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“DISCOVERING” A MEDIEVAL CANDLESTICK IN THE COLLECTION OF THE WALTERS ART MUSEUM

Julie A. Lauffenburger

Abstract

In 1935 a seminal work on medieval metalwork was published in Germany illustrating a variety of fantastic yet functional objects from Northern Europe that included candlesticks, small decorative sculpture and plaques and a subset of functional art known as aquamanilia. Aquamanilia, Latin for ‘water’ and ‘hands’, are hollow vessels used in both secular and religious settings for the ritual washing of hands. Though there are hundreds in existence, still aquamanilia are a little known object existing in only a handful of American museums with sizeable medieval collections. But to turn of the century collectors like William and Henry Walters, they were an irresistible find.

Recent scholarship has confirmed several fakes or later reproductions among this small subset of bronzes, and it is in this context that the Walters collection will be examined. This paper will introduce the Walters’ collection of six aquamanilia and two prickets that come from both the European and Islamic Medieval period. It will then focus on a discussion of two prickets that take the form of Samson and the Lion and how in light of new technical research one that has always been relegated to storage as a fake, received some renewed attention.

Introduction

While examining the medieval collection in the Walters’ storage facility, a metal candlestick in the shape of Samson and the Lion (54.429, which will be referred to as “the questioned Samson”) (Fig.1) was noted as having striking similarities to a candlestick of the same subject matter then on view in the galleries (54.784, referred to as “the 13th c. Samson”) (Fig.2). In fact, the candlestick on view had recently been included in the exhibition and corresponding publication Lions, Dragons and other Beasts: Aquamanilia of the Middle Ages, Vessels for Church and Table (July 12- October 15, 2006). A review of the Walters’ records regarding the Samson and Lion candlestick in storage (54.429) indicated that its authenticity was in question and it had been therefore left in storage. In light of the newly published technical information included in Lions, Dragons and Beasts, and discussions regarding medieval metalwork of this type, the candlestick was taken from storage and a study begun to try and determine with more precision the date of its manufacture.
The Walters’ Samson and Lion candlesticks are contemporary with medieval aquamanilia and were produced in essentially the same way and likely in the same workshops, therefore a review of the technical literature on aquamanilia was essential in interpreting both candlesticks. In addition, the direct comparison of the 13th c Samson, 54.784, (recognized as a fine example of Mosan metalwork, produced in a region the Meuse river valley in present day Belgium, France and the Netherlands), to the questioned Samson, 54.429, provides useful information.

Aquamanilia are hollow vessels for the holding and pouring of water into the hands, used in both religious and secular settings. They are especially noteworthy for their use of anthropomorphic and fantastic animals as subject matter. In form they are distinguished by a hole at the top for filling, a handle and a spout for pouring. Many of the late 19th century museums in Europe and the United States have as part of their collections one or more aquamanilia and stylistically
related candlesticks. Early scholarship on aquamanilia includes Otto von Falk and Erich Meyer’s *Bronze-Gerate Des Mittelalters* (1935), which remains today an essential illustrated list of all known aquamanilia and related metalwork of the early 20th c. Interestingly, even at this early date, the book already includes references to fakes and forgeries. Ursula Mende continued the German scholarly contributions with her important work on the metal alloys (Mende 1981). Early publications in this country out of Cleveland and Boston included technical studies of pieces in their collections (Christman 1974 and Netzer 1991). Most recently, in a comprehensive catalogue and accompanying exhibition at the Bard Graduate Center for Studies in the Decorative Arts, NYC, Peter Barnet and Pete Dandridge from the Metropolitan Museum of Art (2006) have included a wealth of technical information on the methods of producing and casting aquamanilia.

**The Walters Art Museum collection**

Father and son collectors William and Henry Walters, active in the late 19th and early 20th centuries, amassed the majority of the 28,000 objects in the Walters Art Museum’s comprehensive collection. Among those collections were many pieces of medieval metalwork, including noteworthy examples of early enamels and reliquaries. A specific subset of this group is the little known genre of cast vessels known as *aquamanilia* and related candlesticks.

The Walters’ collection, primarily acquired before the death of Henry Walters in 1931, is in part a reflection of the tastes of a post-industrialist merchant class filtered through the tastes of important dealers of the time. The Walters has in its collection six aquamanilia and two related candlesticks, all but one of which was acquired prior to 1931. Of the eight pieces, two of the aquamanilia are recognized fakes and one candlestick, the questioned Samson, 54.429, was cast under suspicion early after its entry into the collection. Why in this case were the odds not in favor of the collector, especially one with a fairly discriminating eye? This can be explained in part by an increase in demand for medieval material that was a result of the simultaneous explosion in archaeological excavations and a rise in disposable wealth represented by the new merchant class. These developments made the late 19th century fertile ground for the production and sale of forgeries. It is known that as early as the 1850s German museums were selling plaster casts of aquamanilia for educational purposes (Barnet and Dandridge 2006). By the 1870’s cast metal copies were being produced by several German foundries including: C. Haegemann in Hanover, C.W. Fleischmann in Munich and Nuremberg, J.H. Schmidt in Iserlohn, Beumers in Duesseldorf (Barnet and Dandridge 2006). Sales catalogues of the German companies offered their copies correctly identified in the catalogue as new castings, and they served as teaching devices, replacements for damaged originals in historic churches, or as decorative pieces. Not surprisingly, however, some of these copies eventually made their way to the art trade as legitimate art of the middle ages. From here they easily moved into private and public institutions whose collections were being formed at the time. One aquamanile in particular, a lion with flame tails from the Nuremberg German National Museum, has approximately 20 castings known in at least three sizes (Mende 1990). The existence of three different sizes implies that casts several generations removed from the original were available as each successive molding and casting process results in an approximately 4% shrinkage factor. So it is evident that at the
time Henry Walters was acquiring his medieval collection the art market was already infused with 19th century replicas and forgeries.

The Romanesque and medieval originals were all unique lost wax casts, but the copies were manufactured in the then modern technique of sand casting, allowing them to be easily produced as multiples. The recent study by Barnett and Dandridge (2006) clearly documents and reproduces by way of a recreation by a living artist, the step by step production of an aquamanile using the lost-wax method.

As previously mentioned, both of the Walters’ Samson and Lion candlesticks were purchased and brought into the collection prior to 1931. Therefore it is clear that the candlestick in question, 54.429, was made prior to the comprehensive von Falke and Meyer publication of 1935. This is significant because early museum records indicate that 54.429 was described as a “forgery copied from 219a and 221 in Falke and Meyer” (Walters Art Museum, undated). The Walters’ Samson candlestick most closely resembles #221 but it is clearly not cast from this piece as the position of the legs and head differ. Moreover, the acquisition history of the Walters candlestick makes a forgery based upon the Falke and Meyer publication, an impossibility. This does not preclude that the examples included in Falke and Mayer could have been known to a potential forger from other publications. In fact, #221 was illustrated in publications as early as 1875 and was in the collection of the Victoria and Albert Museum, and could have been accessible for study or copying.

The museum record for the Samson candlestick in question, 54.429, goes on to say: “Eyes are glass and modern…the socket of the candlestick is upside down…Ellsworth claims it is old” (Walters Art Museum, undated) [1]. A closer examination of the technical details typical of medieval metalwork is now necessary.

**Hallmarks of a medieval Aquamanile**

A centaur aquamanile from Nuremburg, ca 1400, is currently on display in the Walters galleries (54.62) (Fig.3). This piece is particularly interesting as it is an example of a vessel with a dual function. At the terminus of the centaur’s extended hands are two open rings for holding candles while at the same time the spigot in the chest makes its use as a water vessel evident. The centaur has a radiating tail described in the literature as the “flametail” type (Mende 1990), indicative of the Nuremburg school itself. An examination of this piece will serve to illustrate some of the common and defining technical features of these sculptural forms during this period.

An x-radiograph shows the centaur is hollow-cast in one piece except for the spigot (Fig.4). The interior wall conforms closely to the exterior cast, which indicates the use of a very detailed and meticulously formed core. As is typical, the core extends only slightly into both the front and back legs, leaving the majority of the leg solid cast. In general, the desire for a closely formed core was a matter of economy, the less metal used, the less costly the cast. Additionally, the choice of solid or hollow leg may reflect the vessel’s function. For instance a solid-cast leg may have been preferable for the aquamanile as it would impart greater strength for a vessel designed
to be moved about a table and secondly it would prevent water from sitting in the deep voids and corroding the metal as well as becoming contaminated.

Figure 3. Aquamanile in the shape of a centaur. The Walters Art Museum, 54.62.

Figure 4. X-Radiograph of aquamanile from Fig. 4. The Walters Art Museum, 54.62.
In this late German example the core pins, used to secure the core within the investment prior to casting, have been replaced with circular metal plugs of an alloy similar in color to the cast. In earlier aquamanilia it is more typical to find small tapered core pins of either iron or copper alloy, still in place (Barnet and Dandridge 2006).

Because they are closed figures, except for very small openings for filling and pouring of water, the removal of core to create the receptacle for water was often achieved by the creation of a clear-out at the chest or underbelly of the animal. In this case, a rectangular clear-out, used for easy removal of the core material, doubled as a fixture point for the separately cast spigot on the centaur.

One final detail that is a hallmark of the early medieval aquamanilia is the evidence of cold working after casting (Fig. 5). This takes the form of engraving and also includes a repertoire of punch work.

![Figure 5. Detail of engraved lines of hair from Fig. 3. The Walters Art Museum, 54.62.](image)

**The trappings of the 19th century forger**

By way of contrast, the discussion now turns to the Walters’ aquamanile in the shape of a horse, 54.425 (Fig.6). This horse was purchased in 1927 as German manufacture of the 14th century. When examining the horse, several technical details do not correspond with what is expected of the metalwork of the period. It is evident both with visual inspection and looking at the x-radiograph that the horse is very unevenly cast and therefore lacks the feature of a carefully
formed core (Fig. 7). In fact, it is so thin in places that there are now large punctures in the side walls. In addition, there is no clear-out for the removal of the core, which has resulted in the incomplete removal of core in the horse’s head. The complete removal of core material would have been important given the function as a water vessel: even though the water was not intended for drinking, sediment from the core would have been undesirable.

Figure 6. Aquamanile in the shape of a horse. The Walters Art Museum, 54.425. Copper alloy. Authenticity in question.

Figure 7. X-Radiograph of aquamanile from Fig. 6. The Walters Art Museum, 54.425.
An additional feature that casts doubt upon the authenticity of this figure is the lack of engraving or cold working after casting. A detail of the horse’s head shows the as-cast detail of the horse’s mane (Fig. 8). It clearly lacks any of the engraving found on the lion’s mane in the Nuremburg example. In fact this horse belongs to a group of fakes, which were taken directly or indirectly from a medieval original in the Bayrisches National Museum inventory number 2495. Several of these forged pieces are illustrated in the last section of von Falke and Meyer’s 1935 work (1935, 225-228).

The ‘Samson and Lion’ type

Representations of the Samson and lion story can be broken down into two main types. Type 1 has the lion facing forward, and Type 2 has the lion’s head twisted back and facing Samson (von Falke and Meyer 1935). Of the two Walters’ examples the 13th Samson, 54.784, falls into the first category and the questioned Samson, 54.429, falls into the second category.

The questioned Samson, 54.429, represents a category of material that is difficult to define. It unlike either the clear-cut example of the forged horse aquamanile, or the striking examples of medieval workmanship seen in both the Walters’ centaur and the 13th c. Samson candlestick. This candlestick is not cast directly from any known published source and it appears to be a unique cast done in the lost-wax method.
It is useful at this point to review its relationship with the Samson candlestick #221 in von Falke and Meyer (1935, 93), in the collection of the Victoria and Albert Museum (V&A) in London. The V&A does not currently display this piece as it is also uncertain of its date of manufacture (Campbell 2007; [2]). The pose and expression of both lions appears almost identical from the photographs. The figures of Samson, though very close to each other, differ in significant ways. The positions of the left and right legs on the figure are reversed, something that could not have happened if the Walters’ Samson was directly cast from the V&A example. Also, the cloaks on the two figures are different; the Walters’ example incorporates a tuft at the waist, something not seen in the V&A example. Furthermore the height of the V&A candlestick is recorded as 22.3 cm and the height of the Walters piece as 34.5 cm, again making a direct casting impossible.

In 1935 there was one known “precise copy” (von Falke and Meyer 1935, 106) of the V&A candlestick that exactly replicated patterns of wear and corrosion seen on the V&A example. The copy was in the Henkell collection in Weisbaden at the time of the von Falke and Meyer publication, confirming that it was not the Samson and Lion candlestick now in the Walters’ collection as the Walters’ Samson entered the collection prior to 1931 (von Falke and Meyer 1935). What is in question is the relationship between these two European examples. If they are as identical as indicated, then perhaps one is a later copy of the other original or perhaps they are both 19th century casts taken from the same original model, whose whereabouts is yet unknown. Whatever the relationship between the other two candlesticks, the Walters example is not a direct copy of either example, and still stands as a unique cast.

Stylistically the questioned candlestick raised no red flags during recent discussions with the curators at the Walters, though it is clear that it is of less sophisticated workmanship than other examples of medieval date. This is evident primarily in the difference in sculptural qualities of volumes such as the hair and lion’s tail and the extent and quality of the punch work and engraving after casting. It remains possible that this could be a result of differences in workshop practice or skill of an individual artisan.

The x-radiograph

Each of the candlesticks is cast around a single complex core that includes both Samson and the lion (Fig. 9). The closely modeled core of the questioned Samson, 54.429, parallels the final cast surface, though the casting itself appears to be a bit thicker than the 13th c. Samson. The core extends only minimally into the legs of the questioned Samson, a feature in common with aquamanilia, leaving the legs solid cast. Exceptionally, the 13th c. candlestick has completely hollow legs, perhaps as a result of economy and function. It makes sense for vessels holding water to have primarily solid legs so that the water does not get trapped and stale in the hollows, but this does not hold true for the candlestick. It would therefore be possible to use less metal in the candlestick.
A pair of small circular core pins is evident on both x-radiographs and is a hallmark of lost-wax casting. On the 13th century Samson they appear as small circular points of a less dense material in Samson’s upper thigh area. However, on the Samson from storage they appear as small circular points of a more dense material near Samson’s left foot, perhaps indicating they are still in place as tapered metal pins.

Both candlesticks also contain a rectangular shaped clear-out for the removal of the core material. In the case of a candlestick, core removal is primarily to address the issue of weight rather than the issue of water quality as with the aquamanile. The clear-out of the questioned Samson is at the front of the chest and the clear-out on the 13th c. Samson is located directly beneath the belly (Fig. 10).
Figure 10. Top: Detail of clear out on the questioned Samson, 54.429. Bottom: Detail of clear out on the 13th c. Samson, 54.784.
While the cores both closely parallel the exterior form of the cast metal, in both cases additional applications of wax were used to create the tufts of hair on the mane and the face of Samson on both candlesticks.

The Walters card catalogue file contains an undated quote that indicates that the drip pan on the questioned Samson, 54.429, was “upside down”. This claim was refuted by closer examination. In fact the drip pan was simply deformed and had originally, as in the 13th c. Samson, 54.784, been part of the cast stem but was now, as a result of damage, in the incorrect orientation. X-radiography of the candlesticks show that like the 13th c. Samson, 54.784, the questioned Samson is constructed of rolled and soldered sheet metal with a vertical seam extending its length (Fig.11).

![Figure 11. Left: Detail of drip pan and pricket, questioned Samson, 54.429, Right: 13th c. Samson, 54.784.](image)

**The metal alloy**

The composition of both Walters’ Samson and Lion candlesticks was examined using XRF [3]. Bulk composition was analyzed qualitatively from clear areas of metal on the underside of the lion’s feet on both prickets. In both candlesticks the composition appears to be a quaternary alloy of copper, zinc, tin and lead, an alloy combination that was in common use in the middle ages.
and is referred to as latten (Netzer 1991). The alloy is consistent with the compositions of the alloys reported by Dandridge in his analyses of aquamanilia.

Analysis of the prickets on both candlesticks shows a composition of primarily copper. Traces of lead may result from the soldering process and traces of mercury may be from surrounding areas of mercury gilding.

**Cold working and finishing**

Both Samson and Lion examples at the Walters have been extensively worked after casting; the primary difference between the two again appears to be in workmanship. Areas of 54.429, the candlestick from storage, that are embellished with engraving or punch work include the lion’s mane, face, legs, hind quarters and tail, and the tunic, hair and face of Samson. A V-shaped graver and circular punch appear to have produced the majority of details on the candlestick. In addition to circular punches and V-shaped gravers the other Walters’ Samson also incorporates a true beading tool that leaves a half round stamp and results in a hollow circle. A comparison of several details shows the range of tools used and effects obtained on the surface of the brasses (Fig. 12 and 13).

![Figure 12. Left: Detail of engraving, questioned Samson, 54.429, Right: 13th c. Samson, 54.784](image-url)
As part of their surface embellishment, both candlesticks were mercury gilded (the presence of mercury detected with XRF). The gilding on the Samson from storage is worn and remains in recesses and engraved lines reflecting a pattern of wear from use.

The transparent red glass eyes of the Samson from storage were examined and in one case showed signs of glass deterioration, perhaps indicating it has weathered over a period of time (Fig.14). There are several documented examples of glass inlaid eyes, although they are generally of an opaque glass more typical of the early medieval period. It remains possible that
the glass inserts could have been added at a later date and therefore does not have immediate impact on the authenticity of the piece as a whole.

![Figure 14. Detail of glass eye, questioned Samson, 54.429.](image)

There are a few areas of what appears to be cuprite and malachite on the questioned Samson, 54.429, from storage. In those areas the cuprite appears beneath the malachite and it is hidden in recesses and areas difficult to clean. The overall texture of this Samson is somewhat odd and has a pebbly appearance, and though this is unlike the well polished surfaces of the many published examples, it is not unlike other documented examples from the Mosan region, for example a small lion aquamanile from the National Gallery of Art in Washington, D.C. (1942.9.281).

**Conclusion**

The author welcomes further discussion of the Walters Samson and Lion candlestick, 54.429. The current study has shown that it incorporates many of the characteristics of aquamanilia of the Middle Ages and compares favorably with known alloys of the genre. Its relationship with a candlestick in the Victoria and Albert Museum in London remains a puzzle and will be pursued further. Yet overall, in execution it is very closely related to other known examples from the Mosan region and may represent a slight variant on a popular secular subject, Samson and the Lion.

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Endnotes

1. Ellsworth was the chemist at the Walters from 1934-1937.

2. The V&A find its overall manufacture and its bright green corrosion troubling but the piece has never been analyzed nor has it been published since von Falke and Meyer. While it was not possible for this publication, the author is pursuing a more detailed study of the V&A example.

3. XRF was performed by Walters Art Museum Conservation Scientist, Jennifer Giaccai, using a Bruker AXS ARTAX system with a rhodium tube and polycapillary lens.

References

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