: 586.


15 This system allowed trumpeters to perform without pay in return for certain employment upon the first vacancy (due to retirement or death of a member of the Society). It worked well, but had the disadvantage that performance without pay could last for years or even more than a decade; later a pay scale was introduced.

16 The standard work is still Dahlqvist’s The Keyed Trumpet and Its Greatest Virtuoso, Anton Weidinger (Nashville: The Brass Press, 1975) (Brass Research Series, no. 1, now published in Vuarmarens by Editions Bim). For an account of the disappointing turnout at the world premiere of this work, based on information from Lindner’s master’s thesis, see my article “Haydn’s Trumpet Concerto (1796-1996) and Its Origins” in International Trumpet Guild Journal 21/1 (September 1996); 30-34, 43. Weidinger’s first performance of the Hummel Concerto is mentioned in John A. Rice, “The


Patrick Tröster’s iconographical study provides a detailed investigation of the wind ensemble of the late Middle Ages and Renaissance. It fills a long-standing need of a broadly based study that treats surviving illustrations of bands in their contexts. Iconography has been a vital tool in the study of early instrumental music, of course, because of the almost total lack of written musical sources before 1500. This volume has its idiosyncrasies, and English-speaking readers may find it unwieldy (especially those unused to academic German publications—this is after all the publication of a dissertation at the University of Tübingen). Still, it is brimming with original and imaginative ideas and should prove to be one of the handful of basic reference works in the field.

Tröster has organized the book in two large parts. The first discusses the organology of the instruments of the *alta* band and the background of wind ensembles. The second part is a catalogue of illustrations, with line drawings of 420 examples. Nine appendices follow, providing listings of ensembles by their instrumental makeup. An extensive bibliography concludes the volume. There is no general index.

Before embarking on a detailed review of the contents, a few preliminary observations are in order. The heart of the volume lies in the catalogue of illustrations. It is of extraordinary value to have so many of these in one volume, but in order to obtain this quantity, Tröster has elected to present these illustrations as very sketchy line drawings, many of which are of poor quality in terms of providing clear detail. Features are often so indistinct that it is sometimes impossible to verify the author’s arguments concerning matters of construction. His system of organization, by the context of the scene (i.e. banquets, weddings, etc.), is very elaborate, with some sixty different categories. These are identified by a code involving letters. The code letters are given in alphabetical order, but the ordering begins anew with each of some seven groupings. As a result, when an individual example is cited in the text, finding that particular illustration in the catalogue can involve a time-consuming and exasperating hunt. The system is rigorously logical, but not user-friendly. Finally, readers should understand that many impressively scientific-looking tables are given, but these are often derived from best guesses concerning difficult source material. Sometimes it is really hopeless for us be sure whether an artist, for example, is illustrating a shawm or a straight
trumpet. Tröster uses his judgement in categorizing these illustrations, but I’m sure he would be the first to admit that rough accuracy is about the best we can hope for. If, for example, we have 100 depictions of what are termed soprano shawms, probably fifty are pretty secure, some thirty are probable, and the rest may be there because we aren’t sure where else to put them.

Part One begins with an introduction that is devoted initially to a well-informed survey of the state of research. Here the author also reveals his own approach, indicating that this study “has its basis exclusively in illustrative material” (p. 9). Fortunately, Tröster is in fact not that narrow in his approach and is perfectly well aware of (and draws upon) studies that are based on archival, musical, and theoretical sources. Nonetheless the focus tends to be narrow and while this does have its advantages, it also leads to some problematic interpretations. He refers, for example, to a “decline of the alta ensemble” after 1550 (p. 9), which is based on his data sample. There was certainly a marked decline in the number of illustrations of ensembles after that date. Archival evidence, however, especially from Italy and Germany, indicates that wind ensembles were in fact still in a very healthy state for at least another fifty years (I must also admit that my own early research may have been partially misleading in this regard). In short, there is a clear disjunction between the two kinds of evidence.

The introduction continues with a section in which Tröster lays out his research methods. He notes first the problems arising from the fact that essentially no instruments survive from before about 1550. He then observes that previous research, summarized recently by Lorenz Welker, indicates that shawms came in two basic sizes, soprano and tenor (the shawm and bombard). Tröster then proposes a more elaborate interpretation. First he suggests a system of measurement based on relative human-body size; his units of measurement are the lengths of the hand, the forearm, the arm, and the leg. With minute comparisons of lengths of instruments portrayed with the body size of the players shown, he advances the notion of a more refined system of instrumental sizes. At this point (p. 18, and in an extensive footnote) and only very briefly, the author discusses whether these illustrations represent “reality.” This subject has been amply covered in other publications, and Tröster most likely felt that it would have been tedious to cover the same ground yet again. Still, the issue is so central to his methods that a fuller discussion would have been in order. Certainly when a fifteenth-century artist portrayed an historical occasion—say a banquet of Charlemagne that had taken place centuries earlier, he would show the figures in fifteenth-century dress, seated on fifteenth-century furniture, entertained by fifteenth-century musical ensembles. That was the stylistic convention of the time. But fashion changed in the sixteenth century. Artists began to show “classical” (or at least their idea of “ancient”) dress with historical subjects, and, I would suggest, one of the main reasons for the decline in the number of illustrations from the mid-sixteenth century onward was not a decline in the number of contemporary ensembles, but this radical change in artistic convention. Artists knew that the alta ensembles were of their own time, and had no place in their new conception of historical scenes. More critically, even when artists intend to portray reality, they are by no means reliable in terms of the finer details of instruments for a variety of
reasons—ignorance, indifference, lack of technique, or artistic license, for example. On this score I do believe that Tröster’s proposals of a greater range of instrumental sizes may well hold up, but the issue of “reality” deserves to be addressed. What will certainly hold up is the curve that he illustrates with both graphs and tables; the _alta_ ensemble emerged about 1300, the number of illustrations rose gradually, with a clear peak between about 1450 and 1500, and declined (for whatever reason) gradually thereafter.

In the Organology section Tröster proposes four different sizes for the shawm (a shorter and longer normal shawm, a short shawm, and a long shawm), and three for the bombard (normal, long, and short). The notion of shorter shawms is intriguing, especially as they may reflect local practices (as he shows, the short instruments seem to have been most popular in Italy). Also compelling is his discussion of changing structure. Consistency among the illustrations seems sufficient to establish that fourteenth-century shawms were distinctly conical, with less well-defined bells. After a couple of decades around 1400, when makers seem to have experimented with barrel-shaped bells, in the fifteenth century the instruments became less conical, with more pronounced flare at the end of the instrument. Quite problematic, however, is his discussion of the longer instruments. For the long shawm (“leg-length,” about 100 cm!), for example, Tröster gives no discussion as to how makers could have come up with a system of finger holes that would have made it possible to play such an instrument. The illustrations he cites are mostly questionable (in many cases the instruments could be straight trumpets instead of shawms). And of course none of these show any key mechanism, as they would then by definition be bombards. Concerning the bombard, his analysis of fifteenth-century depictions and what he sees as the scant difference between the shawm and bombard shown by Virdung (_Musica getutscht_, 1511) lead him to raise the curious possibility that the bombard may have been shorter than the shawm! He goes on to admit that this goes against everything that we know about the two instruments, and here, finally, he discusses the unreliability of many artists (he points out, for example, that in several illustrations the fontanelle is between the hands of the players, clearly an inaccuracy on the part of the artists). But here even cursory borrowing from organological (i.e. surviving sixteenth-century instruments), theoretical, and archival evidence would have led to a more emphatic rejection of that notion.

After dealing with issues of size, Tröster moves on to several general topics. Under “Hand positions” he notes that shawms could be played with either right or left hand on top. This affirms what was already indicated by the fact that early shawms were made with the last hole duplicated so that it could be played either by the right or left hand; the unused hole was filled with wax. Concerning specifics of hand positions, he notes that artists tend not to be reliably accurate in this regard, and the longer the instrument, the greater the variation. He also finds that fingers are shown in more extreme gestures in the “Gothic” period (by which he means generally the fourteenth century, while in the “Renaissance” (after 1420/30) they are shown less pointed and more curved. His suggestion that this might indicate a more florid, embellished style of playing in the earlier period is tantalizing, but conjectural. Concerning tuning and resonance holes and the placement of finger holes, Tröster observes that in general art works are too vague to convey useful information.
Conclusions relating to embouchure are more specific, however. Shawms were played in three manners: with lip disks, with pirouettes, and with “free embouchure.” The first of these was relatively rare in Europe in the fourteenth through the sixteenth centuries, but this was (and remains today) a standard approach in the Near East. The lips are pressed against a disk, forming an air-tight seal. The reed is taken inside the mouth and the reed vibrates freely, producing a quite penetrating sound. With this approach the cheeks are puffed, which permits circular breathing. Most common in Europe, according to the iconographical evidence assembled by Tröster, was the “free embouchure.” In this manner of playing the reed comes in direct contact with the lips and, contrary to modern oboe technique, the lips are pursed forward to a greater extent, and are placed more loosely on the reed. This makes greater volume possible. The pirouette (a removable wooden disk) was developed, according to Tröster’s evidence, around 1400 and became a characteristic feature especially of the smaller sizes of shawms. (With the pirouette, the player takes the reed in the lips, but rests the lips against the pirouette, which helps to reduce muscle fatigue.) A fascinating, and original, proposal is that a substantial number of illustrations appear to show what he calls an “integrated pirouette,” i.e., one that is built into the instrument and not removable. Tröster then argues that European players, too, took advantage of circular breathing. He notes, interestingly, that puffed cheeks are one indication of circular breathing, but that feature by itself is not enough to make the case.

The next section discusses bagpipes, which will probably be of less interest to readers of this journal. He notes that the instrument had two periods when it was especially in vogue, the first around 1400 and the second in the sixteenth century. The earlier period is of some concern here in that the bagpipe seems to have functioned in some way as the second or third voice in the shawm ensemble, a role that was later taken over by some version of a slide instrument.

Tröster then turns to trumpets, beginning with a useful and generally accurate summary of the state of current research. Stewart Carter, in a paper at the Early Brass Festival at Wake Forest University in July 2001, reported an instance of the modern form of the trombone (in a Florentine sculpture relief dated ca. 1494) earlier than that proposed by Tröster, but that presentation of course came subsequent to the publication of this volume. Tröster describes the possible shapes of the trumpet; in addition to the usual three types (straight, S-shaped, and folded or bugle type), he suggests refinements, notably his “king-sized” S-shape and bugle types. He presents tables showing that illustrations of some form of trumpet performing with alta ensemble follow generally the same curve as the ensemble itself (beginning in the fourteenth century, gradually reaching a peak around 1500 and declining markedly to 1550). He notes the sudden rise of the “king-sized” S-shape around 1500, and as subsequent discussion makes clear, this form includes the newly developed double-slide characteristic of the modern trombone. In broad terms this course of events is sound, except (as indicated above) archival and other evidence makes clear that shawms, cornets, and trombones as an extension of the alta ensemble continued in vogue until at least 1600.
Tröster lays out two broad categories of trumpet instruments, the *ritterliche* and the *spielmannische*. The terms offer difficulties in English ("ritterlich" = knightly, but such trumpets were associated with higher nobility, not with knights); for our purposes, “herald” can suffice for the first and “minstrel” for the second. He takes up the herald type first, establishing two important characteristics of the way the instrument was held. First, it was played palm-up, i.e., held from below, often with one hand (the one-hand grip sometimes being essential, as he notes, for such players were often on horseback and one hand was needed for the reins). Furthermore the herald trumpet was characteristically played with the bell in the air, in what Tröster terms “triumph position.” With his large database he posits almost fifty illustrations that include herald trumpets in wind ensembles between 1300 and the early fifteenth century (he also finds some forty between 1425 and 1550; more on those shortly). He observes that in most of the fourteenth-century illustrations, pairs of trumpets are shown, usually in triumph position, often with banners. After about 1400 there is a marked decline in pairs, and single trumpets become more common. The reader must keep in mind that all illustrations available to the author that combine trumpets and shawms are incorporated in his list, and that trumpets are included *only* when combined with wind instruments. This selectivity raises several potential problems. First, Tröster seems to make the assumption that if the instruments were shown together, they must have performed together, at least at some level. Working from archival documents I have argued a contrary view—that signal trumpets, especially from about 1380 onwards, did not normally perform with shawms even though they might be pictured together. I am now inclined to a view that represents something of a compromise. In some instances, especially in the late fourteenth century, some signal trumpets, without any slide mechanism, probably on occasion did perform with shawms. Even in the fifteenth century, especially for important ceremonial occasions, large mixed groups of shawms and trumpets probably combined to produce a grand festive racket. Still, especially from about 1400 onwards, archival documents are quite clear: signal (or herald) trumpets and shawm bands were two distinct units; they were paid separately, they were provided different livery, and they appeared in different performance contexts. More critically, they had distinct performance practices and repertories. If bands of trumpets and bands of shawms are shown together, this could arise for a variety of reasons. One was the contemporary convention in paintings and miniatures of showing successive events in one scene. Another could be either artistic license or simple inaccuracy. In any case the reader should understand that for the sake of completeness it is an advantage that Tröster has included depictions that show signal trumpets combined with shawms; whether these actually indicate combined performances is, however, problematic for the fourteenth century, and (in my opinion) dubious in most cases for the fifteenth and sixteenth centuries. The reader should also bear in mind that in choosing to include trumpets only when they are pictured with winds, Tröster then by definition does not treat the development of the large herald trumpet ensembles of the later fifteenth century and onwards.

About 1400 several illustrations show a single straight herald trumpet performing with a shawm or shawms; thereafter both the S-shaped and bugle forms predominate. Tröster does argue the case for the straight trumpet with a slide mechanism; in most cases,
though, the illustrations supporting his argument are quite vague in detail. One or two seem quite clear, and while this is a very small sample, it can’t be ignored. Tröster is convinced, of course, that some kind of slide was available shortly after 1400 (his illustrations argue against any earlier dating). In the course of building a supporting argument concerning the presence of a single slide, he attempts to find iconographical support in astrological illustrations of “Luna and her children,” proposing that the more open or more closed slide of the minstrel trumpets depicted were a means for the artist to represent the waxing and waning phases of the moon. This is an ingenious notion, though the argument may be more intriguing than convincing.

For Tröster, a fundamental change came in about 1420, when minstrel trumpets, whatever their structure, changed from “triumph position” to a more downward position. He describes two main manners for the hand closest to the mouthpiece to hold an instrument, the “cigar” and the “microphone” position (the latter was nicely described by Ross Duffin as the “dart” position). Archival evidence hints that this change probably came at least a decade earlier, but of course Tröster’s arguments are based exclusively on iconographical evidence. His first manner (the “cigar” position), with the other hand managing the slide palm up, he describes as the “classic minstrel trumpet” position. The second, with the instrument in a pronounced downward position, is an alternative (according to Tröster), and in fact occurs in roughly twice as many illustrations, and moreover even carries into the sixteenth century (the “cigar” position evidently died out rapidly after 1500).

By about 1500 yet another definitive change, that to the modern double slide, had taken place. Tröster sees this as a two-stage process, first he discusses a “U-shaped” trumpet; i.e., a bugle-shaped trumpet with a double slide. He points to about a dozen illustrations in the early sixteenth century that depict this stage. Tröster then takes up the double slide instrument, with some twenty illustrations. Many of the depictions (as he notes) are in the new medium of woodcuts, in which the quality of detail is pretty awful. Tröster also relies on several drawn from Swiss chronicles, which were illustrated by an amateur hand, and these too are so poor in quality that we can draw only very general conclusions from them. For me, it seems clear that the double slide was widely adopted by 1500 or shortly thereafter, and that many of the first group of illustrations reveal artists struggling to show this new form. Because of the specific criteria imposed by Tröster’s study, he does not include Virdung’s illustration of the trombone (1511), which includes all the essentials of the modern form (with two stays, one to stabilize the slide, the other to stabilize the bell portion of the instrument). Certainly Tröster’s trumpet with “U-shaped” slide (p. 240) would have been an unstable and fragile instrument.

The next section of Part One discusses the development of trumpet instruments within the *alta* ensemble tradition. Especially interesting here are the sections discussing the ensembles that include herald trumpets (quite numerous in the fourteenth century, but some continue into the fifteenth century), and those that include what Tröster terms a “minstrel natural trumpet.” He goes on to argue, however, that the “minstrel slide trumpeter” was by far the dominant instrument in the *alta* ensemble from about 1420 to about 1500. After that date, the double-slide instrument rapidly took over as the dominant form.
Tröster also considers other instruments that were included in the *alta* ensemble; these include most importantly crumhorns, *Rauschpfeifen*, percussion instruments, and of particular interest for readers of this journal, the zink. The section on the zink is especially welcome, as it includes a sampling of illustrations of both straight and curved instruments. Contemporary inventories (such as the one of the Antwerp civic ensemble in 1532) are explicit in recounting that recorders and flutes were part of the band’s instrumentarium, and archival documents indicate that well before 1550 (the cut-off date of Tröster’s study), stringed instruments were being added as well. Tröster included none of these, again because no sources appear to illustrate them. The volume is methodologically consistent, but the reader should be aware that the focus on one stratum of evidence means that some gaps in information are inevitable.

The core of the volume consists of the 420 illustrations. As stated above, these are line drawings of originals, often very rough in quality. Inclusion of photographs of the originals undoubtedly would have involved enormous expense and in fact probably would have made production of the book impossible. It should be noted that Tröster is meticulous in citing ample published sources when they are available, so in many cases the interested reader can track down a better-quality reproduction. Certainly, to have such a large body of illustrations available in one volume is a blessing. One unfortunate aspect of the choice for inexpensive reproduction of illustrations is that some of those chosen as key examples of particular developments are of such vague detail that the reader simply cannot verify hypotheses put forward by the author. (I might add that one solution could be for Dr. Tröster to set up a website, and scan his illustrations into that site to provide high-quality examples. Also, as with any such catalogue, it is incomplete; with a website, further items could easily be added as they are found.) The organization is by social context (banquets, weddings, fairs, and so forth), and within each the examples are ordered by the size of the ensemble; two players, then three, etc. This is an eminently sensible arrangement, but as the numbering system begins again with each category, as noted above, individual examples can be quite tedious to track down. A similar hitch characterizes the bibliography, which is organized into thirteen different categories. An attempt to check any particular reference work can be a frustrating, time-consuming process. The bibliography itself, though, is quite good, and includes a more-than-respectable representation of English-language sources. The organization of the nine appendices, on the other hand, is admirably intelligible. These provide summary chronological listings of various categories of illustrations (e.g. those which include bombard, those which include S-shaped instruments, and so forth).

The volume would have benefited from a firmer editorial hand. Careful readers will probably be annoyed by the rather frequent instances where the text refers to illustrations with numbers that are not to be found (i.e., p. 113, where the reader is directed to example Mu-261, which doesn’t seem to exist). Still, overall the material in the volume is well organized. English-speaking readers, especially, will appreciate the highly condensed summaries at the end of each major section. Tröster has certainly assembled a stunning mass of evidence that has much to tell us about performance practices of wind and brass instruments. His focus on iconography is rigorous, and now one issue will be to explore areas where such
evidence is discordant with other sources. Some questions will be of particular concern to HBSJ readers. Tröster observes, for example, that illustrations of ensembles that include two trombones are not found before about 1500. Archival evidence, however, is explicit in that many of the most preeminent ensembles of the time (those of Maximilian I, or of the cities of Bruges and Antwerp, for example) apparently included two trombonists. Can this disparity be resolved, and what are the implications for performance practice? The author states (p. 360) that he does not find a duo of shawm and bombard as the core unit of the wind ensemble. I have argued a contrary view, attempting to establish that the shawm and bombard, performing the roles of soprano and tenor, were a basic unit—to which other voices might be added. The issue is of some importance as it affects the potential role of the slide trumpet in the performance practices of the *alta* ensemble (some scholars have suggested that the instrument performed the tenor part, while others, including me, have argued for the contratenor). Bear in mind that in the counterpoint of the mid-fifteenth century, the essential two voices were those of the discant and tenor. The contratenor may be added to this framework, but was a more optional element. Evidence painstakingly assembled by Tröster may help resolve this issue. He notes for example, that while duos are quite common in fifteenth-century illustrations, they are almost always composed of shawm or bombards in various combinations; rarely (after about 1420, at any rate) do we see a single shawm with a slide instrument. Iconography seems to imply that a second double-reed instrument was essential (i.e., to provide the tenor), and that the slide instrument was more optional (obviously then a contratenor and thus not the tenor).

In sum, then, this book is a terrific boon for those interested in the history of early wind and brass instruments. Included within its covers is by far the largest collection of relevant illustrations that we have ever had available. The volume certainly has its quirks. Readers will undoubtedly find their eyebrows twitching at some conclusions, and almost every reader will probably become totally exasperated at some point. But the book is crammed with information and imaginative ideas, and I’m delighted to have a copy on my shelves. Potential readers should note its modest price, but more importantly they should note that it has been published in a limited edition of only 150 copies. Given that research libraries, music historians with special interest in instrumental music, and performers interested in early music all should own this book, this small number of copies should sell out very quickly. Don’t delay on this one!

Keith Polk

The imposing number of sixty publications of the Institute for Musical Performance Practice, part of The Kloster Michaelstein Foundation, bears witness to a remarkable activity. The institute was established in 1977 as a complement to the Telemann Chamber Orchestra, founded in 1968 by Eitelfriedrich Thom (1933-93). Thom aspired to a broad approach to early music, featuring close collaboration among musicians, instrument makers, musicologists, acousticians, and organologists. Kloster Michaelstein evolved as one of East Germany's liveliest centers of musicological and organological research. The third principal component of the foundation is a collection of historical musical instruments, currently comprising some 700 items. The Kloster Michaelstein Foundation is housed in a Gothic-period monastery west of the city of Magdeburg, in the middle of scenic woods and fields outside Blankenburg, a small town located south of the Harz Mountains.

The proceedings under review are those of the nineteenth symposium on instrument making, held in November 1998, with the title "Trombones and Trumpets: History, Acoustical Science, and Playing Technique." It was the second symposium dedicated to brass instruments since 1983. Following tradition, the symposium included concerts, one of which was dedicated to the memory of the founder, Eitelfriedrich Thom. A few of the presentations were not available for print: Ellen Hickmann's paper on trumpets and horns in early Europe, a presentation of Jean-François Madeuf concerning Baroque trumpet playing, and a contribution by Don Smithers on mouthpieces. The proceedings comprise the contributions of nineteen speakers: twelve Germans, four Americans, two British, and one Canadian; the articles are either in German or English.

The first article, "Brass Instrument Making in the Fifteenth Century: Thoughts on the Example of Nuremberg", by Martin Kirnbauer, largely repeats the results of his archival research on this topic, originally published a decade ago. He goes beyond his previous discourse, however, by raising the important question, What caused Nuremberg's upswing to international significance in brass instrument making, beginning around 1500 with the Neuschels and Schnitzers? Kirnbauer cites a cluster of different factors: regulatory measures of the city administration, Nuremberg's role as a center of metal processing, the availability of metal and technological know-how, the Neuschels' special talents as makers, and their practical experience as musicians.

No doubt these were important factors, but in my opinion the principal factor was the imperial privileges bestowed on Hans Neuschel I (died 1503 or -04), Hans Neuschel II (died 1533), Georg Neuschel (died 1557), and the Schnitzers. The granting of privileges was not a reward for excellent work nor the Emperor's personal sign of grace, as Kirnbauer seems to think, but a governmental measure intended to promote economic development, to respond to the rapidly expanding market, and to serve as cultural trendsetter by binding the best artisans to the imperial court. The privileges' immediate effects on the Neuschels were:
(1) They were allowed to engage in international trade and to sign their instruments with the imperial eagle. While local craftsmen worked for the local market, the city and its merchants mediated trade with parties beyond the immediate vicinity. Members of the sworn crafts were not allowed to leave Nuremberg, but the Neuschels traveled widely, as indicated in a letter by one member of the family. They supplied instruments for courts in Trier, Munich, Mainz, Berlin, Dresden, Königsberg, London, Copenhagen, among others, and built trombones for the Pope.

(2) Although the Neuschels were formally masters of the guild-like Handwerk of the braziers or coppersmiths and therefore subject to municipal quality control, they and the Schnitzers were obviously liberated from the restrictive bonds of the Handwerk. As a consequence, the privileges prompted a trade principle that is known in German by the term Verlag. A Verleger is both craftsman and merchant. He supervises his own workshop and may engage pieceworkers and small workshops on a flexible basis, depending on the market. He makes sales and may advance money and material. While the ordinary merchant enjoys a privilege for trading but is detached from manufacturing, Verleger like the Neuschels and Schnitzers took responsibility for the quality of their goods and tuned the instruments themselves. As we learn from the correspondence of 1541-45 between Duke Albrecht of Prussia and Georg Neuschel, the latter’s supply business included kettledrums, woodwind instruments, and sheet music. He also traded in instruments (including brass instruments) made in Lyon, Venice, and other places. The concept of Verlag had evolved from the fourteenth century and it remained one of the basic types of business in German wind instrument making as late as the eighteenth and nineteenth centuries, operating alongside the individual small workshops, guilds, and factories.

(3) We know from later trade regulations that artists were exempt from regular craft rules and were allowed to engage in trade. Hans Neuschel II, who was appointed head of the town musicians in 1491 and 1499, may have been among the first to enjoy this special status.

(4) In the fifteenth through the seventeenth centuries, privileges proved to be powerful means for controlling economic activity on a large scale. For example, in 1507 Emperor Maximilian granted the city of Leipzig the privilege of holding fairs as a means of promoting the eastern regions of the Reich and boosting the nascent role of the city as a major trade hub. The privilege of the fair immediately effected an economic upswing of the city and the entire region. It also stimulated instrument making activity in Leipzig, which had hardly existed prior to this date, to a remarkable extent.²

Proceeding chronologically, the next article is Trevor Herbert’s “Trombones and the English Court c. 1480-c.1680.” Herbert offers evidence of a remarkably large number of professional sackbut players, many of whom came from the Continent. During the seventeenth century the court usually employed six trombonists, playing in groups of three. In the sixteenth century the records often point to an even larger number of players that was, as the author points out, in part due to the fact that the Tudor court maintained households
at different locations. Toward the end of the seventeenth century the trombone fell out of favor in England.

Stewart Carter in “Trombone Pitch in the Eighteenth Century” deals with the change of the nominal pitch from A (for the tenor if the slide is closed) to B♭. Carter approaches this tricky question from four angles, a record of extant trombones, musical and literary-didactic evidence, and pitch standards. The change occurred at different times at different places. As for Vienna, Carter found evidence of the change as early as 1707-08. He suggests continuing research to assess the transitional period elsewhere.

“The Soprano Trombone Swindle” by Howard Weiner raises interesting points of concern. His view that the soprano trombone did not emerge before the end of the seventeenth century is acceptable, but his method is questionable. Weiner denigrates Hans Kunitz as a “swindler” and “faker of history” because in his textbook on orchestration in 1959 he claimed that “The soprano trombone, also called treble trombone, belonged from the very beginning, i.e. since the beginning of the sixteenth century at the latest, to the family of the trombones” (p. 67). It is normal in any scholarly discipline for new research to challenge or replace former errors and flawed wisdom, but it is unfair to brand an earlier generation as swindlers because they made mistakes. Weiner’s argument is, in any case, flawed. He admits in one sentence, “Most of the following assertions do not go back to Kunitz himself; to some extent they have circulated since the nineteenth century.” In the same context and in direct reference to those assertions he bluntly states, “The author of this faked history [see the cited quote of 1959] is Hans Kunitz” (p.67). Certainly Kunitz adopted uncritically many earlier opinions, but this does not make him a swindler or faker of history.

Christian Ahrens, in his paper “On the Use of the Trombone during the Eighteenth and Nineteenth Centuries,” deals with a cantata by the German composer Johann Theodor Roehmildt (1684-1756). The cantata has a part for a bombardo, written in Chorton. In a sophisticated comparison with the treatment of trombones in scores by Wilhelm Schneider (1783-1843), Ahrens suggests that the part was intended for a tenor trombone.

The fourth contribution on the trombone, Arnold Myers’s “Trombone Designs in the Transition from Early Models to Modern,” concerns changes in dimensional parameters of the bore of the instrument. Myers selects a set of six principal parameters—a ratio to characterize conicity, a ratio to characterize cylindricality, cup volume of the mouthpiece, overall air column length, diameter at 1/2 tube length, and “horn function”—as bases for comparing the instruments and to establish taxonomic criteria. Myers measured 123 trombones of the sixteenth through the twentieth centuries, though only ten of them were made prior to 1700. He found considerable variety in all parameters: “Clearly there is no such thing as a single model which is uniformly appropriate for the classical and early romantic era.” As to the bore he found a slight increase “from the early trombone to the French model, and more markedly to the German and American models.” Though there is no standard model representing the Baroque or Classical period, there certainly are many different models that represent each period as a spectrum.

Gisela and Josef Csiba, in “The Tromba da tirarsi and Its Successors” put forward an interesting proposition, which they however had published some time earlier: “Musical
trumpeters” of the seventeenth and eighteenth centuries used, so they claim, a slide to correct out-of-tune notes. They believe to have found evidence of such slides in a few historical trumpets in the form of “pull traces.” While the slides have been lost, the traces remain. Dieter Krickeberg and Tom Lerch have given this proposition a closer look in their contributions, “Concerning Traces of Trumpet Slides” and “The Assessment of Endoscopic Examinations of Historic Brass Instruments in the Musical Instrument Museum in Berlin” respectively. Krickeberg found “traces that are at least similar to pull traces” in four out of twenty-four natural trumpets he examined in the Historic Museum of Basel and the Musikinstrumenten Museum in Berlin (p. 107). In his opinion, slides were used at least temporarily in two trumpets of the Basel collection (p. 109). Tom Lerch takes a more cautious position in his assessment of the other two trumpets, which belong to the Berlin museum. He argues that the marks that appear to be “pull traces” cannot unequivocally be attributed to friction from slides, demonstrating persuasively that they could also result from repairs or restorations. Lerch summarizes that the issue calls for much more investigation and study, and argues that at this point we possess insufficient information to assess the various marks and traces to be found inside the tubes of brass instruments.

Two further articles discuss individual instruments and makers that have been given little attention so far. One article, “Remarks on Two Natural Trumpets by the Schmied Family (Paffendorf) in the Musical Instrument Collection of Michaelstein”, by Monica Lustig, describes a trumpet by Johann Adam Schmied of 1742 and another by Johann Joseph Schmied of 1763. Lustig also points to a bell of 1763 without a maker’s name in the same collection and persuasively attributes it to Johann Joseph Schmied. The other article is by Sabine Klaus on “Early Instruments of the Hirsbrunner Workshop, Sumiswald, in the Historical Museum of Basel.” This article displays rich and diverse material, including biographical research conducted and provided by the Hirsbrunner family. Klaus also addresses Leutenegger’s contention that Hirsbrunner built valve instruments as early as 1817. To my mind she provides sufficient evidence to dismiss Leutenegger’s statement, which seems speculative, but she cautiously leaves the possibility open. Further, Klaus draws attention to an interesting valve system in Hirsbrunner’s bass trumpet no.1980.2069. of the Historische Museum in Basel. The valve, which previously has escaped attention, appears in my opinion to be a variant of the Stoelzel valve, developed probably around 1830–35. It belongs to those futile attempts to improve quite successful valve systems, such as the Périnet and Pumpen types, by means of additional action levers and wind-channels. As Hirsbrunner used the upper end of the casing as an air channel, he had to add a connecting channel. Thus he increased the number of openings in the casing from four to six. Viewed from a mechanical perspective, it is a design of increased complexity as well as greater redundancy and vulnerability. Small wonder that this type of valve was not accepted. It is also remarkable that Hirsbrunner was not aware of the detrimental effect of the angular form he gave to the connecting channel, since one of the basic objectives of all valve inventions from the 1820s and later was to avoid sharp angular bends in the windway.

The distinguished trumpeter Friedemann Immer, in his contribution “The Keyed Trumpet,” addresses performance-practical aspects of the four known major compositions
for keyed trumpet: the concerto by Joseph Haydn (1796), the sinfonia concertante by Leopold Anton Kozeluch (1798), and the concerti by Joseph Weigl (1799) and Johann Nepomuk Hummel (1803). While Immer’s comments reflect his own experiences with the performance of those works, another article, “The Keyed Trumpet: Its Structure and Acoustical Behavior Compared to the Valve Trumpet,” by the physicist Walther Krüger, takes an acoustical approach. Krüger compares the acoustical behavior of both the keyed and valve trumpet and concludes that the former requires a more secure embouchure than the latter. In contrast to the valves, the lighter keys present an advantage in playing fast passages. This benefit should not be underestimated, given the fact that the keyed trumpet usually requires only one key to produce a tone.

Richard Seraphinoff, in “Compromise and Authenticity in the Baroque Trumpet and Horn,” addresses the basic problem of modern performance practice. Seraphinoff has set his heart on the ideal that “the end goal of the period instrument movement [is] to perform on instruments as they were, and to play them in a way that we hope would be consistent with the intent of the composer, while still retaining our own personality and integrity as artists” (p. 205). He rejects the vented trumpet and hopes that we eventually will do away with it. He then endorses the trumpet-making courses of Bob Barclay, who himself reports in this volume on “A Trumpet-Making Workshop for Beginners,” in which each student learns to build an instrument in a relatively short period of time.

Acoustical research, however, goes in a different direction than Seraphinoff seems to wish. Apart from basic research, acoustical science in general supports the demand of mainstream manufacturers and musicians to build instruments with very good intonation and the potential to modify out-of-tune notes easily. It does not support the production of vented trumpets but takes a different approach, providing musicians with instruments that will allow them to master the well-known problems of natural trumpets and horns. These efforts result in modifications of historical instruments, however, in a way less obvious than finger holes. Tremendous progress in understanding how brass instruments work acoustically has opened up the possibility of effecting slight, usually invisible changes in the bore for the sake of the instrument’s acoustical optimization as regards intonation and response. Two papers are dedicated to the method of physical modeling that is considered the principal method of optimizing an instrument acoustically: Paul Anglmayer in “Physiological Modeling of Brass Instruments and its Application for the Optimization of Trumpet Intonation,” and Jobst Fricke in “A Different Kind of Physical Modeling to Produce Trombone and Trumpet Sounds.” Physical modeling is a means of expressing the conditions of a vibrating event in an instrument in mathematical form. It allows in a subsequent step the calculation of any additional vibrating event and its bore conditions. This modus operandi may result in suggestions for the modification of an existing bore in order to improve intonation and response. What an artistically talented instrument maker would do intuitively, physical modeling tries to accomplish scientifically and if possible, surpass it. This method can work only if all factors that figure in a particular vibrating process are faithfully reflected in mathematical form. Klaus Wogram, in his paper “A Simple Acoustical Method of Measuring to Assess and Improve Intonation and Playing Quality of Brass
Instruments,” pursues a similar goal of improving the quantitative aspects relating to the musical qualities of an instrument.

These acoustical methods will unquestionably affect the manufacture of period instruments in the future. A demanding player, who is part of the music market, will have to prefer scientifically optimized instruments to those that were made according to traditional empirical craft methods—simply because their intonation and response are better. Acoustical optimization will induce a factor that is in a rigorous sense not historical. But modern performance practice, soberly seen, is not—and cannot be—fully historical either. It is part of modern culture and thus inevitably bound and committed to its overarching perceptions. These include the understanding of sound as a physical and aesthetic phenomenon as well as a focus on precision and perfection, with a concomitant propensity toward stardom. Artistic expression in the nineteenth and twentieth centuries is characterized by a trend toward increased sensual and aesthetic understanding of music. We should remember that aesthetic theory in the modern sense hardly existed prior to the middle of the eighteenth century, and that in earlier times sound was connected with the concept of universal harmony and was not just a physical and aesthetic notion. Musical affects in the sixteenth and seventeenth centuries were not the same as emotions and feelings as they have been associated with music in the last two centuries. Our perception of early music is determined not only by the music itself but also by our psyche as it is molded by contemporary culture. No doubt earlier performance practice aspired to precision and excellence also, but in the end it was more forgiving and tolerant of inaccuracies. The intrinsic imperfections of natural trumpets were more readily accepted as natural, since imitation of Nature was—unlike today—the goal of all arts.

The principle of traditional science and scholarship is abandoned in the contribution of the instrument maker Heinrich Thein, entitled “Technological Research and Experiences in Copying and Restoring Brass Instruments.” The author espouses a spiritual approach to metal and metal processing according to—I presume—the anthroposophy of Rudolf Steiner (1860-1925). Thein explains that the historical maker imparted his intentions to the structure of the metal in a subtle way and the metal consequently imparted those intentions to the sound. Thein thinks that earlier makers had a different, more spiritual attitude toward metal, and thus they were more capable of imparting spiritual intentions to sound. The metal of old instruments therefore would have absorbed spiritual qualities, which, with the right attitude, can still be felt today. Modern metal, on the other hand—and especially that which is processed in factories—does not have such qualities. Thein argues that one can perceive the difference. “The metal [of historical instruments] is already warm… However, this phenomenon cannot be expressed in figures. It may be felt only by way of empathy and comparison with a modern piece of brass” (p. 211). The warmth that Thein has in mind is not the physical, thermodynamic warmth that can be expressed by a certain degree of temperature; it can only be experienced spiritually.

Summing up the proceedings, we find that volume 60 presents a diverse—perhaps somewhat too diverse—cross-section of current research activities in the field of historical brass instruments. There is no common inner theme or focal point, which is not necessarily
a shortcoming; but reading the contributions brought home to me that the symposium adhered to the particular and clearly commendable concept of the Michaelstein Institute for Performance Practice: bringing together artists, makers, scholars, and scientists at one table.

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**NOTES**


3 An English version of Weiner’s article, with the author’s criticism of Kunitz somewhat muted, appears in this issue of the _Historic Brass Society Journal_.

Le trombone à travers les âges (The Trombone through the Ages), by Benny Sluchin and Raymond Lapie. Buchet / Chastel Edition, 18, Rue de Condé, F-75 006 Paris. 149F-22.71€

To begin, I must point out that to my knowledge, this work is the first book of importance (283 pages) dedicated entirely to the history of the trombone, from its origins to the present day, in French. Two books from Payots Editions (Lausanne, Switzerland) have been dedicated to the horn (by Kurt Janetsky) and trumpet (by Edward H. Tarr) respectively, but Sluchin and Lapie’s book is the first on the trombone in that language.

Moreover, the book is an important contribution to research on the trombone in any language. There are several articles on the trombone in music encyclopedias and in such books as the Zink Buch (Basel), History of Brass Instruments (Anthony Baines), The Cambridge Companion to Brass Instruments (edited by Trevor Herbert and John Wallace), and Perspectives in Brass Scholarship (edited by Stewart Carter). Other authors (Henry Fischer, David Guion) have written books on the trombone, but have limited their scope to a specific period. Robin Gregory’s The Trombone: The Instrument and Its Music is now nearly thirty years old; thus Sluchin and Lapie’s book offers a welcome update, incorporating many of the musicological discoveries of the early music movement.

After an interesting preface by Pierre Boulez, the authors divide the saga of the trombone into seven chapters: “From Antiquity to the fifteenth century,” “The fifteenth and sixteenth centuries” (twenty-three pages), “The seventeenth century” (twenty-five pages), “Bach’s time” (nineteen pages), “From the style galant to Beethoven” (twenty-three pages), “The trombone in the Romantic period” (fifty-seven pages), and “The twentieth century” (sixty-five pages.). Every chapter follows the same general plan, beginning with the technical evolution of the instrument (as revealed by iconography, different models, etc.); repertoire, classified by country; then, beginning with the chapter on the seventeenth century, solo repertoire and leading soloists; and the birth and evolution of pedagogy. Finally, the chapter on the twentieth century includes a discussion of jazz, its history and its soloists.

The later chapters in particular are illustrated with copious musical examples illustrating a wide range of repertoire. Completing the book is an appendix of seventeen pages, with lists of methods and principal solo works as well as a bibliography. This book can be read like a novel, but it also serves as an enormous database that will enable readers to deepen their knowledge.

Bibliographic citations are given at the bottom of each page, making them quite easy to use. Most of these sources are easily accessible to musicians who have little musicological background; the articles for the most part come from journals that are easily accessible to brass players, such as Brass Bulletin, International Trombone Association Journal, and Historic Brass Society Journal (I especially recommend this last publication!).

One will always notice a few errors and inconsistencies. For example, the authors use the appellation “trombone” for the trompette-sacqueboutte of the alta ensemble. The latter is really a trumpet, though it may have had a telescopic leadpipe. But this period is still little known, and interested readers will be able to appropriate references to the latest research on this topic find in the notes. The diameter of tenor sackbut bells in the sixteenth century is
on average much closer to 10cm than 12 (p. 29); and the fanfare of Josquin des Prez, *Vive le roy*, has four parts, not five (p. 40); but these details must be considered inconsequential in light of the enormity of the task.

Beyond the list of the dates, facts, and works, certain more subjective judgments are likely to generate lively discussion among trombonists. For instance, concerning the thumb-valve on the alto trombones, the authors state, “This kind of mechanism may not be precisely in agreement with the present research for historical truth in interpreting the music of the past” (p. 178). And on the same page, their statement that “The sonority [of the small-bore French trombone] is rather closed” seems pejorative to me. These instruments seems may seem “closed” to a musician accustomed to a wide bore, but the sound of Ravel’s *Bolero* recorded by M. Galiègue in 1962 with the Orchestre de la Société des Concerts du Conservatoire under the direction of A. Cluytens (reissued by EMI classics), does not appear “closed” to me, but as rich in timbre and at least as appropriate as the different tone colors of Tommy Dorsey or Kai Winding.

In conclusion, one might wonder why a book such as this one should be published in print form now, in the age of the internet. The answer? Because one can find just about everything one needs to know about the trombone quickly. The book is well organized and compact, and one can read it in the train or elsewhere without recourse to a battery or computer file. The reader who wishes to do so can always investigate further any detail, thanks to the copious bibliographical references. Even if one does not know French, it is possible to use the book a rich chronological catalogue of the men, works, and trends that created the history of the trombone. This book is unique and should be in every library.

*Jean-Jacques Herbin*

**ADDENDUM TO VOLUME 12**

In my article “Sensation or Forgery? The 1677 Soprano Trombone of Cristiann Kofahl” (translated by Howard Weiner), which appeared in volume 12 of the *Historic Brass Society Journal* (pp. 259-65), I described this recently rediscovered instrument, now in the Trompetenmuseum Schloss Kremsegg in Kremsmünster, Austria. I mentioned that it was first shown to the public in the exhibition “Für Aug’ und Ohr: Musik in Kunst- und Wunderkammern” at Schloss Ambras, near Innsbruck, July-October 1999. I neglected to mention that the exhibition was designed and mounted by Gerhard Stradner, curator of musical instruments at the Kunsthistorisches Museum in Vienna, and that the exhibition catalogue, which bears the same title as the exhibition (edited by Wilfried Seipel, Milan: Skira Editore, 1999), contains on p. 132 the first photograph and description of the Kofahl trombone. Furthermore, the catalogue was reviewed by Herbert Heyde in *Historic Brass Society Journal* 11 (1999): 198-200. Heyde’s review mentions this instrument and includes a photograph of it.

*Lars Laubhold*