

IN DEFENSE OF ALTENBURG: THE PITCH AND FORM OF FOREIGN TRUMPETS

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The year 1995 marks the 200th anniversary of the publication of one of the most famous treatises ever written on the trumpet, Johann Ernst Altenburg's *Versuch einer Anleitung zur heroisch-musikalischen Trompeter- und Pauker-Kunst* (Halle, 1795). Generally regarded as the first history of the trumpet, this important work, probably the most frequently cited authority on the trumpet, contains passages that have bewildered modern scholars. Particularly perplexing are the statements concerning the pitch of foreign trumpets. According to Altenburg's treatise, French trumpets are pitched in F and English trumpets in G. Since modern researchers have been unable to find sources of French trumpet music in F and English music in G, these pitches for foreign trumpets are a mystery. As Anthony Baines has written: "Various explanations have been suggested but still the namings make no clear sense."¹ In two recent articles published in this journal, Reine Dahlqvist has proposed a simple explanation for these passages: Altenburg is mistaken.² Dahlqvist's thesis is that Altenburg, as well as Johann Heinrich Zedler, Thoma Janowka, and Friedrich Friese,³ copied this information from an earlier source, without any first-hand knowledge of the pitch of foreign trumpets. He further argues that the original source, Christoph Weigel,⁴ is also mistaken, since "there is in fact no evidence that these pitches were used in France and England at that time" (*HBSJ* 5:36). Believing that Altenburg is similarly incorrect about the existence of coiled trumpets in Italy, Dahlqvist concludes: "It is doubtful what Altenburg in fact knew about trumpets and their use in other countries" (*HBSJ* 5:41). The following article offers a different explanation of these sources, and will argue that the discussions of the pitch of French, German, and English trumpets and the shape of Italian trumpets do not conflict with our understanding of the trumpet in the 17th and 18th centuries. The sources are not mistaken, only the assumptions that have been made about them.

There is a simple explanation for the information provided by these treatises concerning the pitches of French and English trumpets. Dahlqvist and other authors have assumed that these passages must refer to trumpets used in concerted music. They have failed to consider that these statements refer to military usage, the pitches pertaining therefore to trumpets used in the field and not to ones performing so-called "art music" with other instruments. Field service was, after all, a trumpeter's primary *raison d'être* throughout the 17th and 18th centuries—a fact that many modern scholars overlook. Given the sublime trumpet writing of Bach and Handel it is easy to forget that most 18th-century trumpeters did not perform in churches, opera houses, or palaces, but played their instruments standing in the mud. Researchers have been unable to find surviving sources containing trumpet writing in these keys because field pieces were seldom written down. In the rare instances when they are put to paper there is no reason to notate them in any key other

than C. This is also the case with music for trumpet ensemble. Dahlqvist's assertions that "as far as is known there is no music from 18th-century England requiring a trumpet in G" (*HBSJ* 5:31) and "there is in fact no evidence that these pitches were used in France and England at that time" (*HBSJ* 5:36) are based on an examination of church, chamber, and theater music, not field trumpet music. The use of higher-pitched trumpets in the field has obvious advantages: the instrument is lighter and shorter making it easier to carry; and the instrument produces, in the low and middle registers, a more penetrating sound that carries farther. The fewer number of surviving trumpets in these keys are the result of the hazards of field trumpet usage, especially under battle conditions. When one considers that these authors are describing field trumpets, the historical sources make sense, and if one examines the treatises in detail, analyzing the context of these statements and considering the purpose of the treatises, it is clear that this is the intended meaning.

Of primary importance to our understanding of these sources is the question of awareness: Why would the authors of these German treatises be aware of the pitches of French and English trumpets or the shape of Italian trumpets? The reason is that trumpets used in France, Italy, and England were manufactured in Germany.

As Nuremberg was the center of trumpet making from the 16th to the beginning of the 19th centuries,⁵ it is not particularly surprising that these makers knew the pitch of trumpets in different countries; they had supplied these instruments since the beginning of the 16th century. Hans Neuschel the younger (ca. 1465-1533) provided "sundry trumpets of silver" to Pope Leo X.⁶ The business correspondence of his adopted son, Jörg (Georg) Neuschel (d. 1557), contains frequent references to "German," "Foreign" [*Welsche*], and "French" trumpets.⁷ A letter dated 1 November 1545 mentions instruments made for the kings of Poland and England.⁸ Concerning Nuremberg's role in the second half of the 17th century, Robert Barclay has observed that "By virtue of aggressive marketing, cheap raw materials, and, of course, excellent workmanship under rigid quality control, Nuremberg acquired the lion's share of the European market in brass instruments."⁹ Continuing throughout the 18th century, Nuremberg makers supplied instruments to these foreign countries. The paucity of extant trumpets of French or Italian manufacture supports this view. As Anthony Baines has noted: "Italy, though contributing much to trumpet music, relied mainly on the Nuremberg makers and no Italian-made baroque trumpet has yet come to light. The virtual absence of French instruments is more remarkable The few seventeenth- and eighteenth-century *regimental* trumpets preserved in the Musée in Paris are all Nuremberg-built"¹⁰ [emphasis added]. In England, there did exist a long and distinguished line of goldsmith-trumpet-makers who, being trumpeters in the King's or Queen's Guard, produced trumpets for their own use.¹¹ These English trumpets, highly ornate in character and often made of silver, were well suited to the ceremony and display of life at the royal court but less apt for field work. While the Nuremberg makers produced instruments of superlative quality and ornament, they also mass-produced simple utilitarian instruments designed for field service—trumpets that were lighter and less expensive than ornate silver ones, easier to carry, and less lamented when trampled underfoot. As import duties indicate, these instruments were shipped into England well into the 18th century.¹²

To ensure that the instruments exported to various countries were pitched in the appropriate key, a standard was required. The reference pitch was that of the common German trumpet; French trumpets were a tone higher, while English ones were a third higher than the standard. Note that the treatises of Weigel, Friese, and Zedler do not mention specific pitches, but rather describe the intervallic relationship between foreign trumpets and the German trumpet. An excellent representation of the various pitches of trumpets manufactured in Nuremberg is found in a photograph that Edward H. Tarr included in his English translation of J.E. Altenburg's *Trumpeters' and Kettledrummers' Art*.¹³ In this photograph are six trumpets made by members of the Haas family that show a wide variation in fundamental pitch.¹⁴

The use of higher-pitched trumpets in foreign countries most likely began in the early 17th century. During the first half of the 17th century, the makers of Nuremberg were extremely busy supplying instruments to Germany, France, Italy, England, and Sweden. The reason for this, of course, was the Thirty Years' War (1618-1648), the historical importance of which is well-known. The impact that this protracted multi-national conflict had on trumpeters of the time was enormous and is crucial for our understanding of trumpets and trumpeters in the early 17th century. Corroboration of the pitch of French military trumpets of this time is found in the well-known *Harmonie Universelle* of Marin Mersenne. In Proposition XI of the Fifth Book of Wind Instruments, the ordinary trumpet is described as pitched in C; in Proposition XX, following a section on military trumpet calls, Mersenne depicts the military trumpet as an instrument in F.¹⁵

The knowledge of the pitch and shape of foreign trumpets of Weigel, Friese, and other German authors would have come from either the Nuremberg trumpet makers themselves or from those involved in the sale and shipping of these instruments.¹⁶ As we shall see, the majority of the treatises that discuss international trumpets are concerned with trade and manufacture, not with music.

The earliest dated treatise to mention international trumpets is the *Abbildung der gemein-nützlichen Haupt-Stände* by Christoph Weigel (1654-1725). The full title of the work, published in 1698, is *Abbildung der gemein-nützlichen Haupt-Stände von denen Regenten und ihren so in Friedens- als Kriegs-Zeiten zugeordnetes Bedienten an, biss auf alle Künstler und Handwercker, nach jedes Ampts- und Berufs- Verrichtungen, meist nach dem Leben gezeichnet und in Kupfer gebracht, auch nach dero Ursprung, Nutzbar- und Denckwürdigkeiten, kurtz, doch gründlich beschreiben, und ganz neu an den Tag gelegt, von Christoff Weigel*. [Illustration of the principal trades in general use by the Regents and their designated servants in times of peace and war, including all artists and artisans, according to every office and profession, mostly drawn from life and rendered in copper, and, in short, precisely described according to their origin, usefulness, and significance, and set down completely new on this day by Christoph Weigel]. This book, 684 pages in length, contains descriptions and copper engravings for 214 different occupations (apothecary, bookbinder, potter, hourglass-maker, tailor, etc). Five professions that involve musical instruments—organ maker, violin and lute maker, trumpet maker, wind-instrument maker, and string maker—are included. After describing when and how Nuremberg trumpet making became an industry protected by

laws and regulations, he proceeds to describe the products that they manufacture: trumpets, trombones, Waldhorns, and posthorns. Weigel lists several varieties of trumpets,

namely the **German** and so-called ordinary trumpets; the **French** which are a tone higher than the former; the **English** which are about a whole third [i.e. a major third] higher than the ordinary trumpets. One also finds a class of **coiled** trumpets, and [they] are the **Italian** or *Welsche* which are wound six-times around; ...¹⁷

Weigel's purpose is to describe the manufacture of brass instruments, not their musical applications. His statements about foreign trumpets are not based on an extensive knowledge of the musical repertoires of England, France, or Italy, but on information from the Nuremberg makers themselves, just as his article on woodwind instruments is based on the instruments of the famous Denner family (also of Nuremberg). After all, Weigel lived in Nuremberg and had ready access to these instrument makers.¹⁸ He was not a musician but rather a copper engraver and author who wrote and published dozens of books on such diverse subjects as biblical illustrations, minerals and metallurgy, maps of Italy, histories of the world, emblems, law, copper engraving, and theology. His large treatise on professions may have been assembled in some haste, as Robert Barclay has opined, and perhaps "It serves its chief purpose as an article of propaganda—it is a very early example of a chamber of commerce brochure."¹⁹ In this regard, the emphasis on the importance of Nuremberg trumpet manufacture to other countries would be particularly apropos. What better advertisement for the city than that one of her products is so desirable that it is exported to many foreign countries? In his article on the trumpet maker, Weigel writes, "thus the Nuremberg masters have been in this regard fortunate over others, that their work is favored at almost all electoral and princely courts, and is exported in great quantity to Spain, France, Denmark, Holland, and even Moscow, among others."²⁰ The pitches of these trumpets refer to the type of instrument that was exported in the greatest numbers at the end of the 17th century, the military trumpet.

The next source under consideration here is *Clavis ad Thesaurum Magnae Artis Musicae*, published in Prague in 1701 and written by Thoma Balthasare Janowka (1669-1741).²¹ Unlike the previous source, this dictionary, written in Latin, is concerned with the "great art of music," and addresses music theory, musical terminology, and musical instruments. Janowka was a musician who served as organist at the Tyn church in Prague for fifty years.²² His remarks about the pitches of foreign trumpets are found in the article entitled "TUBA" [trumpet]. Janowka writes,

Therefore there are three varieties of field trumpet [*tubae campestris*]; i.e. one type that is low (called "humbled" [*humiliatae*] by some) in *Chorton*, corresponding to French and Italian organs, in B \flat with respect to our [organs]; another type known as "long" or "ordinary," either in *Cornetton* or else corresponding to our organs; others are short [*breves*], sounding in D with our organs,

which some call French (I do not know why); whereas others use that term [French] for the first “humbled” ones, from their French and Italian organ pitch. There are, in fact, other ones in E, but they receive little use.²³

There is no doubt here that Janowka is referring to military usage. Since Janowka’s treatise is primarily concerned with “art music,” it was necessary to differentiate between field trumpets and trumpets used in concerted music. For the latter, Janowka employs the term *tubicine*.

It is important to note the differences between Janowka’s text and the other treatises: 1) Janowka mentions specific musical pitches; 2) he does not discuss the pitch of English trumpets; 3) he does not mention the shape of Italian trumpets; and 4) he mentions a type of trumpet that is lower in pitch than the “ordinary” one. It is clear from the content and wording of Janowka’s remarks that Weigel could not possibly be the source of his information.

The undated *Ceremoniel und Privilegia derer Trompeter und Paucker* is found as both a separate publication as well as in *Der vornehmsten Künstler und Handwercker Ceremoniel-Politica* of Friedrich Friese (1668-1721). The latter, a three-volume collection published in Leipzig during the first two decades of the 18th century, contains descriptions of twenty-two different professions, including blacksmith, hat maker, gunsmith, butcher, and others. Friese was a professor at the *Gymnasium* in Altenburg and a graduate of the University of Leipzig. His purpose in writing the *Ceremoniel-Politica* was to explore the structure and organization of guilds: regulations, training of apprentices, examinations and ceremonies by which an apprentice qualified to become a master, and so forth. As set forth in the introduction to the first volume, each part of this treatise is devoted to a different manual art and has the same format: a series of questions and answers divided into three chapters, the first devoted to the ceremonies of apprentices, the second to those of journeymen, and the last to masters in the art. Friese worked on this project for at least ten years and published each individual part as a separate issue before grouping them into the larger work.²⁴ The title page of each part, with one exception, contains the same text, altering only the name of the profession and the date of publication. Of the twenty-two parts, the only one that does not have this elaborate title also lacks the name of the author, the publisher, and the date and place of publication. This section is devoted to Trumpeters and Kettledrummers (see Figures 1-3).

Several features of the “Ceremonies and Privileges of Trumpeters and Kettledrummers” suggest that it may not belong to Friese’s *Ceremoniel-Politica*, and may have been bound with the other sections at a later date. First, it lacks the elaborate title page of the other sections. Second, rather than following the three-chapter format of all the other sections, it has only two parts (“Useful Remarks on the privileged free Trumpeter’s Art” and “Privileges”). Third, while the first twenty-one sections are paginated sequentially from 1-940 with corresponding signatures, that devoted to trumpeters and kettledrummers has page numbers and signatures that begin anew (numbered 1-43 rather than 941-983). Fourth, of the two copies of Friese’s work that I examined, both located at Harvard University,



Figure 1
Friedrich Friese, *Der vornehmsten Künstler und Handwerker Ceremoniel-Politica*, part 8 (1707), title page.



Figure 2
Friese, *Ceremoniel-Politica*, part 17 (1715), title page.



Figure 3

Ceremoniel und Privilegia derer Trompeter und Paucker, title page.

the first does not contain the *Ceremoniel und Privilegia derer Trompeter und Paucker*, and the second has bound into this volume, immediately following the section on trumpeters and kettledrummers, a work that is clearly not by Friese: a treatise on hat making by Paul Jakob Marperger.²⁵ The binder's title for this large volume is *Handwerker politica*, perhaps representing three separate works bound together, sharing similar subject matter. Fifth, the concluding sentence of the *Ceremoniel* of trumpeters and kettledrummers, following the final line of the privileges ("... and given at Dresden on the 10th of July 1650 / Johann Georg [I] Elector") states that "These are printed according to the true original by the brothers Christian and Melchior Bergen, book printers to the Electoral court of Saxony at Dresden."²⁶ This last sentence may indicate that this is an official publication of the mandates, intended for distribution and printed shortly after 1650, or else a later reprint (perhaps fifty years later) that includes this sentence in order to show that the mandates are taken from an official source. Finally, the work contains only the trumpeter mandates issued by Holy Roman Emperor Ferdinand II in 1630 and 1643 and by Elector of Saxony Johann Georg I in 1650. A publication supposedly published around 1709 and comprehensive enough to include three sets of trumpeter's privileges surely would have also included the mandates issued by Holy Roman Emperor Ferdinand III in 1653, Elector Johann Georg II in 1658, Johann Georg III in 1683, Johann Georg IV in 1692, Holy Roman Emperor Joseph I in 1706, and Elector Friedrich August I in 1709.

In the modern literature the publication of the *Ceremoniel und Privilegia derer Trompeter und Paucker* has been given variously as “Dresden, 1650,”²⁷ “Dresden, after 1650,”²⁸ “Dresden, 1709,”²⁹ “1720?,”³⁰ and even “some ten years later [than Weigel]” (i.e. ca. 1708).³¹ If the work is from the 1650s then it is definitely not by Friedrich Friese (who was not born until 1668). If it is by Friese then it was certainly published in Leipzig and not Dresden and can be dated, by internal evidence, between 1715 and 1721.³²

Questions of attribution and dating aside, the information concerning international trumpets provided by this treatise is stated in the context of the manufacture of trumpets in Nuremberg. The first section, entitled “Useful Remarks about the privileged [and] free Trumpeter’s Art,” is in the form of a series of nineteen questions and answers concerning the history, manufacture, and “remarkable” things about trumpets. The fourteenth and fifteenth questions are concerned with the trumpet maker’s art:

XIV.

When and where was this art [of trumpet making] again provided with laws?

The year 1635. The trumpet makers of Nuremberg received good laws and orders from a very noble and very wise city council and their art was set on firm footing.

XV.

What kinds of trumpets are manufactured?

Various, namely 1. German or ordinary trumpets. 2. French / a tone higher than the former. 3. English / a whole third higher than the German [trumpets]. 4. Italian and coiled. Here belongs also the *Trommeten=Stöcke* and *Streithämmer* / similarly the *Waldbörner*.³³

This passage is not a discussion of trumpet music, nor does the treatise contain a single reference to musical repertoire. Rather it contains information of a more general nature, the specified intervallic relationships refer to the size to which the Nuremberg trumpet makers built their instruments.

Johann Heinrich Zedler’s *Großes vollständiges Universal Lexicon aller Wissenschaften und Künste* (Leipzig & Halle, 1732-1754) is a sixty-four-volume (plus supplements) encyclopedia of knowledge of the world. It contains numerous articles of musical interest, including several on musical instruments, musical organizations, famous musicians, and the musical activities of important localities. Don Smithers has written:

The scope and scholarly integrity of Zedler’s enormous undertaking make it an extraordinary achievement. Many of the articles on music in this monumental work were written by Lorenz Mizler, a former pupil of J.S. Bach and founder of the first musicological society of any consequence. The serious student of 17th- and 18th-century history unfamiliar with Zedler’s *Lexicon* would be well-advised to spend a concentrated period of time studying this

work and its wide-ranging contents.³⁴

Edward Tarr has called the article on the *Trompeter* “one of the most important single sources, prior to Altenburg, concerning the trumpet.”³⁵ Zedler’s *Lexicon* contains separate articles for “Trumpet” and “Trumpeter.” The latter extends to more than twenty-three columns of text and discusses the role of trumpeters in antiquity, in the Bible, and in modern times. Following a detailed treatment of the mandates that protect trumpeters, the article concludes with the full text of the Hapsburg Imperial Trumpeter and Kettledrummer privileges of 1653.³⁶ By contrast, the entry for the “Trumpet” is only one-third of a column in length and consists of five sentences:

Trompete, Trompet, French *Trompet[t]e*, Italian *Trombe, Clarino*, or *Trombetta*, Latin *Tuba* or *Buccina*, a wind musical instrument, consisting of a set of three long, thin tubes lying together, [made] of brass, copper, or silver, [and] of wood or clay by the peasants; on the upper end [one finds] a mouth-piece, the lower end is a wide opening. The court trumpeters of great Lords use only the silver ones; the brass and copper trumpets are nowhere better manufactured than in Nuremberg, and one has these in different forms, namely German or so-called “ordinary” trumpets, the French, which are yet a tone higher, the English, which are a major third higher than the ordinary trumpets; one also finds a class of coiled trumpets, these are the Italian, which are wound a few times around. Finally, here belong the trombones, posthorns, and Waldhorns, the finest of all of which are made by the so-called trumpet makers in Nuremberg. For the Tartars, trumpets and drums are a symbol of sovereignty. *Allgem. Chronicke* VI. Th. p. 686. Moreover, see the article: *Trompeter*.³⁷

Notice that there is no mention of concerti, cantatas, operas, or any sort of “art music.” Even the article on the “Trumpeter,” which is sixty-six times longer than this one, does not contain a single reference to any composer or musical composition. That these subjects are treated at other points in Zedler’s *Lexicon* makes it clear that the trumpeter and his instrument are described not in the context of concerted music with other types of musical instruments, but rather in relation to the trumpeter’s most common role in 18th-century society, namely a purely functional one consisting of civic, signaling, or ceremonial duties. The type of music associated with the utilitarian duties of the trumpet was rarely recorded for posterity. Even music for trumpet ensemble without other kinds of instruments would have been notated in C.

Before turning to Altenburg’s famous work, it is necessary to mention two additional 18th-century treatises that discuss the pitch and shape of foreign trumpets: Jablonski’s *Allgemeines Lexicon der Künste und Wissenschaften* and Hübner’s *Curieuses Natur- Kunst- Gewerck- und Handlungs Lexicon*. Johann Theodore Jablonski (1654-1731) was born in Danzig and spent his childhood in Amsterdam.³⁸ He attended gymnasium in Berlin and

university in Königsberg [now Kaliningrad]. In 1700 he became secretary of the newly formed *Societät der Wissenschaften* in Berlin. Of the many works that Jablonski wrote, the most famous is the *Allgemeines Lexicon der Künste und Wissenschaften*. This *Lexicon* was originally published in Leipzig in 1721 and later reprinted (1767) in an enlarged edition (by Johann Joachim Schwabe) in Königsberg and Leipzig by the widow of the original publisher. Like Zedler's later work, this one is a lexicon of arts and sciences. Included is an entry on the trumpet:

Trompete, Tuba, Trompette, a wind instrument, which is made of either silver, brass, copper, or glass. The brass and copper [trumpets] are of different types, namely 1) German or ordinary trumpets; 2) French, which are a tone higher; 3) English, which are about a whole third higher than the ordinary ones; 4) Italian, which are coiled a few times. Those who play these [trumpets] are held in special regard, and are maintained by princely courts or the cavalry. They are divided into field trumpeters and musical trumpeters. The former blow nothing other than their trumpets, and only their field pieces on these; the latter play with others in large musical sonatas, and in addition play other musical instruments, and are now sought after by most courts.³⁹

The article then discusses the role of the field trumpeter, the trumpeter privileges, and finally the privileged trumpeter's relation to tower musicians and *Stadttrumpfer*. Of all the short entries on the trumpet found in 18th-century lexicons and dictionaries, this one is perhaps the most interesting and informative.

This article on the "Trumpet" differs from those found in the other German treatises cited above. Although the categories of foreign trumpets are described in the context of the construction of instruments—immediately following a list of the materials used—the trumpet makers of Nuremberg are not mentioned. Note also that the French, Italian, English, and 'ordinary' trumpets are not made of silver (a material less suitable for field instruments). Since Jablonski also provides information on what and how trumpeters played, it appears that his source was involved not with the manufacture and trade of trumpets, but rather with the trumpeters themselves. It is known that Jablonski traveled to England (after 1680), spent two years traveling in Italy (1715-1717), and wrote, under the pseudonym Pierre Rondeau (1711-12), a grammar and dictionary of the French language.⁴⁰ Further, Jablonski appears to have had a knowledge of art music.⁴¹ Jablonski's knowledge of foreign trumpets most likely came from first-hand experience with the trumpeters of these countries.

Johann Hübner (1668-1731) attended *Gymnasium* in Zittau and the University of Leipzig, where he studied theology, poetry, rhetoric, geography, and historical sciences.⁴² In 1694 he became Rector of the *Gymnasium* in Merseburg, and in 1711, assumed the rectorship of the Johanneum Lateinschule in Hamburg. This latter position he held for the last twenty years of his life. One of his employees was Georg Philipp Telemann, who had been appointed *Kantor* at the Johanneum in 1721.⁴³ Hübner was an extremely prolific writer who wrote on such diverse subjects as theology, geography, genealogy, and poetry.

Many of his works were translated into various languages, including French, Dutch, Italian, Swedish, and Russian. Concerning this author, Curt von Faber du Faur has written:

Hübner belonged to the species of great polyhistorians who flourished at the turn of the [18th] century. The extent of his publications, like that of his knowledge, is astounding, and he produced pedagogical, historical, and prosodic manuals while at the same time performing the arduous duties of rector of the Johanneum in Hamburg.⁴⁴

Among the works published under Hübner's name are two lexicons: the *Curieuses Natur-Kunst-Gewerck- und Handlungs-Lexicon* and the *Reales Staats-Zeitungs- und Conversations-Lexicon*. These two works complement each other: the former is concerned primarily with economics, the latter with geography. The *Handlungs-Lexicon* was originally published in Leipzig in 1712 and was in its sixth revised and enlarged edition by 1731. In 1739 a completely "new edition" was prepared, with a second introduction by G.H. Zincken. This new edition itself appeared in six subsequent enlarged and revised editions by 1792. The *Conversations-Lexicon* first appeared in 1704 (reprinted 1972), was in its sixth edition by 1713, and had reached its thirty-first edition by 1824. Although these volumes came to be known as "Hübner's lexicons," they were not actually written by him; he provided only the introductions to the original editions.⁴⁵ The *Curieuses Natur-Handlungs-Lexicon* was originally written by Paul Jacob Marperger,⁴⁶ the *Reales Staats-Conversations-Lexicon* by Philipp Balthasar Sinold von Schütz.⁴⁷ It is Marperger's lexicon that contains information about foreign trumpets.

Paul Jakob Marperger (1656-1730) was an economist born in Nuremberg.⁴⁸ His many publications are concerned primarily with business, including accounting, monetary exchange, shipping routes, and trades (his treatise on hat making is cited above). His interest in foreign commerce is evident in the *Handlungs-Lexicon*, which contains articles on the wares produced in many foreign places, including America, Moscow, Turkey, and the Far East. The lexicon contains little of musical interest, except for a few entries on musical instruments, including the following one for *Trompeten*:

Trumpets are certain wind instruments that are made of either silver, brass, copper, or glass, and for the most part the court trumpeters of great lords use only the silver ones; the brass and copper trumpets are nowhere better manufactured than in Nuremberg, and one has these in different forms, namely German or so-called "ordinary" trumpets, the French, which are yet a tone higher, [and] the English, which are a major third higher than the ordinary trumpets; one also finds a class of coiled trumpets; these are the Italian, which are wound a few times around. Finally, here belong the trombones, posthorns, and Waldhorns, the finest of all of which are made by the so-called trumpet makers in Nuremberg.⁴⁹

Not only is the information on the pitch and shape of foreign trumpets provided in the context of the manufacture of Nuremberg trumpets, it was also written by a man keenly interested in trade, commerce, and the exportation and importation of goods. This description of French, English, and Italian trumpets is found in all thirteen of the editions of the *Curieuses Natur- Kunst- Gewerck- und Handlungs-Lexicon* published in the 18th century.

Comparing the original text of Marperger's article to that of Zedler's, it is obvious that, except for some variations in spelling and grammar, most of the text is identical. It is clear that the article found in Zedler's lexicon is an expansion of the one in Marperger's and is not based on Weigel's treatise. The two lexicons were published in Leipzig some thirty years apart.

The real significance of Jablonski's *Allgemeines Lexicon* and Marperger's *Curieuses Natur- Kunst- Gewerck- und Handlungs-Lexicon* is that both works are specifically cited by Johann Ernst Altenburg. In the very first footnote of Altenburg's treatise, in the chapter concerned with the origin and classification of trumpets, both works are listed.⁵⁰ Obviously these works, rather than Weigel's, provided Altenburg with information on types of trumpets. They were not, however, the only sources for Altenburg's knowledge of foreign trumpets.

The seventh document is the most famous: Johann Ernst Altenburg, *Versuch einer Anleitung zur heroisch-musikalischen Trompeter- und Pauker-Kunst* (Halle, 1795). Of the seven treatises, this is the only one that is concerned exclusively with the trumpet; moreover, it contains the most detailed information specific to this instrument, including the history of the trumpet, contemporary usage, the privileges of trumpeters and kettledrummers, the decline of the trumpeter's art, biographies of famous trumpeters, as well as practical instructions for learning to play the trumpet and kettledrums. Altenburg discusses the gamut of trumpet playing: field trumpet playing, clarino technique, performing in trumpet ensembles, and even playing *concerti* and *sinfonie* in an orchestral environment. While it can be argued that the primary focus of this treatise is military usage, and that quantitatively the number of references to field-trumpet playing far outnumber those to concerted music with other instruments: does this constitute a convincing argument as to whether the pitch of field trumpets or concerted clarino parts are intended? Do the pitches of foreign trumpets given by Altenburg reflect contemporary usage or do they describe, as an historical study of the trumpet, an earlier practice that had become obsolete in his own time? In order to answer these questions, one must examine the context of Altenburg's statements.

References to the pitch of foreign trumpets occur at four different points in Altenburg's text. The first instance is in the first chapter, which is devoted to the history and the "Kinds, Names, and Forms" of the trumpet. The kinds of trumpets have been divided into two basic types, the "Old Kind" and the "New Kind," a binary division between ancient and modern common to many treatises of the time. When Altenburg first introduces the "modern" trumpet, it is defined as an instrument especially suited to military use:

Our ordinary trumpet (Lat. *Tuba*, French *Trompette*, Ital. *Tromba* or *Clarino*) is known as a musical wind- and war-instrument and is used especially by the cavalry.⁵¹

These common (*gewöhnlichen*) trumpets are then divided into two classes, those differentiated solely by size and those differentiated by form and material. In the first class, the first subcategory contains the two common pitches of trumpet—those in *Cammerton D* (equivalent to *Chorton C*) and *Cammerton E \flat* . Concerning trumpets in these two pitches, Altenburg writes:

With this type it is quite comfortable to play field pieces and the principale [part] in the low register as well as [the] clarino [part] in the high register, in that this [choir-pitched C trumpet] is not too long for the former and not too short for the latter. [Being able to play this kind of trumpet] is of no small advantage to the art of the German trumpeters.⁵²

The second and third subcategories are:

(2) The chamber-pitched F of French trumpet, [so called] because it is used by the French, is somewhat shorter; therefore, [it is pitched] a minor third, or one and a half tones higher than the former.

(3) The chamber-pitched G or English trumpet (*tromba piccola* in Italian) is so called because it is customarily used by the English. It is a whole tone higher still than the former [or French trumpet] and a fourth (*Diatessarone*) higher than the first. Clarino playing cannot be pushed quite as high with it as on the German D trumpet, and the player tires faster [on account] of its short body. Field pieces and principale parts can be played very penetratingly and blaringly with it.⁵³

From these passages, it is apparent that:

1) the usual pitch of the German trumpet was either C or D—pitches suited to both field and clarino playing. This is entirely consistent with the surviving 18th century repertoire;

2) “French” and “English” trumpets were not nominal designations but were actually used by the French and the English;

3) the trumpet in G is well suited to field use since it “can be played very penetratingly and blaringly”;

4) the trumpet in G is impractical for clarino playing because of its short body.

Here Altenburg has provided an explanation for the scarcity of surviving English scores written for the G trumpet. Since the G trumpet is very suitable for field work and not for clarino playing, one would not expect to find concerted music written for trumpets at this pitch.

The assumption that Weigel was the source of this passage has been so strong that the differences between the two texts have not been noted. Not only does Altenburg provide additional information not provided by Weigel, but the basic intervallic relationship between the types of trumpets is different. Weigel states that the French trumpet is a tone higher than the ordinary one, and the English is a major third higher, while Altenburg states that the French trumpet is a minor third higher and the English is a fourth higher. Taking this at face value and assuming that Weigel is referring to the trumpet in concerted music, the ordinary trumpet would be in C (according to surviving musical manuscripts of the time), the French in D, and the English trumpet in E. In contrast, Altenburg says that the ordinary trumpet is in *Cammerton* D, the French in *Cammerton* F, and the English in *Cammerton* G. Even differences of pitch standard cannot account for the different intervallic relationships between Weigel's trumpets and Altenburg's trumpets. How then does one reconcile these two disparate descriptions of foreign trumpets? Clearly, Altenburg is not discussing field trumpets exclusively: he repeatedly mentions both clarino and field playing. If Weigel is discussing field trumpets, then the pitch of his ordinary trumpet would not necessarily be C. If Weigel's common field trumpet was pitched in E \flat , then his pitches for French and English trumpets would coincide with those given by Altenburg. Although Altenburg gives D as the most common pitch of German trumpet (for field and clarino playing), he states at two different points in his treatise that many trumpets are built in E \flat .⁵⁴ Support for this hypothesis can be found in the large number of surviving Nuremberg trumpets that are pitched in *Cammerton* E \flat or higher—pitches for which relatively little music has survived.⁵⁵ It has generally been assumed that the instruments were built sharp so that they could be crooked down to lower keys or lower pitch standards. Since the insertion of a crook adds a certain amount of instability to the end of the instrument, it is logical to believe that these instruments were played uncrooked in E \flat when used in the field as utilitarian signaling instruments and crooked down to lower pitches when used as trumpets in more sophisticated musical settings. Baines reached a similar conclusion: "the high density [of surviving trumpets] in the E flat region around 205 cm. may be explained partly by sharp building but probably more by military usages."⁵⁶

The next reference to the pitch of a foreign trumpet is found in the fifth chapter of Altenburg's treatise, entitled "On the Advantages of the Trained Brethren-in-Art in Particular." In the section entitled "The Differences in Services Abroad," one finds an account of the salaries, uniforms, and provisions received by trumpeters of foreign nationalities. After describing the Roman Imperial Service, Altenburg writes:

In French service he receives 34 livres and 10 sous monthly and, furthermore, a gorgeous uniform. In time of war [he also receives] bread, meat, rice, and from the regiment, a horse.

The Roman Imperial Privileges are not in effect there; therefore, there are not only trained [trumpeters] but also city musicians (*Kunstpfeifer*) among them.

With the English a trumpeter receives 6 Dutch ducats monthly. Those of

the blue guard are clad in scarlet uniforms with blue facings and short vests, both of which are trimmed with gold stripes. They have short silver trumpets with magnificent tassels, and silver kettledrums.⁵⁷

As in the first chapter, Altenburg refers to the trumpet used by the English service as a “short” trumpet. Certainly, an instrument pitched a fourth higher is considerably shorter than the normal trumpet. The context of this passage is field-trumpet usage. Of particular interest is the wealth and specificity of information provided about French and English trumpeters; obviously Altenburg’s knowledge of foreign trumpets was not limited to that found in the treatises cited above. After presenting the particulars of Danish and Dutch service, Altenburg concludes this section with the following:

I have not been able to gather trustworthy information on the remaining foreign services and will, therefore, move on to the situation of trumpeters in Germany.⁵⁸

This is hardly the statement of an author who engages in “uninformed speculation,” but rather of one who is able to admit the limits of his knowledge.⁵⁹

Altenburg’s ninth chapter, “On the Mouthpiece, Tuning Bits or Shanks, Crooks, and the Mute,” contains a section on “Tuning.” Here the author discusses the possibility of playing in the “eight common keys” of C, D, E, E \flat , F, G, A, and B \flat . At first he states that one would need eight different trumpets, and then that, by means of the intervention of the whole-tone mute and half- and whole-step crooks, only the three sizes of trumpet (D, F, and G) mentioned in his first chapter would be necessary. Altenburg proceeds to explain how this would be accomplished. The English G-trumpet would yield A and G major:

- (2) A major. Here if one takes the short or G trumpet and inserts a mute, one will be in tune.
- (3) G major. [Use] the above trumpet, also called the English [trumpet].⁶⁰

As before, the trumpet in G is characterized as a short trumpet. The F trumpet would be able to accommodate three different keys:

- (4) F major. [Use] the field trumpet, otherwise called the French [trumpet].
- (5) E major. Here one adds a tuning bit to the above trumpet which lowers [its pitch by] half a tone.⁶¹

The meaning of “F dur. Die Feldtrompete, sonst die Französische genannt” is utterly unambiguous—the French field trumpet is pitched in F. This, coupled with the fact that “in 1757 he [Johann Ernst Altenburg] joined the French army as a field trumpeter and participated in the Seven Years War”⁶² makes it clear that Altenburg had personal knowledge

of the pitch of the foreign trumpets of his day. One of the duties of a field trumpeter was to act as a messenger between armies, and it is likely that he had contact with at least some of the armies of the various countries (Germany, France, England, Austria, Sweden, and Russia) that participated in the Seven Years' War. Moreover, since trumpeters acted as "free agents," they found employment in foreign armies.⁶³ This is most likely what Altenburg is referring to when he writes:

These [conditions of Field Trumpeters in General] are now very diverse, according to the nature of the positions. Since I have essayed them myself, before, during, and after the passing of the Seven Years' War, and have seen and become acquainted with others as well.⁶⁴

The use of higher-pitched military trumpets during this period is substantiated by J.S. Halle who, in his *Werkstätte der heutigen Künste* [The workshops of contemporary arts] (1764), writes "the shorter E or F trumpets [are] used by the infantry, provided with crooks and with tuning bits for 1/8, 1/4, and 1/2 tones."⁶⁵

It was necessary for Altenburg at this point in his essay to specifically identify this instrument as a field trumpet, since this passage is indeed concerned with concerted music. The title of this section is "Einstimmung"—"tuning" in the sense of "being-in-tune" (i.e. how a trumpeter plays in tune with other [non-trumpet] instruments). Altenburg specifically mentions playing in tune with an organ or other keyboard instrument;⁶⁶ probably other instruments were also intended. The ability to play in eight different keys is of no use to field trumpeters or even trumpet ensembles, but only to those performing concerted music. Altenburg identifies the one who might desire "in denselben mitblasen und einstimmen" (to play with others in these [eight different keys] and be in tune) as "ein musikalischer Concerttrompeter" [a musical concert-trumpeter]. In order to do this, the concert trumpeter would employ an instrument that he would not normally use otherwise, a field trumpet in F.

It is important to observe that Altenburg does not state that this was actually done, but only that it could be done, the tone of the passage being hypothetical. There are several indications of this. The paragraph opens, "If one wanted to play [with others] and be in tune with others in these [eight keys], one would also have to have eight trumpets of different sizes"⁶⁷—a supposition that is corrected in the next sentence: one would require only "three trumpets (or at most four)." The first key that is mentioned is B \flat and even though in theory, one could play in high B \flat , in practice "such trumpets do not exist, and moreover, because it would become painful and difficult for the player thereon, it is preferred that one play an octave lower in this key, using a long trumpet."⁶⁸ The following key of A major is attained by inserting a mute into the English G trumpet. Since modern researchers have been unable, in practice, to attain a whole-tone transposition with an antique trumpet mute, this may further confirm the hypothetical nature of these particular remarks.⁶⁹ In order to make his discussion of playing in tune with others complete, Altenburg has postulated how one might play the trumpet in eight different keys. He has not stated that this was

actually done, and one would not expect to find surviving 18th-century music in all eight of these different keys.

The final reference to the pitch of foreign trumpets is located in the 12th chapter, “On the Structure and Nature of Trumpet Pieces.” Altenburg discusses a setting of the chorale *Aus meines Herzensgrunde*, scored for three muted trumpets in D and an unmuted one in E, performed as a *Morgenseegen* [*sic*] (i.e., a piece that is played by tower musicians in the morning). In order to play this unmuted line, “It is presupposed that the French, or F trumpet, is lowered a half tone with a tuning bit. Perhaps this kind of tuning has been neglected up to now for lack of a shorter F trumpet.”⁷⁰ The exact meaning of this last sentence is unclear, but it does confirm that the French field trumpet in F was not commonly employed by German *Stadtptfeifer*.

The large number of sources that Altenburg drew on and the amount of contact he had with other trumpeters attest to the reliability of his information and demonstrate that he accurately describes the pitch of foreign trumpets.⁷¹ Further, Altenburg’s personal involvement in the Seven Years’ War and the opportunity it afforded him to encounter foreign trumpeters indicates that these conclusions apply to the usage of his time. It is not known what contact Altenburg had with Italian trumpeters. As historians, we are limited to surviving written documents. No records survive of the conversations Altenburg may have had with other trumpeters (who may have encountered Italian trumpeters) while he was researching his book, nor of other musicians or travelers with whom he may have spoken. We do not know if he wrote letters to anyone in Italy. And yet all of these things are possible. The fact that Altenburg provides more specific information concerning coiled Italian trumpets than any of the other sources indicates that his source of information was probably contemporary rather than historical. Whether or not we can pinpoint the exact source is irrelevant. The evidence provided by these seven treatises indicates that these were the normal pitches and shapes of foreign trumpets throughout the 18th century and perhaps also in the 17th century as well.

Two additional sources that originate near the time of publication of Altenburg’s *Versuch* provide further support for the pitch and shape of foreign trumpets. The first is the four-volume *Vollständige theoretische und praktische Geschichte der Erfindungen* that was edited by J.H. von Oroll and published in Basel, 1789-95.⁷² The chapter devoted to brass contains a section entitled “Trompetenmacher, oder Instrumentenmacher.” In describing the type of instruments that these trumpet makers produce, he writes:

Trumpets are of different types: the German or ordinary trumpets; the French [trumpets] which are a tone higher; the English which are a whole third higher than ordinary trumpets; and further coiled trumpets, which are the Italian and which are wound around several times; also the trombones belong here.⁷³

The second source is one of the most famous musical compositions of the 18th century, Franz Josef Haydn’s “Surprise” Symphony. As H.C. Robbins Landon has pointed out, the

autograph score of this symphony—composed in London in 1791—reveals that Haydn had originally intended it to include two trumpets pitched in G:

Haydn wrote the whole opening movement of No. 94 with G trumpets, and he was very careful to use them mainly up to written *e*" (=b"); only once does he employ the tricky sounding *c*" ([mvt.] I: [measure] 214); but he must have decided that they would be too difficult to play and perhaps also too shrill; for having completed the opening movement he changed to C trumpets and wrote, at the first entrance of the original (G) trumpet parts in the autograph (I:21), 'a parte' over the stave, crossing out the discarded parts. The C trumpet parts for [movement] I are on a separate sheet at the end of the MS. By the time he reached the third and fourth movements, Haydn put C trumpets in the score: the slow movement would have had parts in C as a matter of course.⁷⁴

Landon further points out that Haydn's earlier symphonies in G with trumpets use instruments pitched in C. Haydn apparently had wanted to take advantage of the G trumpets available in England but had found these high-pitched trumpets to be too limiting. Altenburg makes a similar remark concerning trumpet concerti: "It is true that some connoisseurs of this instrument have set trumpet concertos in various keys, for example F and G major, E and G minor; however, these could not be made in a natural manner without many limitations."⁷⁵ These sources indicate that G trumpets did exist in England at the time and provide a logical and practical reason why concerted music for these instruments would be extremely rare.

A critical reading of the treatises of Weigel, Friese, Janowka, Marperger, Jablonski, Zedler, Oroll, and Altenburg reveals that these puzzling references to foreign trumpets pertain to military trumpets. The lack of extant musical sources does not contradict these statements; indeed, Altenburg has provided an explanation for this state of affairs.

Coiled Trumpets in Italy

In addition to the information on trumpet pitches, seven of the above treatises state that coiled trumpets existed in Italy. Like the French and English trumpets, this coiled trumpet was a military instrument. Altenburg specifically states, "It [the '*Invention*- or Italian trumpet'] is not used by the cavalry, but [rather] by the so-called oboists and regimental fifers of the infantry."⁷⁶ Note that both of the options provided, use by the cavalry or by the infantry, are military in nature. While Altenburg describes only this infantry usage, the existence of the term *tromba da caccia* in 18th century Italian musical manuscripts provides evidence that this type of instrument was also employed in concerted music with other instruments, and, as its name suggests, was associated with hunting.

The designation *tromba da caccia* ("hunting trumpet"), which most logically refers to a coiled trumpet, has been a subject of controversy for several decades. Much has been written on this term and the heated debate over its meaning has provoked some to argue

that the term has no meaning and is a misnomer for the horn. The greatest obstacle to the present understanding of this designation has been lack of evidence; most of the hypotheses and conclusions have been based on a minuscule number of compositions. Most of the discussion of music with *tromba da caccia* has been limited to three works: a Violin Concerto in F with two *trombe da caccia* by Georg Philipp Telemann, published in 1907 as part of volume 29/30 of the *Denkmäler der Deutscher Tonkunst*, and the operas *Circe* and *Cleofida*, mentioned in Wilhelm Kleefeld's article (published 1899/1900) on the orchestra of the Hamburg opera.⁷⁷ The difficulties involved in drawing conclusions about the use of the coiled trumpet in Italy from three non-Italian compositions are obvious. A lack of readily available sources has hindered our knowledge: for a period of seventy years, Telemann's concerto was the only work with *tromba da caccia* available in a modern edition. Fortunately, in the past twenty years, the number of compositions with *trombe da caccia* available in modern edition or facsimile has increased tenfold.⁷⁸

With all due respect to Reine Dahlqvist's desire to "sort out the confusion" surrounding the label *tromba da caccia*, he has simply not examined enough repertoire. My ongoing search for compositions with *tromba da caccia* has uncovered nearly 150 manuscripts from the 18th century that contain this designation. These sources are found in libraries in Germany, Austria, France, Switzerland, England, Italy, Belgium, Spain, Portugal, the United States, and Guatemala, and contain one hundred different compositions by forty-one composers.⁷⁹ Works for which the date and place of composition are known span nearly the entire 18th century (1708-1788) in ten different cities (Naples, Vienna, Rome, Salzburg, Turin, Venice, Hamburg, Dresden, Palermo, and Lisbon). The designation was used throughout the 18th century, concurrent with the terms *tromba*, *cornò*, and *cornò da caccia*, not only in works by the same composer but occasionally also within the same work. A systematic and exhaustive search of Italian libraries would uncover many more such works.

Our present understanding of the musical use of the *tromba da caccia* has been informed—and, I believe, limited—by modern assumptions in much the same way that suppositions about the musical function of the trumpet have influenced the explanation of the pitch of foreign trumpets. Assumptions pertinent to the interpretation of the musical sources involve tessitura and timbre. The tessitura of trumpets and horns in the 20th century is well defined: they play in different registers—trumpets play at "trumpet pitch" and horns play at "horn pitch." The horn is customarily built in F, an octave and a fourth lower than the trumpet that is normally trumpet in B \flat (occasionally C). Such a clear differentiation of registers fits very nicely with the late 19th- and 20th-century concept of orchestration, but does not apply to the 18th century or earlier periods. The pitches of the trumpet and horn of earlier times not only intersected at eight-foot C, but also crossed—horns went up to F alto and trumpets descended below C. Many surviving instruments and extant scores attest to this. Much of the "proof" that the *tromba da caccia* is a horn is based on the question of register—i.e., if the musical text indicates a register below C alto, then a horn was intended.

There are several difficulties inherent in this approach. First, the determination of register based on the musical score is highly problematic. While the musical texture, musical

symbolism, word painting, and harmonic structure can, on a case-by-case basis, provide clues to the so-called “alto-basso question,” there is no clear-cut way to decide which register was intended. Attempts have been made to determine register by clef usage and transposition: trumpet parts are always untransposed in treble clef, while horn parts are always transposed and appear in various clefs (including bass clef). Life would be a great deal easier if this were true. Unfortunately, my examination of several hundred 18th-century opera scores has found a much more complex notational practice. While English brass notation, especially that of printed scores, does adhere closely to a convention of employing different clefs that makes the music appear as if in C in treble clef (including baritone clef for G-horns), the Italian practice is extremely varied. Perhaps there are strands of consistency in a particular regional usage; however a great deal of research needs to be done. Fortunately, there are a few cases in which the register is unambiguous.

Let us consider two examples from the works of Antonio Vivaldi, the opera *Orlando finto pazzo* (RV 727), performed in Venice in 1714, and the *Con^o p. S.A.S.I.S.P.G.M.D.G.S.M.B.* [per Sua Altezza Serenissima il Signor Pisendel Giorgio...⁸⁰] *del S.D. Ant^o / Vivaldi* (RV 574), dedicated to the Dresden court violinist Johann Georg Pisendel. Both of these works are in F and call for two *trombon da caccia* (i.e., a large *tromba da caccia*). Vivaldi’s use of the augmentative form clearly indicates the lower register; certainly an instrument in F alto would not be characterized as large. Does this prove, however, that the *trombon da caccia* is a horn or does it show instead that coiled trumpets were occasionally built in low F? One cannot determine whether the bore of an instrument is cylindrical or conical based merely on the tube length. Indeed, a twelve-foot-long instrument of primarily cylindrical bore is far simpler to build than one with a purely conical bore. If one assumes, for the sake of argument, that this proves that the instrument is a horn, the next logical question would be, What type of horn is it? Surely not all horns are created equal. Surviving 18th-century horns exhibit a wide variety of shapes, bell sizes, and bore configurations. Would this term indicate a widely looped horn as opposed to a tightly coiled type of horn? Tarr and Dahlqvist have noted the similarity between the Italian term *tromba da caccia* and the French term *trompe de chasse*,⁸¹ the assumption being that the 18th-century *trompe de chasse* is a purely conically bored instrument played with a horn mouthpiece rather than a widely coiled, cylindrically bored instrument played with a trumpet mouthpiece. There is very little evidence to support this. The term *trompette de chasse* does not appear to have been used in 18th-century France, and even the term *trompe de chasse* does not seem to be used as a part-designation in French scores of concerted music. If it were possible to document the use of the term *trompe de chasse* in the 18th century, find this part designation on musical scores, show that the 18th-century *trompe de chasse* is identical to that of the 20th century, and argue convincingly that the French “hunting trump” [*trompe de chasse*] was exactly the same as the Italian “hunting trumpet” [*tromba da caccia*] but completely different from the German “hunting trumpet” [*Jägertrompete*], then there would be a far better argument that the *tromba da caccia* was a type of horn. Nonetheless, this is a radically different conclusion from one that considers this designation a misnomer resulting from a confusion of terms. Even the modern *trompe de chasse* is not the same instrument as an orchestral French horn.

Much of the confusion surrounding the label *tromba da caccia* has resulted from assumptions based on 20th-century orchestral practice. Indeed, if a modern orchestra were to perform Antonio Vivaldi's opera *Orlando finto pazzo* with its two *trombon da caccia* in F, then the "equation *tromba da caccia* = horn" (*HBSJ*, p. 182) would be correct. On account of the tessitura of the writing, the horn is the modern equivalent of *tromba da caccia* in this particular case. However, in the late 20th century, where the use of period instruments has become the norm rather than the exception, an imperfect translation of 18th-century practice into the language of the modern orchestra is no longer necessary nor desirable. To the present author, the Vivaldi examples suggest that the *tromba* [or *trombon*] *da caccia* in low F was an unusually large size, and that those compositions for *trombe da caccia* in C, D, E♭, E, and F [without augmentative part designation] are in the alto register.

Modern assumptions about timbre further impinge on the *tromba da caccia*. Since many Italian scores simultaneously employ *trombe lunghe* (long trumpets) and *trombe da caccia*, Dahlqvist argues that this indicates that the latter is a horn: "It seems unlikely that Pérez [or any other composer] combined long and coiled trumpets for the sake of a small nuance of sound" (p. 182). Regardless of whether 20th-century ears (exposed to all manner of sounds—including artificially-created wave forms—and noises foreign to the 18th century) have the same sensitivity as those of two hundred ago, the question is whether timbre is the decisive factor. With the advent of electronic speakers the musical experience has changed: for most people today, music is heard and not seen, and the aural experience has become divorced from the visual one. This was not the case in the 18th century. The combination of long and coiled trumpets may have resulted from the visual associations of these instruments. This is especially true of the world of opera where visual impact is of paramount importance. Since *trombe da caccia* are found primarily in operatic works (my compilation of manuscripts contains five times as many stage works as purely instrumental compositions), it is clear that timbre is not the sole criterion, and that the visual significance of a particular brass instrument may play a decisive role.

One specific case occurs in Johann Christian Bach's opera *Catone in Utica* that premiered at the Teatro San Carlo in Naples on 4 November 1761.⁸² The opera calls for *trombe*, *corni*, and *trombe da caccia*. Trumpets in D appear in the overture and an aria from Act II, scene ix. *Corni* are found in arias in all three acts and are pitched in C, D, E♭, G, and B♭. Like most horn parts found in 18th-century operas, they function as harmonic filler and rhythmic punctuation. The *trombe da caccia* are found at only one point in the opera—an instrumental *Marchia* in Act III, scene xiii. This march is scored for two *trombe da caccia* in D. In the score these instruments are designated *Tromba da caccia di Guerra*. This is the only known use of this term, and may indicate that the military association of the *tromba da caccia* was taken for granted by the Italians. As this was the first time that J.C. Bach had written for the *tromba da caccia*, the association may have been novel enough to him that he noted it on the score.⁸³ Military trumpets are appropriate for this penultimate scene of the opera: the stage direction found in the libretto reads "Ceasar [enters] on a triumphal chariot drawn by enemy prisoners, preceded by instruments of war and by his victorious army."⁸⁴ In order to add realism to the entrance of Ceasar's army, J.C. Bach scored this

march for the type of trumpet used by the infantry. The designation *tromba da caccia di guerra* confirms Altenburg's association of this instrument with the military and is consistent with the view that the other 18th-century treatises that mention foreign trumpets are primarily concerned with military instruments.

There are other factors that could explain the combination of long trumpets and coiled ones. One practical explanation has been presented by Don Smithers:

[Coiled trumpets] appear to have had more use in Italy and Italian opera orchestras, where the more compact form ingratiated itself to musicians in the orchestra pit. Stage trumpets, on the other hand, needed to be more showy, replete with large and impressively decorated banners. These are sometimes referred to as *trombe lunghe* (long trumpets), while the coiled-up instruments in the pit are called *trombe da caccia* (hunting trumpets).⁸⁵

Another explanation relates not to this instrument's impression on the audience but its impact on the performer. The relationship between musician and instrument is a complex physical and psychological entanglement ranging from a subtle symbiosis to a battle of Faustian proportions. Hermann Eichborn, Werner Menke, Don Smithers, Horace Fitzpatrick, and Graham Nicholson have all noted that a coiled trumpet does not play exactly the same as a long one. All of these authorities have observed a noticeable advantage to the more tightly coiled form. Is this improvement in playing response reflected in the surviving Italian *tromba da caccia* parts? With a few exceptions, most of the *trombe da caccia* parts written by Italian composers that I have examined in detail place the same demands on the performer as those for *trombe lunghe*. One of the exceptions is found in a composition by the little-known composer Carlo Cotumacci (1709?-1785), a student of Alessandro Scarlatti and teacher of Giovanni Paisiello. Cotumacci spent most of his life as organist in various churches in Naples. Several autographs of his church music are found in the collection of St. Michael's College in Tenbury, England. Tenbury MS. 608 (now in the Bodleian Library) contains a *Confitebor à più Voci Con VV.ⁿⁱ, Oboè, e Trombe da Caccia Di Carlo Cotumacci* scored for double choir, two violins, two oboes, and two *trombe da caccia*. In the score the *trombe da caccia* parts are notated in treble clef as untransposed parts in D and given the generic designations *Tromba prima* and *Tromba 2da*. Although the composition itself is of rather dubious musical quality, the trumpet parts are far more virtuosic than those normally found in 18th-century Italian scores (see Example 1).

It is not surprising that the coiled trumpet was used in Germany. Not only were these instruments manufactured in Germany but their existence was well known from treatises and through the frequent interaction of Italian and German musicians at that time. The *Syntagma Musicum* of Michael Praetorius with its well-executed scale drawings of musical instruments had a very wide distribution: not only is this work cited in treatises throughout the 18th century and into the 19th century (including those of Walther, Mattheson, Hülphers, Kircher, Mizler, Lichtenthal, LaVoix, *et al.*) but sixty-eight copies survive in libraries in Austria, Belgium, Switzerland, Germany, Denmark, France, Great Britain, Holland,

Spiritoso

Tromba da Caccia 1

Tromba da Caccia 2

5

12

21

27

33

Example 1

Carlo Cotumacci, *Confitebor à piú Voci con VV.ⁿⁱ, Oboè, e Trombe da Caccia.*

Musical score for Example 1 (cont.), consisting of seven systems of two staves each. The music is in 2/4 time and G major. The score includes various musical notations such as trills (tr), dynamics (f, dolce), and articulation marks (accents). Measure numbers 85, 89, 93, 97, 101, 105, and 109 are indicated at the beginning of their respective systems. The notation includes eighth and sixteenth notes, rests, and trills.

Example 1 (cont.)

The image displays a musical score for two staves, likely representing a brass instrument and a piano accompaniment. The score is divided into seven systems, each with a measure number in the top left corner: 111, 120, 125, 131, 137, 143, and 165. The key signature is one sharp (F#), and the time signature is 2/4. The notation includes various rhythmic patterns, including sixteenth and thirty-second notes, and rests. Trills are indicated by 'tr' above notes. Dynamics such as *f* (forte) and *p* (piano) are used. The tempo marking 'Largo' appears in the fifth system. The score concludes with a double bar line and repeat signs in the final measures of the sixth and seventh systems.

Example 1 (cont.)



Musical score for Example 1 (cont.), showing measures 172 through 212. The score is written for two staves (treble and bass clefs) in a key signature of two sharps (F# and C#). The tempo is marked *Allegretto*. The score includes various musical notations such as notes, rests, trills (tr), and dynamics like *dolce*. Measure numbers 172, 179, 186, 191, 197, 204, and 212 are indicated at the beginning of their respective systems. The piece concludes with a double bar line at measure 212.

Example 1 (cont.)

Sweden, the United States, and Italy (Bologna, Modena, and Rome).⁸⁶ The question has been raised as to whether 18th-century Italians knew *Syntagma Musicum* with its drawing of a trumpet “coiled up like a snake,” known as a *Jägertrommet*, and whether *tromba da caccia* is a literal translation of this term. Here I believe the direction of influence has been reversed. From the 16th century, Nuremberg makers built for the southerners [i.e., Italians] trumpets that were different in form and more expensive than the usual instrument. During the 17th and 18th centuries, coiled instruments were used for hunting and in the infantry, and beginning around 1700 these instruments were used in Italian operas. In light of Praetorius’ extensive knowledge of Italian musical practice, it is more plausible that the statement “Some make trumpets like a posthorn or like a coiled snake [emphasis added]” refers to the Italians, and that *Jägertrommet* is a translation of *tromba da caccia*.

The travels of Germans and Italians into each other’s countries provided ample opportunity for acquaintance with the coiled trumpet. During the Thirty Year’s War, Italian troops (as agents of the Spanish Hapsburgs) marched through Germany into Sweden. In the 18th century German musicians often apprenticed in Italy. Many of the compositions employing *trombe da caccia* by German composers can be linked to Italy. In 1716 the Electoral Prince of Saxony visited Italy. Among the members of the prince’s entourage was the Dresden court violinist Johann Georg Pisendel. After a nine-month stay in Venice (where he studied with Vivaldi), Pisendel visited Rome, Naples, and other cities.⁸⁷ Two of the works mentioned above that utilize *trombe da caccia* (Vivaldi and Telemann’s concertos) were composed for Pisendel. Of the two operas mentioned by Kleefeld, Keiser’s *Circe* contains arias with *tromba da caccia* that were composed by an Italian (probably Leonardo Vinci), and *Cleofida* (not to be confused with *Cleofide*) was based on *Poro* by Handel, whose sojourn in Italy is very well documented. It is not surprising that Johann Adolf Hasse, who had lived in Italy from 1721-1730, and who studied with Vinci, would have included *trombe da caccia* in his opera *Alessandro nell’Indie*.

Information on coiled trumpets can also be found in the seven treatises mentioned above. In this regard the question of whether these German sources accurately reflect Italian practice is irrelevant: German-speaking people would have learned that coiled trumpets existed and that these instruments were readily available from trumpet makers in Nuremberg. Not only did this information appear in at least twenty publications in the 18th century,⁸⁸ but the readership of these books was not limited to the musically literate. The lexicons of Jablonski, Marperger, and Zedler, like modern encyclopedias, disseminated knowledge to a large and varied cross-section of the populace. For some, like Gottfried Reiche, this instrument may have been favored for its playing characteristics, while for others it may have served a different purpose. In the 18th century, there were obvious advantages for one to have a trumpet that did not appear to be a trumpet. Considering the strictness and noble enforcement of the privileges of the German trumpet guilds, it is logical that non-guild members would try to circumvent the regulations by using an instrument that did not superficially appear to be a trumpet. Since several of these treatises are intended for artisans, metalsmiths and local trumpet makers could have used this knowledge in building their own instruments. Reine Dahlqvist has provided an example of this. Dahlqvist

writes, “According to a later report the Thuringian peasants made trumpets in the shape of a horn in order to evade the noble privileges so that they could use trumpets whenever they wished.”⁸⁹ When modern researchers consider a surviving 18th-century brass instrument, it is important that they remember this motivation. It is difficult to imagine that, by merely making the windings more frequent and more circular, a trumpet could metamorphose into a horn.

Exactly how widely was the coiled trumpet found in Germany? Historical evidence attests to its use in Leipzig, Hamburg, and Dresden. The well-known 1697 coiled trumpet of Carl Pfeiffer was built by a Leipzig *stadtppfeifer* for the use of Leipzig *Stadtppfeifer*. Since *Stadtppfeifer* did not take part in hunting, this Pfeiffer trumpet documents the use of coiled trumpets in the art music of Leipzig, as do the many representations depicting Gottfried Reiche with a coiled trumpet. The manuscripts of *Circe* and *Cleofida* (or *Poro*) show that the instrument was used in Hamburg. Compositions by Telemann and Vivaldi confirm the *tromba da caccia* in Dresden. What about other cities? In his article Dahlqvist cites extremely valuable and little-known references from secondary sources that demonstrate the presence of the *Jägertrompete* in other cities (*HBSJ* 5: 183-4). The first is Wertheim, where the trumpeter C.F. Wächter procured *ein Jacht-Trompethen samt 3 Setzstücke* in 1740. On account of an absent hornist, this trumpeter apparently had to participate in the court’s hunts from May 1740 to December 1741, and had a normal trumpet fashioned in a form convenient to the hunt. Since German court trumpeters, unlike *Stadtppfeifer*, did not normally double on the horn, this refashioning of the trumpet’s shape was necessary. A second citation relates to the city of Basel. An account of a concert from 10 October 1710 reports:

Under the linden trees was placed a music table, on which there was a harpsichord. In addition there were played nearby, in the most beautiful manner, violins, bassoons, flageolets, oboes, horns [*Waldhörner*], and *Jägertrompeten*. [*HBSJ* 5: 183].⁹⁰

This report not only indicates that coiled trumpets were used outside Italy, it also shows conclusively that a *Jägertrompete* is not a *Waldhorn*. Dahlqvist’s contributions notwithstanding, a great deal of further research is necessary to determine the full extent of the coiled trumpet’s usage outside of Italy.

The question of international employment aside, J.E. Altenburg’s statement that coiled trumpets were used in Italy is supported by six other treatises and by many musical manuscripts. His knowledge of Italian trumpets, like that of German, French, and English ones is secure.

As an historical document, Johann Ernst Altenburg’s *Versuch einer Anleitung zur heroisch-musikalischen Trompeter- und Pauker-Kunst* has much to recommend it. Not only has Altenburg provided a wealth of information, but he has documented the written sources from which he drew his data: in the preface he outlines the principal sources, and in the main body of text he provides copious footnotes containing detailed bibliographical cita-

tions including specific page references.⁹¹ Altenburg admits the limits of his knowledge, and draws attention to reports that he has been unable to confirm. In order to determine the accuracy of Altenburg's information, other historical sources must be consulted. If statements are unique to Altenburg, then one may express skepticism. If a statement is contradicted by other historical sources, then one endeavors to determine which source is correct. In the case of Altenburg's remarks on the pitch and form of foreign trumpets, no such complications arise. Seven other sources corroborate his statements.

The problem that scholars have had with Altenburg's treatise lies in what he does not say. Altenburg does not answer the questions that modern scholars would most like to have answered. We want a treatise written by *ein rechtskünstler Trompeter* or even *ein musikalischer Concerttrompeter*—a work that would answer all the problematic questions of technique, notation, and organology confronting modern scholars. This is not Altenburg's treatise, nor was this his intent. Simply stated, Altenburg's agenda is not our agenda. (Rarely do the two coincide in any historical research). The student of the historical trumpet should not criticize a source because it does not tell us what we would like to hear. Instead, one must endeavor to understand the information given and the glimpse into the past that it provides. As an attempt [*Versuch*] by an organist who was trained as a field trumpeter, it is a remarkable achievement, and even 200 years after its publication, Johann Ernst Altenburg's *Versuch* remains one of the most important contributions ever made to the history of the trumpet.

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NOTES

¹ Anthony Baines, *Brass Instruments: Their History and Development*, (London, 1976, rev. 1978), p. 129.

² Reine Dahlqvist, "Pitches of German, French, and English Trumpets in the 17th and 18th Centuries," *Historic Brass Society Journal* 5 (1993): 29-41; and idem, "Gottfried Reiche's Instrument: A Problem of Classification" *Historical Brass Society Journal* 5 (1993): 174-191. Subsequent citations of these articles will be by page number alone.

³ Johann Heinrich Zedler, *Großes vollständiges Universal-Lexicon aller Wissenschaften und Künste* (Leipzig & Halle, 1732-1754), 64 volumes (plus supplements); Thoma Balthasare Janowka, *Clavis ad Thesaurum Magnae Artis Musicae* (Prague, 1701); and [Friedrich Friese], *Ceremoniel und Privilegia derer Trompeter und Paucker* (n.p., n.d.).

⁴ Christoph Weigel, *Abbildung der gemein-nützlichen Haupt-Stände* (Regensburg, 1698).

⁵ Vincenzo Galilei wrote in his *Dialogo della musica antica, et della moderna* (Florence, 1581) that brass instruments were thought to have been invented and first made in Nuremberg. For a discussion of the importance of this city to the history of brass instruments, see Don L. Smithers, *The Music and History of the Baroque Trumpet before 1721* (London, 1973; 2nd ed., Carbondale and Edwardsville IL, 1988), pp. 51 ff.

⁶ Sir John Hawkins, *A General History of the Science and Practice of Music* (London 1776), 2: 612.

⁷ See Robert Eitner, ed., “Briefe von Jörg Neuschel in Nürnberg, nebst einigen anderen,” *Monatshefte für Musikgeschichte* (1877): 149-159.

⁸ *Ibid.*, p. 159.

⁹ Robert Barclay, *The Art of the Trumpet-Maker: The Materials, Tools, and Techniques of the Seventeenth and Eighteenth Centuries in Nuremberg* (Oxford, 1992), p. 21.

¹⁰ Baines, *Brass Instruments*, p. 124.

¹¹ The history of the English trumpet makers can be found in Maurice Byrne, “The Goldsmith-Trumpet-makers of the British Isles,” *Galpin Society Journal* 19 (April, 1966): 71-83 and *idem*, “William Bull, John Stevenson and the Harris Family,” *Galpin Society Journal* 45 (March 1992): 67-77.

¹² Records for the year 1660 list an import duty of 12s. for “Brass Trumpets the dozen.” See Guy F. Oldham, “Import and Export Duties on Musical Instruments in 1660,” *Galpin Society Journal* 9 (June, 1956): 97-8. More important for the present discussion, an import duty for brass trumpets is also listed for the years 1670, 1671, 1675, 1684, 1689, 1702, 1747, and 1751. See Thomas Daniel, *The Present State of the British Customs ... Being the only complete system of duties extant. Wherein are comprehended all the alterations and additions to the Sessions 1753, and the Defects of all former Books on this Subject are supplied ...* (London and Sunderland, 1752) and Charles Carkesse, *et al.*, *The Acts for tonnage and poundage, shipping and navigation, prevention of frauds in His Majesties customs, and the Book of Rates ... Collected for public use* ([London], 1675, 1684, 1689, and 1702).

¹³ Johann Ernst Altenburg, *Essay on an Introduction to the Heroic and Musical Trumpeters' and Kettle-drummers' Art*, trans. Edward H. Tarr (Nashville, 1974), p. 11.

¹⁴ See also the discussion and chart of German trumpet pitches found in Baines, *Brass Instruments*, pp. 124-8.

¹⁵ Marin Mersenne, *Harmonie Universelle: The Books on Instruments*, trans. Roger E. Chapmann (The Hague, 1957), pp. 318 ff.

¹⁶ Like guilds in general, the trumpet makers of Nuremberg were most likely protective about the particulars and the “secrets” of their trade. The information about international trumpets does not fall into this category and, rather than posing a threat to the makers, would support the fame of their product.

¹⁷ “nemlich **Teutsche**/ und so genannte Ordinari-Trompeten/ **Französische**/ so einen Thon höher sind als jene/ **Englische**/ welche die Ordinari-Trompeten um eine ganze Terz an der höhe übertreffen. Man findet auch eine Gattung von **gewunden** Trompeten/ und sind die **Italienische** oder **Welsche** bey die sechsmahlen rund herum gewunden” Weigel, *Haupt-Stände*, p. 232.

¹⁸ As an evaluation of the *Haupt-Stände*'s treatment of music in general, Wolfgang Spindler has written that Weigel's treatise “contains interesting details of the instrumental practice of the time,” and stresses “the predominance of the organ among instruments and the leading role of Nuremberg in the construction of wind instruments.” *The New Grove Dictionary of Music and Musicians*, s.v. “Weigel [Waigel],” by Wolfgang Spindler.

¹⁹ Barclay, *Trumpet-Maker*, p. 4.

²⁰ Weigel, *Haupt-Stände*, p. 233. “Wie dann die Nürnbergischen Meister biß hieher vor andern dargestalt beglückt gewesen/ daß ihre Arbeit fast an den mehresten Chur- und Fürstlichen Höfen beliebt/ und in grosser Menge nach Spanien/ Franckreich/ Dennemarck/ Holland/ ja so gar in Moscau u.u. verführet werden.”

²¹ Thoma Balthasare Janowka, *CLAVIS / ad Thesaurum Magnae Artis / MUSICÆ / seu / Elucidarium omnium ferè rerum / ac verborum, in Musica Figurali tam Vo- / cali, quàm Instrumentali obvenientium. / ... Vetero-Prage in Magno Collegio Carolino Ty- / pis Georgij Labaun. A. 1701.* (Facs. rep., Amsterdam, 1973). The facsimile is of the print in the Royal Library in Brussels. The bottom of the title page of

this copy contains the handwritten inscription “J.S. Bach. Org. Isnac. 1705.”

²² *New Grove Dictionary of Music and Musicians* (London, 1981). s.v. “Janowka, Tomá Baltazar [Janowka, Thomas Balthasar]” by John Clapham and Tomislav Volek.

²³ Janowka, *Clavis ad Thesaurum Magnae Artis*, pp. 314-5. “Sunt autem tubæ Campestris in triplici differentia; nam aliæ demissæ (quibusdam *humiliate* dictæ) chori toni, cum Gallicis & Italicis Organis convenientes, respectu nostrorum ex *b* dictæ; aliæ *longa*, seu *ordinariæ* Cornetti toni, seu cum nostro organo convenientes; aliæ breves, *d* cum nostro organo sonantes, quas quidam Gallicas (nescio quare) vocant; cùm è contra alii illas priores humiliatas, à Chori Gallici & Italici Organi tono, sic compellent. Sunt quidem & aliæ ex *E*, sed vix usum aliquem sui obtinent.”

²⁴ The individual sections with their dates of publication are: Blacksmith (1708), Tailor (1708), Cabinetmaker (1712), Glove maker (1712), Pouch maker (1705), Woodturner (1705), Furrier (1707), Shoemaker (1707), Cutler (1708), Potter (n.d.), Tanner (n.d.), Hatmaker (1710), Felt hatmaker (1710), Bookbinder (1712), Gunsmith (1712), Pewterer (1714), Beltmaker (1715), Rope maker (1715), Butcher (1715), Harness maker (1715), Weiß-Becker (1716), and Trumpeter and Kettledrummer (n.d.). Friedrich Friese had published an earlier work on the “remarkable ceremonies” (weddings, etc.) of the peasants of Altenburg: *Historische Nachricht von denen merckwürdigen Ceremonien derer Altenburgischen Bauern wie sie es nemlich bey Hochzeiten ...* (Leipzig, 1703; reprint: Altenburg, 1887).

²⁵ Paul Jakob Marperger, *Beschreibung des Hutmacher-Handwercks, und alles dessen Was so wohl moraliter als politicè und historicè von denen Hüten, deren Zubereitung und vielerhand Sorten ...* (Altenburg, 1719).

²⁶ “besiegelt/ und Geben zu Dresden/ am zehenden Julii Anno 1650. / Johann Georg/Churfürst. Nach dem wahren *Original* druckten dieses Christian und Melchior Bergen/ Gebrüder/ Churfürstl. Durchl. zu Sachsen Hof-Buckdruckere zu Dresden.” *Ceremoniel*, p. 43.

²⁷ *Repertoire International des Sources Musicales B VI*¹ [Écrits Imprimés Concernant la Musique] (München-Duisburg, 1971), p. 334.

²⁸ Detlef Altenberg, *Untersuchungen zur Geschichte der Trompete im Zeitalter der Clarinblaskunst (1500-1800)*, (Regensburg, 1973), 2: [ii].

²⁹ *HBSJ* 5: 37.

³⁰ *British Museum: General Catalogue of Printed Books* (London, 1961), 79: cols. 889-90.

³¹ Baines, *Brass Instruments*, p. 129.

³² The majority of the individual sections contain a list of the *Ceremoniellen* that have already been completed. Since “Trumpeters and Kettledrummers” is not found among the nineteen guilds listed in the part devoted to the harness maker (dated 1715), it can be dated between this year and that of Friese’s death in 1722.

³³ *Ceremoniel*, p. 8. “XIV./ Wenn und wo ist diese Kunst wieder mit/ Gesegen versehen worden?/ Anno 1635. haben die Trommeten=/ Macher zu Nürnberg von einen hoch=/ edeln und hochweisen Rath gute Ge=/ setze und Ordnung erlanget und ihre/ Kunst auf festen Fuß besetzt./ XV./ Was vor Arten dere Trommeten wer=/ den verfertigt?/ Unterschiedliche und zwar 1. Teutsche/ oder Ordinar=Trommeten. 2. Französische / so einen Thon höher als jene./ 3. Englische / so eine ganze *Tertia* höher/ seyn als die Teutschen. 4. Italiänische/ und gewundene. Hieher gehören auch/ die Trommeten=Stöcke und Streit=/ hämmer / ingleichen die Waldhörner.”

³⁴ Don L. Smithers, “Bach, Reiche, and the Leipzig *Collegia Musica*,” *HBSJ* 2 (1990): 4.

³⁵ E.H. Tarr, preface to transl. of Altenburg, *Essay*, p. viii.

³⁶ For an English translation of all twenty-three mandates from 1653, see Don L. Smithers, “The Hapsburg Imperial *Trompeter* and *Heerpaucker* Privileges of 1653,” *Galpin Society Journal* 24 (July 1971): 86-95. Zedler’s *Lexicon* provided one of the sources for Don Smithers’ translation.

³⁷ Zedler, *Lexicon*, 45: col. 1105. “**Trompete, Trompet**, Franz. *Trompet[t]e*, Ital. *Trombe, Clarino*, oder *Trombetta*, Lat. *Tuba*, oder *Buccina*, ein blasendes Klingspiel, bestehend aus einer langen dünnen, dreyfach zusammen gelegten Röhre, von Meßing, Kupffer oder Silber, bey den Bauern von Holz oder Thon, da an dem obern Ende ein Mundstücke, unten aber eine weite Oeffnung ist. Grosser Herren Hof=Trompeter führen keine andern als silberne; die meßingenen und kupffernen Trompeten aber werden fast nirgends besser als in Nürnberg verfertigt, und hat man derselben unterschiedliche Arten, nemlich Teutsche oder so genannte ordinaire Trompeten, die Französischen, welche schon einen Ton höher sind, die Englischen, welche die ordinären Trompeten um eine ganze Terz an der Höhe des Tons übertreffen; man findet auch eine Gattung von gewunden Trompeten, dergleichen die Italiänischen sind, welche etliche mal rund herum gewunden sind. Hieher gehören endlich auch die Posaunen, die Post- und Waldhörner, welche alle in Nürnberg von den so genannten Trompetenmachern am besten gemacht werden. Bey den Tartarn sind Trompeten und Trommeln ein Zeichen der Oberherrschaft. Allgem. Chronicke VI. Th. p. 686. Siehe übrigens den Artikel: **Trompeter**.”

³⁸ Except where noted, biographical and bibliographical information on Jablonski is from R. Schwarze, “Jablonski: Johann Theodor J” in *Allgemeine Deutsche Biographie* (Munich 1881, reprint: Berlin 1969), 31: 525-6.

³⁹ Jablonski, *Allgemeines Lexicon der Künste und Wissenschaften ...* (Königsberg & Leipzig, 1767), p. 1593. “**Trompete, Tuba, Trompette**, ein Blasinstrument, welches entweder aus Silber, Messing, Kupfer oder Glase gemacht ist. Der messingenen und kupfernen hat man unterschiedliche Arten, nämlich 1) deutsche oder ordinaire Trompeten; 2) französische, welche einen Ton höher sind; 3) englische, welche die ordinären um eine ganze Tertie an der hohe des Tones übertreffen; 4) italienische, welche etliche Male rund herum gewunden sind. Diejenigen, welche darauf blasen, sind in besonderem Ansehen, und werden an fürstlichen Höfen, oder bey der Reutery unterhalten. Sie werden in feld- und musikalische Trompeter unterschieden. Die ersten blasen nichts, als ihre Trompete, und auf derselben allein ihr Feldstück, die andern stimmen nach der Musik in großen musikalischen Sonaten mit ein, und spielen daneben auch andere Instrumente, und diese werden nunmehr an Hofen am meisten gesucht.”

⁴⁰ Schwarze points out that the first edition of the *Allgemeines Lexicon* is dedicated to the prince in whose entourage Jablonski toured Italy. See Schwarze, “Jablonski,” p. 526.

⁴¹ Concerning Jablonski’s remarks on slurs, see John Butt, *Bach Interpretation: Articulation Marks in Primary Sources of J.S. Bach* (Cambridge, 1990), p. 28.

⁴² The biographical and bibliographical information on Hübner is taken from H. Kaemmel, “Hübner: Johann H.,” *Allgemeines Deutsche Biographie*, (Munich, 1881; reprint: Berlin, 1969), 31: 267-9.

⁴³ An engraving of Johann Hübner can be found in Werner Menke, *Georg Philipp Telemann: Leben, Werk und Umwelt in Bilddokumenten* (Wilhelmshaven, 1987), p. 80, *Abb.* 122.

⁴⁴ Curt von Faber du Faur, *German Baroque Literature: The Collection of the Yale University Library* (New Haven, 1958), p. 389.

⁴⁵ Kaemmel, “Hübner,” p. 268.

⁴⁶ Harold Jantz, *German Baroque Literature* (New Haven, 1974), p. 227.

⁴⁷ Franz Brümmer, “Sinold: Philipp Balthasar S.,” in *Allgemeine Deutsche Biographie* (Munich, 1892; reprint: Berlin, 1971), 34: 400.

⁴⁸ See J. Franck “Marperger: Paul Jakob M.,” in *Allgemeine Deutsche Biographie*, (Munich 1884, reprint: Berlin, 1970), pp. 399-401.

⁴⁹ Paul Jakob Marperger, *Curieuses Natur- Kunst- Gewerck- und Handlungs-Lexicon* (Leipzig, 1712), col. 1287. “Trompeten, sind gewisse Blas-*Instrumenta*, werden entweder aus Silber, Meßing, Kupffer oder Glaß gemacht, und führen meistentheils Grosser Herren Hof=Trompeter keine andere als silberne; die meßingene und kupferne Trompeten aber werden fast nirgends besser als in Nürnberg verfertigt, und

hat man derselben unterschiedliche Arten, nemlich Deutsche oder so genannte *ordinaire* Trompeten, die Französische, welche schon einen Ton höher sind, die Englische, welche die *ordinaire* Trompeten um eine ganze Terz an der Höhe des Thons übertreffen; man findet auch eine Gattung von gewundenen Trompeten, dergleichen die Italiänischen seynd, welche etliche mal rund herum gewunden sind. Hieher gehören endlich auch die Posaunen, die Post- und Wald-hörner, welche alle in Nürnberg von denen so genannten Trompetenmachern am besten gemacht werden.”

⁵⁰ Altenburg, *Versuch*, p. 1. “a) Siehe hiervon Jablonsky, *allgemeines Lexicon der Künste und Wissenschaften*. Desgleichen Fasch [sic], *Kriegs- Ingenieur- und Artillerie Lexicon*. Nicht weniger, *Hübners Natur- Kunst- und Handlungs Lexicon*.” The middle source, Johann Rudolph Fäsch, *Kriegs- Ingenieur- und Artillerie Lexicon* (Nuremberg, 1726) is a purely military lexicon. Unfortunately, the entry for the trumpet merely states, “*Trompette*, ist ein gewisses metallenes, bey der *Cavallerie* gebräuchliches Blaß-*Instrument*, und der es bläst, heist auch *Trompette*, auf Teutsch Trompeter” (p. 257). The main musical interest of this treatise is the names of French and German trumpet calls.

⁵¹ Altenburg, *Versuch*, p. 9. “Unsere ordinarie Trompete (lat. *Tuba*, franz. *Trompette*, ital. *Tromba* oder *Clarino*), ist als ein musikalisches Blas- und Kriegsinstrument bekannt, und besonders bey der Reuteren gebräuchlich.” Except where noted, excerpts from Altenburg cited in English follow Tarr’s translation (see n. 13). Since the pagination of the original edition are conveniently located in the margins of this translation, all page numbers will refer to the original German edition.

⁵² Altenburg, *Versuch*, p. 11. “Mit dieser Gattung kann man in der Tiefe die Feldstücke und den Principal sowol, als in der Höhe den Clarin, ganz bequem blasen, indem sie zu jenen nicht zu lang und zu diesem nicht zu kurz sind, welches für die deutschen Trompeter ein nicht geringer Vortheil ihrer Kunst ist.”

⁵³ Altenburg, *Versuch*, p. 11. “2) Die kammertönige F-Trompete oder die französische; weil sie bey den Franzosen eingeführt ist, ist schon etwas kürzer, solglich um eine kleine Terzie oder anderthalb Ton höher als die vorige. 3) Die kammertönige G- oder englische Trompete (ital. *Tromba piccola*) heißt deswegen so, weil sie bey den Engländern üblich ist. Sie ist noch einen ganzen Ton höher als die vorige, und um eine Quarte (*Diatessaron*) höher, als die erste. Das Clarinblasen lässet sich darauf nicht so hoch treiben, als auf der deutschen D-Trompete; und der Bläser wird geschwinder durch ihr kurzes Korpus ermattet. Feldstück und der Principal kann sehr durchdringend und schmetternd darau ausgedrückt werden.”

⁵⁴ Altenburg, *Versuch*, pp. 11 and 85.

⁵⁵ A discussion of the pitches of surviving Baroque trumpets can be found in Baines, *Brass Instruments*, pp. 124-8.

⁵⁶ *Ibid.*, p. 128.

⁵⁷ Altenburg, *Versuch*, p. 40. “In französischen Diensten bekommt er monatl. 34 liv. und 10 Sols, und überdies prächtige Montur. Zu Kreigszeiten auch Brodt, Fleisch, Reis, und vom Regiment das Pferd.

Die R. Kayserl. Privilegia gelten da nicht, eben daher sind nicht nur Gelernte, sondern auch Kunstpfeiffer mit unter.

Bei den Engländern bekommt der Trompeter monatl. 6. Holländische Ducaten. Die von der blauen Garde tragen die Montur von Scharlach mit blauen Aufschlägen und kurze Westen, beides mit goldnen Tressen besetzt. Sie haben kurze silberne Trompeten mit prächtigen Pantrullen und silberne Pauken.”

⁵⁸ *Ibid.* “Von den übrigen ausländischen Diensten habe ich keine zuverlässige Nachricht einziehen können, und gehe daher auf den Zustand der Trompeter in Deutschland über.”

⁵⁹ Note that in a passage in which Altenburg discusses foreign instruments, he presents the information not as fact, but as a second-hand report: “In 1766 it was reported from [St.] Petersburg that a certain

Kölbel had succeeded, after oft-repeated attempts, in producing all of the half steps on the horn throughout the range of several octaves, by means of some finger or tone holes" (*Versuch*, p. 112).

⁶⁰ Altenburg, *Versuch*, p. 85. "2) A dur. Hier nehme man die kurze oder G-Trompete, und stosse den Sordun hinein, so wird man einstimmen. 3) G dur. Die vorige Trompete, sonst auch die englische genannt."

⁶¹ Ibid. "4) F dur. Die Feldtrompete, sonst die Französische genannt.

5) E dur. Hier setze man auf die vorige ein Setzstück, das um einen halben ton erniedriget."

⁶² *New Grove*, s.v. "Altenburg, Johann Ernst," by Edward H. Tarr.

⁶³ This was true not only of trumpeters but other military instrumentalists as well. For example, J.S. Bach's brother Johann Jacob left Eisenach to become an oboist in the Swedish Army in 1704. His departure is immortalized in the famous *Capriccio sopra la lontananza del suo fratello dilettissimo* [Capriccio on the Departure of his Most Beloved Brother], BWV 992.

⁶⁴ Altenburg, *Versuch*, p. 54. "Dieser ist nach Beschaffenheit der Dienste jezt sehr verschieden. Und da ich sie selbst, vor, während und nach verstossenem siebenjährigen Kriege in dieser Qualität versucht, andere aber mit angesehen und kennen gelernt habe"

⁶⁵ Cited in Baines, *Brass Instruments*, p. 126.

⁶⁶ Altenburg uses the term *Flügel*. It is unclear whether he is referring specifically to a type of piano, or if, as was commonly done in the late 18th century, the term is being used generically to refer to several keyboard instruments including the piano and the harpsichord. I have chosen the awkward but inclusive "keyboard instrument."

⁶⁷ Altenburg, *Versuch*, p. 85. "Wolte man nun in denselben mitblasen und einstimmen, so müste man auch acht Trompeten von verschiedener Gröse haben."

⁶⁸ Ibid. "Weil man aber dergleichen kurze Trompeten nicht hat, und da es überdies dem Blasenden darauf sauer und schwer werden würde: so sucht man diese Tonart lieber in der tiefern Oktave mit einer langen Trompete vorzutragen."

⁶⁹ For a discussion of the dilemma of Baroque trumpet mute transpositions, see Don L. Smithers, "Antique Trumpet Mutes; A Retrospective Commentary," *Historic Brass Society Journal* 2 (1990): 104-111.

⁷⁰ Altenburg, *Versuch*, p. 111. "vorausgesetzt, daß man die Französische oder F=Trompete mit dem Setzstücke um einen halben Ton erniedrigt. Vielleicht hat man diese Art der Einstimmung bisher aus Mangel einer kürzen F=Trompete unterlassen. übrigens könnte man auch eine andere Chormelodie auf ähnliche Art in ein solches, zum Morgenseegen bestimmtes, Tonstück einweben."

⁷¹ Altenburg cites the following authors: Büsing, Faber, Forkel, Galland, Mattheson, Mizler, Sorge, Schmidt, Wildvogel, Jablonski, Fasch, Hübner, Lipsius, Spate [Kasper Stieler], Pliny, Virgil, Siculus, Justinus, Printz, Josephus, Agricola, Praetorius, Bartholocius, Hedrich, Bonnet, Walther, De la Loubère, Tacitus, de Chales, Bonnani, Adlung, Rufus, Vosius, Scriver, Bulengerus, Mayer, Schubart, Fugger, Sprenger, Chancellor Ludwig, Horace, Seckendorf, Berckenmeyer, Kalkbrenner, Gessner, Kirnberger, Spiess, Marpurg, Türk, Du Cange, Hiller, Albrechtsberger, Quantz, Leopold Mozart, Schöttgen, Geyer, Francisci, Ovid, Catullus, and Tosi.

⁷² I am extremely grateful to Dr. Albert Rice for bringing this treatise to my attention.

⁷³ J.H. von Oroll, *Vollständige theoretische und praktische Geschichte der Erfindungen* (Basel, 1789-95), 1: 217. "Die Trompeten sind von verschieden Art, als, teutsche, ordinaire Trompeten, ferner, französische, die einem Ton höher sind, die englische, die die ordinären Trompeten eine ganze Terte in der Höhe übertrifft, weiter gewundene Trompeten, wie die italiänische sind, welche etlichemal rund herum gewunden sind, dahin gehören auch die Posaunen."

⁷⁴ H.C. Robbins Landon, *Haydn: Chronicle and Works*, vol. 3, *Haydn in England 1791-1795* (Bloomington, 1976), p. 524. Landon has printed the original G trumpet parts as an appendix in his critical

edition of the complete Haydn symphonies (Volume 11, p. 117).

⁷⁵ Altenburg, *Versuch*, p. 111, “Einige Kenner dieses Instrumentes haben zwar Trompeten Concerte aus verschiedenen Tonarten z.B. aus F- und G dur, E- und G moll gesetzt; jedoch konnte dieses natürlicher Weise nicht ohne manche Einschränkungen geschehen.”

⁷⁶ Altenburg, *Versuch*, p. 12. “Die Trompeter der Cavallerie bedienen sich ihrer nicht, sondern die sogenannten Oboisten und Regimentspfeifer der Infanterie.” Dahlqvist comments “Altenburg’s comment on the use of the coiled instruments in the infantry remains to be substantiated” (*HBSJ* 5: 180).

⁷⁷ Wilhelm Kleefeld, “Das Orchester der Hamburger Oper, 1678-1738,” *SIMG* 1 (1899/1900): 275.

⁷⁸ The present author is aware of the following editions: Johann Christian Bach, *Catone in Utica* (*The Collected Works of J.C. Bach*, v. 2), *Symphonie Concertante* (idem, v. 31), *Tè Deum* (idem, v. 24); Giuseppe Bonno, *Isacco figura del Redentore* (*The Italian Oratorio*, v. 21); Francesco Gasparini, *L’oracolo del Fato* (*The Italian Cantata in the Seventeenth Century*, vol. 7); Geminiano Giacomelli, *La Merope* (*Drammaturgia Musicale Veneta*, v. 18)]; Davide Pérez, *Solimano* (*Italian Opera, 1640-1770*, vol. 45); Giovanni Battista Pergolesi, *L’Adriano in Siria* (*The Complete Works of G.B. Pergolesi*, v. 1), *Livietta e Tracollo* (*La Contadina Astuta*) (*The Complete Works of Pergolesi*); *L’Olimpiade* (*Italian Opera, 1640-1770*, v. 34]; and Georg Philipp Telemann, *Concerto da me Telemann* (*Denkmäler deutscher Tonkunst*, Bd. 29/30 and Wolf Hobohm, *Georg Philipp Telemann Konzert F-Dur für Violine und Orchester* (*Musik der Dresdner Hofkapelle Autographen und Singuläre Abschriften*) (Leipzig, 1980).

⁷⁹ A listing of these compositions is far too large for the present article. A complete list, including libraries and shelf numbers, date and place of first performance (where known), keys of the *tromba da caccia* parts, and other types of brass instruments employed, can be found in the forthcoming monograph by Matthew Cron and Don Smithers, *Snakes, Horns, and Trumpets: Problems of Pitch and Tessitura in the Performance of 17th- and 18th-century Music with Generic Trumpets; or, When Is a Corno Not a Tromba?* (in preparation).

⁸⁰ See Walter Kolneder, *Antonio Vivaldi* (Wiesbaden 1965).

⁸¹ See Reine Dahlqvist, “Corno and Corno da caccia: Horn Terminology, Horn Pitches, and High Horn Parts,” *Basler Jahrbuch für Historische Musikpraxis* 15 (1991): 42.

⁸² Autograph score, *P:La* 44-I-37-39.

⁸³ In his first opera in Italy, *Artaserse* (Turin, 27 December 1760), J.C. Bach included a similarly scored movement in the third act. This instrumental piece is also a “Marchia” (a type of composition suitable for trumpets). In the earlier opera the designation is *trombe*, and is, like *Catone in Utica*, notated for D trumpets in alto clef. A facsimile of *Artaserse* can be found in *The Collected Works of Johann Christian Bach*, vol. 1 (New York and London, 1986).

⁸⁴ “Cesare sopra Carro trionfale, tirato Numidi prigionieri, preceduto da istrumenti bellici, e dal suo esercito vittorioso.” A facsimile reprint of this libretto is found in Ernest Warburton, ed. *Collected Works of Johann Christian Bach* (London & New York), v. 43.

⁸⁵ Smithers, *Baroque Trumpet*, p. 330.

⁸⁶ *Repertoire International des Sources Musicale* B VI² [Écrits Imprimés Concernant la Musique], (München-Duisburg, 1971), p. 666.

⁸⁷ See *New Grove Dictionary of Music and Musicians* (London, 1980), s.v. “Pisendel, Johann Georg,” by Pippa Drummond.

⁸⁸ This tally includes the reprints of the lexicons of Jablonski and Marperger.

⁸⁹ Dahlqvist, *HBSJ* 5: 180. The report comes from W. Schneider, *Historisch-technische Beschreibung der musicalischen Instrumente* (Quedlinburg, 1834). As Schneider indicates, the idea that these coiled trumpets were horns, or even eventually evolved into horns, is a “rather fantastic [legend].”

⁹⁰This sentence concludes “whereby more than 200 persons showed up” (“wobei sich mehr als 200 Personen einstellten”). See Karl Nef, *Die Collegia Musica in der deutschen reformierten Schweiz von ihrer Entstehung bis zum Beginn des neunzehnten Jahrhunderts* (St. Gall, 1897; reprint: Wiesbaden, 1973), p. 69.

⁹¹Note that in his list of oriental trumpets, all but one have a specific bibliographical citation.