BENNINCK MEETS SANDER:
A COMPARISON OF TWO EARLY SEVENTEENTH-CENTURY TRUMPETS

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The making of trumpets has long been associated with the imperial city of Nuremberg. Although the roots of this craft have not yet been fully investigated, we know that its formation as a specialized profession must have been promoted by the Trumpeters Privilege, promulgated by Emperor Sigismund in 1431. One of the first trumpet makers to become widely known, according to Wörthmüller, was Hans Neuschel the younger. His instruments became well known all over Europe, as did those of the second famous instrument-making dynasty, the Schnitzers, who may be regarded as the founders of the famous Nuremberg school of trumpet makers. As late as the mid-eighteenth century, Nuremberg trumpets were highly prized articles for export.

Of course there are surviving early trumpets that were made outside Nuremberg. In addition to early records of trumpet-making in France, we have several instruments preserved—for example the trumpet by Marcian Guitbert of Limoges (1442), the pair of trumpets made by Jacob Steiger of Basel (1578), one by Lissandro Milanese (Genoa, 1589), and one by Hans Veit in Naumburg (1646). Among these comparatively early trumpets we also find one by Anton Benninck of Lübeck (1621; see Figure 1) and another by Jan Sander of Hanover (1623; Figure 2). The Sander instrument is preserved in the Germanisches Nationalmuseum, Nuremberg, as part of the collection of Ulrich Rück (Inv. no. MIR113), while the trumpet of Benninck has now been returned to its original location, the Schlossmuseum in Weissenfels. Both instruments are amply described in the catalogues of the Germanisches Nationalmuseum and the Bachhaus, Eisenach, respectively. In addition, a full-scale technical drawing of the Sander instrument has been published.

While preparing the Sander instrument for loan to a recently established exhibition at the Nuremberg castle, several questions about its construction brought the Benninck instrument into the picture. A detailed comparison of the two trumpets seemed warranted, since they show many similarities in construction and ornamentation, in addition to the fact that both were made in northern Germany at almost the same time.
Figure 1
Trumpet by Anton Benninck, Lübeck, 1621
(Weissenfels, Schlossmuseum)

Figure 2
Trumpet by Jan Sander, Hanover, 1623
(Nuremberg, Germanisches Nationalmuseum, MIR 113)
The two trumpets described

1. The Trumpet by Jan Sander

signature: “IAN. SANDER FECIT // IN HANNOVER 162.” (last number illegible)
ball inscription: G.A.R.S. / 1.6.2.3.
pitch: $D_{b}$ ($a' = 440\text{ Hz}$)
type: long, single-coiled to the left
construction: 5 tubes, bell with Nuremberg rim wire

The garnishes have engraved lines, and the mouthpipe garnish has an additional reinforcing ring. The bows are rather circular. The saddle holding the loop has no engraving or other ornamentation; the ball is soldered to a sleeve. The inscription is embossed with punched letters. The conical/hyperbolic bell ends in a smooth flare. The signature is on the garland, which is decorated with engraved leaves. The garland is reinforced by a bezel ornamented with leaves and flowers. The conical/hyperbolic bell ends in a smooth flare. The signature is on the garland, which is decorated with engraved leaves. The garland is reinforced by a bezel ornamented with leaves and flowers. Van der Meer interprets the inscription on the ball as the owner’s name and the date as date of acquisition. The letters “G.A.R.S.” have been deciphered as a very common abbreviation: “Gustavus Adolphus Rex Svetiae” (Gustavus Adolphus, King of Sweden). The binding is not contemporary, but the tassels may be original. The colors of the tassels—blue and yellow—are those of the Swedish regiment of Gustavus Adolphus.¹⁵

Technological details

- Large inner bows, slightly enlarged in diameter compared to the yards.
- Parts now soldered with soft solder, rather than loosely put together.
- The tabs of the seam are very irregular. Though not shown in the technical drawing, the tabs of the initial 130 mm are rather widely spaced, as is customary, after which they are very close together for approximately 100 mm; beyond this point they are again more widely spaced. The seams of the yards are joined with brass solder.
- X-rays of the bell revealed areas of varying density in wavy patterns—the ball is made of two halves, soldered onto a sleeve passing through the ball.
- The ends of the loop are joined end-to-end, rather than placed alongside each other.
- The garland shows no evidence of a seam.
2. The Trumpet by Anton Benninck

signature: “MACHT ANTON BENNINCK / IN LUBECK 1621”
ball inscription: “D. G. Rom. Imp. semp. Aug. Ferdinand II” (Dei Gratia Romanorum Imperator semper Augustus Ferdinandus II)
pitch: D♯ / E♭ ? (at a’ = 440 Hz)\(^{17}\)
type: long, single-coiled to the left\(^{18}\)
construction: 5 tubes, bell with Nuremberg rim wire
design: 5 garnishes, 2 loops, ball
material: brass
basic measurements
height: 676 mm
total length (without mouthpiece): 2093 mm
tube diameter:
first tube 12.1 mm
second tube 12.6 mm
bow diameter:
12.2 mm
bell diameter:
120 mm

The garnishes have engraved lines, and the mouthpipe garnish has an additional reinforcing ring. The bows are round. The saddle holding the loop has no engraving; the ends of the loop are joined end-to-end rather than placed alongside each other. The ball is soldered to a sleeve. The inscription on a brass ribbon around the ball is made with punched letters on a dotted ground, which is also punched. The conical/hyperbolic bell ends in a smooth flare. The tabs are set in rather equal distances. The garland is decorated with engraved leaves, and the signature is found there as well. The garland is reinforced by a bezel with embossed leaves and flowers. Binding and tassels shown in the photograph in the catalogue of the Bachhaus were missing when we examined the instrument in Weissenfels.

**Technological details**
- Bows are not enlarged in diameter.
- Parts of instrument loosely put together.
- The bell has been added beneath the ball, as can be seen from the fact that the seam does not continue beyond the ball; seam from garland to ball worked in very evenly spaced tabs. The seam above the ball butt joint plain.
- All the seams joined with brass solder.
- The garland shows no evidence of a seam.

**Comparison of the two trumpets**
Fortunately it was possible to bring the two instruments together for a detailed comparative examination, which revealed many similarities. Both trumpets have a ball inscribed with a punched dedication, and their bells have remarkably wide flares for this period. All garnishes, at the mouthpipe as well as at the ball sleeve and the other ferrules, are decorated with engraved lines, similar to the instruments of the later members of the Ehe family. The loops of both instruments are joined end-to-end and soldered on a plain, unde-
rated saddle. The most striking similarity can be observed at the garlands (Figures 3 and 4): while the text of the two inscriptions is of course different (as indicated above), the lettering is absolutely identical in style. The triangular engravings above the letters and the floral ornaments remind one of acanthus leaves without flowers or fruits. The elaborated bezel is also identical on both instruments, showing the same small flowers and leaves in identical dimensions.

Figure 3
Trumpet by Benninck, garland with signature

Figure 4
Trumpet by Sander, garland with signature
In spite of some differences, particularly in the measurements of the tubes and the bell seams, the striking similarities between these two instruments invite the conclusion that both trumpets must have been constructed, or at least mounted, in the same workshop. While their saddles, loops, and garnishes may be regarded as commonplace, the garlands and bezels without any doubt were made by the same hand. Here a problem of attribution arises: If both garlands came from the same workshop, why do they bear different signatures? Before trying to answer this question, we should return once more to the technological observations.

Classification of technological details
As Heyde has noted, both instruments seem on the surface to follow the general pattern of contemporary Nuremberg trumpets. But a closer look reveals several atypical features that the two instruments share. According to Heyde\(^1\) the so-called *Mundrohrändel* (see Figure 5), the reinforcing double ring at the receiver, is ordinarily not found on instruments built prior to the the early nineteenth century.

![Figure 5](image)

Garnishes: Benninck (left), Sander (right)
Figure 5 also shows the garnishes on the two trumpets. Before 1700 such garnishes usually were embossed—often with scale-like patterns. Garnishes with decoratively engraved strokes typically show a certain amount of depth, but on these two instruments we find decoration pierced through the metal as well. The garnishes often show darts made with a punch, which on seventeenth-century instruments are sometimes slightly curved. Garnishes typical of seventeenth-century trumpets are shown in Figures 6 and 7.

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**Figure 6**
Garnish: Trumpet by Hans Hainlein, Nuremberg, 1632
(Munich, Musikinstrumentenmuseum im Stadtmuseum, Inv. No. 67-5)

**Figure 7**
Garnish: Trumpet by Conrad Droschel, Nuremberg, 1640
(St. Annen: Museum für Kunst- und Kulturgeschichte, Inv. No. 1878)
Another interesting feature concerns the rather large saddles, which are completely plain on both instruments, in comparison to most seventeenth-century trumpets, on which even the smallest parts are elaborately decorated (Figure 8).

Figure 8
Bows and saddles: Benninck (left), Sander (right)

The balls of both trumpets are rather large in size and are made of two half-bowls (Figure 9). These may be compared with early seventeenth-century trumpets of Nuremberg manufacture—for example, specimens by Conrad Droschel (1640)\textsuperscript{10} and Hans Hainlein (1640)\textsuperscript{21}—with characteristic small balls. The ball of the Sander instrument is mounted on a sleeve passing through the knob.

Brass solder is used for the seams of both instruments, instead of the silver solder that is customary for seventeenth-century trumpets. Also of significance are the small tabs (1.6-1.8 mm) in this very characteristic order—wide-narrow-wide—on the seam of the bell on the Sander instrument, which did not become a common feature of trumpet construction before the nineteenth century. Such tabs can be seen, for example, on a firehorn (= bugle; inv. no. MI 812) dating from late nineteenth century in the collection of the Germanisches Nationalmuseum and also on a cornet by J. Stumm Jr. of Kreuznach (inv. no. MI 387) from the second half of the nineteenth century.
The conically flaring bells of both trumpets are uncharacteristically wide for this period. Measurements of bell diameters of other instruments preserved from this time range from 9 to 10 cm.²²

In comparison to the bell profiles²³ of other seventeenth-century trumpets, those described here must be regarded as rather exceptional; they are more typical of a keyed bugle, bugle, or post horn. In addition, the bell of the Sander trumpet seems to be pressed (or “chased,” with a chasing lathe) rather than hammered. This resulted in the structures seen in the X-ray, mentioned above.²⁴ Contrary to the opinion of Heyde,²⁵ both Wörthmüller²⁶ and Barclay²⁷ assume that seventeenth-century trumpet makers did not use a chasing lathe.

The garlands of both trumpets were cut from a sheet of metal and pressed onto the end of the bell; they therefore lack the tabs and solder seams seen on most trumpets of this period, the garlands of which were made from metal strips. The upper edge of both garlands is absolutely plain, rather than decorated with darts, as is found on most seventeenth-century trumpets.

Although the style of engraved floral ornamentation seen in Figures 10 and 11 is commonly found on other objects from the first half of the seventeenth century, it does not appear on trumpets and trombones before the end of the seventeenth century. The rim and the floral ornaments on the garland show crisp contours and no signs of wear.
Conclusions
In summary, the observations presented here might be interpreted as suggesting that both trumpets are from a period later than the dates stamped on their garlands. This hypothesis on the one hand could help to explain many of the peculiar technological details mentioned above and yet keep intact our notion of the appearance of a typical early seventeenth-century trumpet. On the other hand, we must remember that many antique musical instruments have undergone changes and modifications over the years, and thus it is sometimes difficult to reconstruct their original state. Before pushing an object from its pedestal, we should try to find further explanations for unusual features, rather than simply accepting that an instrument is no longer fully understood today—in the case of the two trumpets described here, 350 years after they were built. Very often, contextual information—such as makers’ biographies, reception history of the instruments, and the history of their acquisition—can be of considerable value.
Notes on the makers
Interestingly, both trumpets are unique specimens. Both Sander and Benninck seem to be known only from these two instruments; there are no further references to them in the literature. Research in the archives of Hanover failed to reveal any information on Sander, and similarly in Lübeck, Anton Benninck’s name could not be found in church records. On the other hand, the two family names were reasonably known in northern Germany. Members of the Benninck family are identified as Stück- und Glockengießer (?piece- and bell-founder) and Ratsgießer (municipal founder) in Lübeck, while a member of the Sander family is known as Hofsilberschmied (court silversmith) in Hanover in 1680.

Acquisition
The Sander trumpet was included in the collection of Ulrich Rück when it was acquired by the Germanisches Nationalmuseum in 1962. Dr. Rück had purchased the trumpet in 1931, together with several other instruments, from Hugo Engel, an antique dealer in Vienna. There is no further information concerning the provenance of this instrument. We could obtain no information at all from Weissenfels concerning the Benninck instrument, but another interesting trace, described below, could be followed there.

The context of Weissenfels castle
During the eighteenth century the Weissenfels court of Johann Adolf I and II was famous for its theater, which flourished under such music directors as Johannes Beer, Johann Krieger, and Adolf Hasse. The Weissenfels corps of trumpeters was also quite well known, and Johann Ernst Altenburg was a prominent member of this establishment at a later time. Although much research has been conducted on the history of music in Weissenfels, the inventory of musical instruments there has not been thoroughly investigated.

The castle museum in Weissenfels owns a few instruments in addition to the trumpet of Anton Benninck. Particularly worthy of note are three trumpets, two by Johann Joseph Schmied of Pfaffendorf (1770 and 1798) and one signed by Friedrich Ehe of Nuremberg (1744). These trumpets show certain similarities to the instruments described above. Significantly, the balls of all three bear dedicatory inscriptions—to Frederick II and Frederick William II of Prussia, and Frederick, Count of Hesse-Darmstadt, respectively. While we can identify many historical trumpets whose bells and/or garlands are prominently inscribed with the names of sovereigns from various regions of Europe, only the five trumpets described in this article are known to have inscriptions on the ball. In all five instances the balls are very elaborate and superbly crafted, seemingly in contradiction to the rather mediocre quality of the instruments in general, which in turn conflicts with their dedication to noble patrons.

But there are still further details that connect these instruments. The tassels of Schmied (1789) and Sander (1623) are identical, and might reasonably be dated from the seventeenth or early eighteenth century. As mentioned above, the colors represent the Swedish court. Significantly, there is a connection between Weissenfels and Gustavus Adolphus, who died during the battle of Lützen, near Weissenfels, in 1632. The autopsy was carried out at the
Weissenfels *Geleitshaus* (mortuary). A few years later (1644/48) Weissenfels was captured by the Swedish army and the castle was destroyed.

Apart from the Schmied instrument of 1789, which may be regarded as original in all parts (though the binding and tassels may be much earlier; see above), the remaining two Weissenfels trumpets of Schmied (1770) and Ehe (1744) seem to have been assembled by an amateur craftsman, using a combination of original and later parts. Only the garlands, signatures, and fragments of the bell can be attributed unequivocally to the given makers.

Looking again at the group of Weissenfels trumpets, we must conclude that at least two of them (Schmied 1770 and Ehe 1744) are mixtures of various components. And here we have to conceded, that our “seventeenth-century” trumpets may have been made much later, by cobbbling together parts of different trumpets from different periods. Several technological aspects of these instruments point to the mid- or late nineteenth century as the period of their assembly. Since the abbreviation “G.A.R.S.” was probably not widely understood at that time, we may assume that while the ball together with the tassels probably date from this early period, both trumpets in their present form may have been assembled as pastiches, as was often done with jewelery.

Weissenfels fell under Prussian control in 1815, and from 1820 the castle was used for barracks. It is extremely difficult to obtain information from this period. In any case it is surprising that four of five existing trumpets preserved at the same place in Weissenfels have such lofty inscriptions on the ball. Could there perhaps have been a connoisseur or collector of such imperial items, or a memorial hall where these things might have been displayed? As we do not know why these trumpets were assembled in their present form, we should not jump to conclusions; but the technological observations presented here should be reason enough to reflect again about the authenticity and historical evidence of the “imperial trumpets” of Benninck and Sander.

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NOTES


2 See Sabine Zak, Musik als “Ehr und Zier”: Studien zur Musik im höfischen Leben, Recht und Zeremoniell (Neuss: Verlag Dr. Päffgen, 1979), p. 150

3 Designated master in 1493, he died in 1533.


9 The trumpet was formerly on loan to the Bachhaus in Eisenach.


12 A technical drawing of the instrument was prepared in 1977 by Robert Barclay; the drawing is available from the Germanisches Nationalmuseum, Nuremberg.

13 According to van der Meer (see n. 10).


15 According to Dr. Willers, curator of historical weapons and astronomic instruments at the Germanisches Nationalmuseum.

16 By Barclay (see n. 12).

17 According to Heyde (see n. 11).

18 Description of type represents the current configuration of the instrument. Whether the instrument was originally coiled to the left or the right cannot be determined, as the instrument can be assembled in either way.

19 See Heyde, Trompeten, Posaunen, Tuben, p. 247.


23 Ibid.

24 A comparison with X-rays of a modern bell suggest the pattern seen in the X-rays of the Sander
trumpet may be a characteristic of metal pressed on a bench.

27 Barclay, *Art of the Trumpet Maker*, p. 115.
28 We are grateful to Iris Schmuck, Stadtarchiv Hanover, and Ms. Klein, Stadtkirchenkanzlei, for their assistance.
31 We should like to thank Dr. Astrid Fick and Dr. Herbert Heyde for their efforts to find more information.
32 Weissenfels was the residence of the *Chursächsische Sekundogenitur* (second-born in the lineage of the Electorate of Saxony) from 1656.
34 Including a cornetto, trombone, horn, kettledrum, and side drum.
35 According to Ms. Anneliese Streiter, of the textiles department of the Germanisches Nationalmuseum.
36 The numbers “1744,” for instance, were punched on the garland later. F. Ehe did not punch letters and numbers at all.