An Investigation of Roman Silver Plate in the San Antonio Museum of Art

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An Investigation of Roman Silver Plate in the
San Antonio Museum of Art

Allyson Walsh

A departmental senior thesis submitted to the Department of Classical Studies at Trinity University in partial fulfillment of the requirements for graduation with departmental honors.

April 21, 2010

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An Investigation of Roman Silver Plate in the San Antonio Museum of Art

By Allyson Walsh
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(Photographs of inscriptions taken by Dr. Jessica Powers.)


(Photograph of inscription taken by Dr. Jessica Powers.)


Abbreviations

AA: Archäologischer Anzeiger (Supplement to the Jahrbuch des Deutschen Archäologischen Instituts)

AJA: American Journal of Archaeology

AntJ: Antiquaries Journal

BABesch: Bulletin van de Vereeniging tot Bevordering der Kennis van de antieke Beschaving

BM: British Museum

BSOAS: Bulletin of the School of Oriental and African Studies

JRA: Journal of Roman Archaeology

JArchSci: Journal of Archaeological Science

MFA: Museum of Fine Arts, Boston

SAMA: San Antonio Museum of Art
**Introduction**

The San Antonio Museum of Art (SAMA) has a collection of fifty-three ancient silver objects on display in its Denman Gallery. From the time when the objects were acquired in 1986 until now, little has been known of their story. The museum label states only: “Group of tableware and spoons. Roman. 1st Century AD. Silver.” This investigation will challenge the museum’s current identification of these objects.

Through research and visual analysis this study will attempt to situate these unprovenienced objects within their chronological, geographical, and social context in the hope that the museum will use this research and the objects themselves to better educate the general public about the importance of preserving these invaluable artifacts.

This investigation is divided into eight chapters. The first discusses the history of the collection and how the museum came to acquire these objects. The second chapter provides a review of ancient silver studies and explains how this investigation will contribute to this field. Most ancient silver plate has been preserved as a result of hoarding. The third chapter is a chronological presentation of silver hoards from the first to the seventh century C.E. in order to make clear where the objects in SAMA’s collection should fit. The fourth chapter is a discussion of hoards and the motivations behind this practice. The fifth chapter provides an overview of silver metallurgy and describes the basic methods of production for most of these vessels. The sixth chapter is the most extensive; it presents detailed analysis of selected objects in the collection. The seventh and eighth chapters offer suggestions for further study and final conclusions.
Chapter I: History of the Collection

This assortment of Roman silverware belongs to SAMA’s Stark-Willson Collection. It was part of a collection of approximately one thousand objects acquired by the Stark family of Orange, Texas in the 1920’s and 1930’s. The family acquired these Egyptian, Near Eastern, and Classical antiquities during a “grand tour” of Europe and the Near East. They augmented their collection by buying from auction houses and dealers in New York and elsewhere.

Following the death of Mrs. Stark, the family’s collecting interests shifted to American art of the southwest and the previously acquired antiquities no longer fit in the museum they established in Orange, TX. Consequently, in 1986 the museum decided to turn their collection over to SAMA. Mr. Stark’s will stipulated that the objects had to be sold to the museum, but fortunately they were sold for the original 1920’s prices. Mr. and Mrs. Robert Willson, art collectors and patrons of SAMA, provided the funds for the purchase of this collection.

It is impossible to know when and where the Stark family acquired the fifty-six pieces of Roman silverware in their collection or even whether they were bought as a single lot. The identification of the silverware as Roman is also an issue. An investigation of the original inventories revealed that the closest thing to a purchase of Roman silverware was a collection of Byzantine silver spoons and dishes bought in 1928 from the American Colony Stores located in New York and Jerusalem. It is possible that the dealer misidentified the silverware or the record could actually be referring to a purchase of Byzantine silver separate from the objects now at SAMA. This study will attempt to answer some of these questions and unlock the history behind this assortment of “Roman” silver plate.

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1 Scott 2007, 2008.
2 Stark Museum of Art 2010.
Chapter II: Review of Silver Studies

Silver, a noble metal, is electro-negative and does not lose electrons easily. It is this chemical property that makes silver more resistant to corrosion than other metals and “noble” not only in a chemical, but also in a social, cultural and political sense. Although ancient peoples did not know the science behind silver’s many desirable properties, they have exploited this resource for at least five millennia.³ It is the combination of durability, workability, natural beauty, and rarity that facilitated the attachment of an intrinsic value to silver. These properties also made silver an indicator of wealth and status as well as a medium of exchange. This “noble” metal still retains these associations with affluence and importance today.

Large-scale silver working developed later than gold and copper exploitation because deposits of ‘native’ silver, which can be worked without further processing, are extremely rare. When the intensive exploitation of silver deposits began in the third millennium B.C.E., techniques and tools already in use for gold accelerated the development of the craft. The first exploitation of silver resources occurred in Anatolia, Mesopotamia, and possibly Iran and the Greek islands.⁴ The Roman Empire eventually included the regions where silver deposits were located and where these techniques developed. The size of the empire and trade networks allowed for increased silver production and transfer of these goods and technologies to different regions of the empire.

The archaeological record preserves large amounts of Roman silver plate. This is partly because the high value of silver caused many people to bury it during troubled times, and in great part due to the eruption of Mt. Vesuvius in 79 C.E. Scholars have abundant examples of cultural material to study and the field of Roman silver studies has grown exponentially.

³ Merriman 2009, 6.
⁴ Merriman 2009, 6-7.
Silver plate has traditionally been studied using art historical approaches, mainly because the finest examples of ancient silver plate in museums around the world were not recovered in archaeological excavations. Both this fact of recovery and the art historical methodology have proved to be limiting factors in studying silver for the purposes of understanding ancient Roman society.

Since the discipline of archaeology developed out of a tradition of antiquarianism and treasure hunting, archaeologists are often apprehensive about the study of such material. Also, archaeologists traditionally stayed away from studying silver hoards because of their high value, which limits the ways they can be studied. In the past thirty years, however, the study of silver plate has evolved into a multi-disciplinary approach, involving scholars from a variety of fields. This change in attitudes toward the study of silver plate combined with increased numbers of hoards excavated archaeologically and improved methods of technological analysis has contributed greatly to our understanding of the use of silver in the world of ancient Rome.

The publication of first century C.E. silverware discovered during excavations of Pompeii and Herculaneum at the turn of the nineteenth century catalyzed the field of Roman silver studies. The silver from the House of the Menander is one of the most famous examples. Other parts of the empire also produced hoards of silver, for example, the hoard from Boscoreale and the Hildesheim Treasure. (These will be discussed in greater detail in the following section.) These were the first archaeologically-excavated silver hoards and they provided scholars with much greater information than silver discovered in an uncontrolled manner.

The contemporary study of Greek and Roman silver plate begins with Donald Strong’s *Greek and Roman Gold and Silver Plate* published in 1966. This landmark work reflects the introduction of a multi-disciplinary method for studying ancient silver plate. Strong combines

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5 Maiuri 1933; Heron De Villefosse 1899; Pernice and Winter 1901.
“historical, aesthetic, and scientific analysis in his survey of precious metalwork from the Bronze Age to the fifth century C.E.”6 This study forms the basis of much of the detailed research of the 1970’s and 1980’s and still remains “an indispensible work of reference for any worker in the field.”7 Strong advocates for increased study of silver after the first century C.E. and further investigation of the relationship of silver to tablewares of other materials, like bronze, glass and ceramic.8

Kenneth Painter, curator of the British Museum’s Romano-British collections from the early 1960’s to 1977, attempted to do just that.9 His catalogue, Wealth of the Roman World, accompanied a 1977 British Museum exhibition designed to demonstrate the homogeneity of Roman silver even in late antiquity.10 This catalogue furthered the development of a multi-disciplinary approach to the study of ancient silver plate. Not only did it draw together late-antique silver from across the Roman world and beyond, but it also allowed scholars and scientists from around the world to undertake a necessary program of research and analysis.11

A trend that developed in the late 1970’s and early 1980’s was the re-publication and re-analysis of old finds with new technologies and methods of interpretation. Scholars were no longer satisfied with the original publications; “they were becoming aware that there were new standards to apply, new questions to ask and new answers to seek.”12 For example, François Baratte’s landmark work included both profile drawings and photographs of well-known pieces that had been in Louvre’s collection since 1852.13 He brought “the apparatus of modern

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6 Johns 1990, 29; Strong 1966, xxviii.
7 Johns 1990, 29.
8 Oliver 1977, 19.
9 Johns 1990, 29.
10 Silverware in the exhibition dated from 300-700 C.E..
11 Johns 1990, 29.
13 Johns 1990, 30; Baratte 1981.
“scholarship” to a collection of objects discovered well before the development of methods of scientific analyses.14

The development of new technologies facilitated communication between scholars on a global level that culminated in the Paris Table ronde on Roman and Byzantine Silver held in 1983. The proceedings of the conference were published in 1988 and included both technological and social studies of silverware.15 The application of scientific analysis to the field of silver studies has become commonplace in the last fifty years. For example, in 1966 Donald Strong listed only twelve publications including scientific analysis of Roman silver plate but now there are hundreds available.16

The 1970’s and 1980’s were also a time when theoretical approaches to the study of ancient silver plate were becoming more archaeological, rather than just art historical. One of the most provocative papers included Kenneth Painter’s theories on ownership and status of late Roman silver hoards.17 Painter attempted to explain silver within the wider historical context of late-Roman society and provide greater understanding of the lives of the individuals who produced and used these objects. Although Painter’s theories were highly criticized and proved to be unsubstantiated, this discussion and debate furthered the understanding of how Roman silver plate was used.18

Catherine Johns19 documents research on Roman silver plate in a 1990 article and suggests that the future study of Roman silver include the following: certain standards of publications are to be expected, including drawings, photographs, and technological analysis.

14 Johns 1990, 30.
16 Johns 1990, 34.
18 Johns 1990 35-36; Cameron 1992; Painter 1993
19 Johns 1990, 40.
Johns also addresses one of the questions that has always challenged scholars: the identification of manufacturing sites. She also advocates for further investigation of silver from eastern proveniences to balance the extensive study of silver from the western regions of the empire.

Since Johns’ 1990 article, more scholars have tried to understand the relationship between silver objects and the societies that created them.\(^{20}\) Ruth Leader-Newby’s 2004 study, *Silver and Society in Late Antiquity,* explicitly addresses this change in the field of silver studies. Although she acknowledges the importance of the early art historical publications, she calls for movement from “a simple history of artefacts” to one that seeks “to determine their role in the wider sphere of visual culture.”\(^{21}\) One such question that has received much attention in recent years is motivations for hoarding and the larger social implications of this anthropological phenomenon.\(^{22}\)

New approaches toward ancient silver studies have made reinvestigation of recognized silver collections worthwhile. The past decade has especially been marked by a return to the first century silverware discovered at Pompeii and Herculaneum. The most famous of these silver hoards comes from the House of the Menander. Kenneth Painter’s 2001 publication of this collection includes historical, compositional, and social analysis. It is this type of comprehensive study which serves as a model for my examination of Roman silverware from SAMA. Since so little is known about this collection, I will attempt to compile information in a way that facilitates and provides suggestions for future research, when technological analysis becomes more cost-effective.

\(^{20}\) Swift 2009.
\(^{21}\) Leader-Newby 2004, 5.
Chapter III: Chronological Fixed Points

Introduction

As with any art form, the decorative motifs, artistic styles, and shapes of silver plate changed over time according to popular trends and tastes. In order to examine the evolution of silver plate over time, this chapter will present a series of silver hoards from the first to the seventh centuries C.E. Each one of these hoards was chosen because it best represents silverwork from its time period.

Many of the silver hoards discussed in this chapter were found in the western provinces of the Empire. This unequal distribution of silver hoards is a reflection of modern scholarship. Modern nations in those regions have claimed descent from the Roman Empire and early twentieth-century archaeologists searched for evidence to support these claims. The reinvestigation and republication on this material has perpetuated the unequal study of Roman silverwork. There are examples of silver hoards from other part of the Empire.

The purpose of creating the chronological presentation that follows is to propose where the silver collection from SAMA should fit.

Silver from the First Century C.E.

Large quantities of Roman silver plate from the first century C.E. have been preserved, either as a consequence of the eruption of Mt Vesuvius, or as a result of burying and hoarding on the western frontiers of the empire. The three most important silver hoards from this time period are the Hildesheim Treasure, and the hoards from the Villa della Pisanella at Boscoreale and the House of the Menander in Pompeii.
The Hildesheim Treasure, named for its findspot in Hildesheim Germany was the first of these three to be discovered, on October 17, 1868.23 The more than seventy Roman-era silver objects represent the largest collection to be found in the Germanic cultural area.24 Unlike the two other contemporary hoards discussed in this chapter, the Hildesheim treasure was not associated with any structure in which it might have been used.25

Scholars assigned dates to this hoard ranging from the early first century C.E. to the fourth century C.E.; recent research supports a date of deposition during the Augustan period.26 The primary publication suggested that the majority of the hoard was produced in central Italian workshops, with only a small number of objects produced in Gaul or local workshops.27 However, subsequent discoveries have made it clear that the silver plate from the Hildesheim Treasure does not resemble Italian hoards of the first century28 and most scholars now accept that the entirety of the Hildesheim Treasure was produced in workshops on the frontiers of the north-western provinces.29 Burial evidence suggests a local elite who adopted Roman drinking but not eating customs. But the Hildesheim Treasure includes silverware for both eating and drinking, and thus it was probably war spoils rather than a table service.30 It may even be part of the spoils taken by the Germans on the defeat of Varus based on its first century date and its location.

Its recovery by means of archaeological excavation makes the Hildesheim Treasure an important fixed point for silver studies, but its provinciality makes it difficult to compare this hoard with silverware found in contexts associated with structures, like the hoards from Boscoreale and the House of the Menander.

23 Pernice and Winter 1901.
27 Pernice and Winter 1901, 15.
The catastrophic eruption of Mt. Vesuvius on the 24th of August in the year 79 C.E. caused the both the voluntary and involuntary deposition of silver in Pompeii and Herculaneum as well as the surrounding countryside.\textsuperscript{31} As a result, excavations at Pompeii have revealed much about Roman daily life, and more specifically, the role of silver plate in first-century Italian society. The hoards of silver found in Pompeii and Herculaneum comprise the largest surviving collection of Roman plate and are especially significant because their deposit can be associated with a specific date, and are thus an important chronological fixed point for the study of Roman silver.\textsuperscript{32}

The discovery of silver artifacts at these sites was sporadic and uncontrolled throughout the 18th and 19th centuries. This was the case for the discovery of a silver hoard at the Villa Pisanella at Boscoreale, located one kilometer north of Pompeii.\textsuperscript{33}

Until the discovery of the silver hoard from the House of the Menander in 1933, the 109 pieces of at Boscoreale Hoard discovered in 1895 comprised the largest hoard discovered in Campania. The archaeological value of the discovery is greatly reduced because the excavation of the silver was uncontrolled and it passed directly to the market.\textsuperscript{34} Nevertheless, it seems likely that the hoard was discovered in a cistern below a grape-pressing room along with a human skeleton clutching a purse filled with gold coins.\textsuperscript{35} The findspot raises questions of whether the hoard was \textit{in situ}, or even belongs with the house. Several silver vessels were also found in a cupboard in the peristyle. It has been suggested that these pieces were part of the hoard but located in the cupboard because they were going to be repaired. If this is correct, it supports the

\textsuperscript{31} Painter 2001, 1.
\textsuperscript{32} Painter 2001, 1.
\textsuperscript{33} Painter 2001, 2.
\textsuperscript{34} Painter 2001, 14.
\textsuperscript{35} Painter 2001, 14; Héron de Villefosse 1899.
thesis that the silver hoard belongs to the villa in which it was found.\textsuperscript{36} The size and quality of silver from Boscoreale makes it an important chronologically fixed point for silver studies but the many uncertainties surrounding its discovery make it less than ideal for comparison.

The arrival of the 20\textsuperscript{th} century brought controlled, scientific excavation to the sites of Pompeii and Herculaneum. Amedeo Maiuri undertook extensive excavation in Pompeii, including the excavation of the House of the Menander,\textsuperscript{37} where he found a substantial hoard of silver plate during the 1930 season.\textsuperscript{38} The 118 pieces of silver plate found in the house of the Menander comprise one of the three most important surviving silver hoards from the first Century C.E. and is the only one to be found and recorded under modern conditions.\textsuperscript{39} This hoard is also significant because it was discovered in the original container and location in which it was deposited in antiquity. Maiuri’s 1933 publication, although extensive and well illustrated, is descriptive rather than analytical and lacks the scientific precision of modern publications.\textsuperscript{40}

The hoard from the House of the Menander is similar to that from Boscoreale, though there are some differences. The Boscoreale hoard has more drinking silver, but the silver from the House of the Menander included everything necessary for a meal, excepting only a mixing bowl for wine and a tripod, which would not have fit in the chest. Based on the numbers of different types and quantities of silver found in other hoards, Painter suggests that the silver plate from the House of the Menander is a complete service for eight people and each diner had two cups and three plates. They were served with wine, food and spices in pairs of vessels, and their hands and feet were washed in groups of four.\textsuperscript{41}

\textsuperscript{36} Painter 2001, 14.
\textsuperscript{37} Medwid 2000, 194-195.
\textsuperscript{38} The original publication, Maiuri 1933 is published in Italian, which I cannot read; most of the information about the silverware from the House of the Menander is taken from Painter 2001.
\textsuperscript{39} Painter 2001, 15.
\textsuperscript{40} Ling 1997, 2.
\textsuperscript{41} Painter 2001, 25.
Maiuri thought the silver could be divided into two distinct groups, Hellenistic silver in originals and copies and another group of Roman-made silver. Pliny described the development and fashion for collecting silver in this manner and Maiuri forced the silver into groups that it did not belong.\(^{42}\) Painter refutes this argument by pointing out that the cups, which Maiuri identified as Hellenistic, actually date to the Claudio-Neronian period, and that there is nothing in the hoard earlier than the mid first century B.C.E.\(^{43}\)

The hoard was discovered in the area indicated by “S” in Figure 2. This area provided access to the cellars and served as a substructure for the bath complex.\(^{44}\) In addition to insulating the baths, these rooms provided storage for fuel and accommodations for slaves charged with maintaining the baths. These underground rooms were also used as emergency storage space for hoards of bronze ware, jewelry, coins, and silver plate.

The excavators were surprised to find this area free of pumice and ash and containing coarse amphorae and bronze vessels among the collapsed masonry.\(^{45}\) A wooden box with bronze fittings emerged from underneath the layer of collapse. The box measured 1.5 by 0.8 m and its contents were divided into two distinct layers. The upper layer consisted of pieces of gold and silver jewelry and forty-six coins.\(^{46}\) The lower level contained 118 pieces of silver plate arranged in groups and wrapped in a heavy woven material. There were thirteen figured cups in the bottom of the box. Overall the silver plate was extremely well preserved, even better than the contemporary hoard from the Villa Pisanella at Boscoreale.\(^{47}\) Only the cups decorated in relief seemed to be corroded and missing small pieces of metal. Even though “the ground in which the

\(^{42}\) Painter 2001, 28.  
^{43}\) Painter 2001, 28.  
^{44}\) Ling 1997, 93.  
^{45}\) Painter 2001, 3.  
^{46}\) Painter 2001, 3.  
^{47}\) Painter 2001, 3.
silver lay was damp; but the robustness of the wooden box, and the fact that the objects were wrapped in wool or heavy cloth, meant that the majority of the pieces appeared from the ground ‘as sparkling and polished as if they had just emerged from the hands of the silversmiths.’

Although this study focuses on Roman silver plate, the coins and jewelry found with the silver will be described briefly in order to discuss the relationship between these two groups of objects, and what this relationship indicates about the role of silver plate in the first century C.E. The remains of wood and a small lock found within the large wooden chest suggest that the coins and jewelry were stored in a separate box. The twenty-one pieces of gold jewelry consisted of earrings, necklaces, arm rings, hairpins, a bulla (child’s protective medallion), rings, and a small ball of thin gold wire. The quantity of jewelry in the box suggests the owner was a wealthier member of Pompeian society, and one of about 8.6% of the jewelry-owning population of the town. Although it is difficult to determine if the box of jewelry and coins was the property of one individual, Amedeo Maiuri believed it was, and that it was the property of ‘one of the ladies of the family of Quintus Poppaeus’ specifically. Maiuri’s conclusion regarding the ownership of the jewelry may be correct but there is no way to be sure.

The hoard of forty-six coins included Republican and Imperial denarii, as well as aurei of Nero and Vespasian. Based on the dates of the coins, the small box was placed in the chest between 78 and 79 C.E. Maiuri was originally intrigued that so few coins had been hoarded with silver and jewelry of much greater value and thought it was the personal property of one of the ladies of the house. However, by comparing this hoard to others found in and around Pompeii,

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48 Painter 2001, 3; Maiuri 1933, 248.  
50 See Painter 2001, 6-7 for more information the distribution of jewelry.  
51 Painter 2001 8; Maiuri 1933, 383. 
52 Painter 2001, 10.
Painter was able to show that this hoard is actually of a medium size and that it could not possibly have been owned by a single woman.\textsuperscript{53}

Painter’s revaluation of the relationship between the jewelry and coin hoard and the silver plate reveals less is actually known about these valuable objects than Maiuri originally thought.\textsuperscript{54} Although we know the box of jewelry and coins was placed in the chest between 78 and 79 C.E., there is no direct evidence for the date when the chest was placed in the cellar. The revaluation of this material also leaves many questions unanswered regarding the identification and status of the owner.\textsuperscript{55} The quantity of gold rings suggests that the owner was of equestrian or senatorial rank but this is not proven. Archaeologists assume that the chest was hidden because of the eruption but not even this is certain.

Now that the types of silver and the number of people using them have been discussed, we must look the vessels themselves and then the context in which they were found to reveal who their owners might have been and if they were in fact the inhabitants of the House of the Menander. One of the most important attributes of silver plate for determining anything about the relative importance of the hoard and social status of the owner is weight. Silver was a common way of storing wealth in antiquity because it could be melted down and used in another form if necessary. The total weight of the silver from the House of the Menander is 23.5 kg, equivalent to 72 Roman pounds and valued at more than HS 35,000. For comparison, the hoard from Boscoreale weighs 30 kg, and the values of these two hoards are in the top tier of known first-century hoards.\textsuperscript{56} Other evidence provided by the silverware itself comes in the form of inscriptions, which usually denote ownership. The silver hoard from the House of the Menander

\textsuperscript{53} See Painter 2001, 10-12 for the details of this comparative study.
\textsuperscript{54} Painter 2001, 12.
\textsuperscript{55} Painter 2001, 12-13.
\textsuperscript{56} Painter 2001, 26.
bears relatively little inscriptive evidence; only six of the 118 vessels are inscribed. Maiuri concluded that the lack of inscriptions was due to one noble family having owned this set of silverware for a very long time, but his interpretation of these inscriptions was affected by his desire to identify a certain Roman aristocratic family as owners of the house and also the silver. Painter points out that the absence of the names of owners does not automatically indicate one family owned the silver for a long time. The presence of the name Apelles on two pairs of cups could be accounted for as an inscription made by the dealer in antiquity to sell the vessels for a higher price.

External evidence can also contribute to answering this question of ownership and status. Based on evidence compiled during excavations of the rest of the structure, it seems the opulence of the silver corresponds with the luxury of the house in which it was discovered. Measuring 1830 sq m, the House of the Menander has been called “one of the most extensive and opulent houses in Pompeii.”

It has all the features necessary to be identified as an aristocratic house and its luxurious amenities and rich fittings make it comparable to the houses of the local magistrates. Maiuri believed the ownership of the house could be attributed to the gens Poppaea related to Nero’s second wife Poppaea Sabina. This was based on the discovery of a bronze seal reading Q(VINTI) POPPAEI EROTIS. Painter makes the important point that wealth does not always indicate status, since freedmen could accumulate wealth and build houses that were just as opulent. The coin hoard found with the silver cannot be considered evidence for the owner’s wealth. Since it was valued at HS 1432 and most houses in Pompeii contained HS 100-1000, it must be understood as a normal amount to be held in a Pompeian household.

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57 Painter 2001, 34.
60 Painter 2001, 36-37.
The structure of the house also indicates where and how the silverware may have been used. There is evidence for three to five dining rooms (they can be difficult to identify because Romans often used moved furniture around to create the type of room desired.) If we accept that the silver plate found in the House of the Menander is for eight guests, this does not seem to correspond with the number of people able to sit in an indoor *triclinium* or *stibadium*. A *stibadium* can accommodate five to nine people but it is not common until the late Imperial period and the House of the Menander was buried in 79 C.E. There is no archaeological evidence for the use of the *stibadium*. Painter addresses this problem by suggesting that the silver from the House of the Menander was used at an informal outdoor *stibadium*, as a result this set of silver would not have been the family’s primary set. Perhaps a fancier set was made of other materials or removed before the eruption.\(^{61}\)

The only conclusions Painter is willing to make are that the House of the Menander is comparable with those of local magistrates and the owner might have been a magistrate himself but the silver neither confirms nor denies this conclusion. The silver plate was most likely the property of the owner of the house but it could have been collateral for a loan to someone else.\(^{62}\)

Silverware dating to the first century C.E. is plentiful and found in a variety of contexts. Of the three most significant hoards of silver from the first century C.E. the Hildesheim Treasure, the hoard from Boscoreale, and the hoard from the House of the Menander, the silver from the House of the Menander serves as the best example of first-century silverware because extensive information is known about its exact provenience and the structure in which it was found.

\(^{61}\) Painter 2001, 41.  
\(^{62}\) Painter 2001, 38.
Silver from the Second Century C.E.

The dearth of fine tableware preserved from the second century C.E. provides a striking contrast to the finds from the previous century. Large silver hoards have yet to be discovered. Only a few closely dated finds have been unearthed. One of them is a small hoard from Backworth in Northumberland, England, discovered in 1811 and now in the British Museum.63 The 209 coins in the hoard indicate that it must have been buried after 139 C.E.64 This hoard also included a chain, bracelet, rings, a pan, two brooches, and three spoons. Inscriptional evidence suggests that these items were interred as a votive deposit at a shrine of a Mother-goddess located near the eastern end of Hadrian’s Wall.65

Silver from the Third Century C.E.

The quantity and distribution of hoards from the third century C.E. resembles that of the previous century. Only a few hoards have survived, their deposition a result of barbarian attacks in the western provinces.66 The Treasure of Chaource, discovered in 1883 and now in the British Museum, is one such example.67 It was wrapped in cloth and buried in a field in north-western France in the third century C.E., most likely buried during the troubled time of Gallienus’s reign (253-260 C.E.).68 The thirty-three pieces of silver and six bronze vessels (including strainers, jugs, bowls, plates and dishes) compose the most complete silver service (*ministerium*) from the third century C.E.69 Stylistic evaluation suggests that pieces in this hoard were all produced in local Gallic workshops.70

63 Plate I. Strong 1966, 160; Merriman 2009, 84.
64 Walters 1921, 46.
65 Merriman 2009, 85-86.
67 Walters 1921, 38.
68 Walters 1921, 38.
69 Strong 1966, 161.
70 Strong 1966, 161-162.
Silver from the Early Fourth Century C.E.

The political, social, and military turmoil of the late third and early fourth centuries is reflected in the small quantity of silverwork surviving from this period. One such example is the Munich Treasure. Its exact provenience is unknown and it is named for the city in which it is now displayed. It is believed to have Eastern origins because several of the bowls bear stamps indicating they were manufactured in Nicodemia, Antioch, and Naissus (in present-day Serbia). The inscriptions and portraits of emperor Licinius identify at least five of the pieces as largitio silver, vessels produced specifically for the emperor to distribute on ceremonial occasions. These are some of the earliest examples of largitio silver.

After Diocletian abdicated his throne in 305 CE, the subsequent division of power between Constantine and Licinius turned violent. A civil war between the leaders of east and west raged from 320-324 C.E. A decisive battle at Chrysopolis, on the Asiatic shore of the Bosporus, ended the war. The Munich Treasure included pieces made for these warring rulers and some scholars believe their owner might have been an important person in the vicinity of Chrysopolis, forced to bury his hoard sometime around the 324 C.E.

However, recent comparative studies have suggested that the owner of the Munich Treasure was not necessarily of high social status. This conclusion is based on the insubstantial weight of the silver collection and the mediocre workmanship, (for example, the evidence for lathe turning and die stamping which suggests large-scale silver production). Finally the vessels

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71 Kent and Painter 1977, 17.
72 Leader-Newby 2004, 16.
73 Leader-Newby 2004, 16, 19.
74 Kent and Painter 1977, 18.
75 Leader-Newby 2004, 17.
not identified as *largitio* are characteristic of fourth century domestic plate and their small size and lack of decoration does not suggest great wealth.  

**Silver From the Late Fourth/Early Fifth Centuries C.E.**

By the second half of the fourth century, the state was recovering slowly from the decline of the past hundred years. The quantity of silver hoards from the late fourth and early fifth centuries reflects the resurgence of the Roman economy. With the exception of the first century C.E., there are more silver hoards preserved from this period than any other. The decorated plate of the late fourth and early fifth centuries shows a return to the quality and style of plate from the first centuries B.C.E. and C.E. Several objects from this period bear stamps indicating that they were produced in Constantinople. This city was emerging as an important political center and would eventually become the capital of the Eastern Roman Empire. The founder of the city, Constantine, was also responsible for recognizing Christianity. As a result, Christian influence and symbolism were adopted into silver plate decorative motifs with greater frequency. There was no clear division between pagan and Christian decorative arts.

The Sevso Treasure, named after its ancient owner, is one of the smallest hoards discussed in this chapter, consisting of only fourteen vessels, but these pieces are some of the finest examples of Roman silver plate. Its exact provenience is unknown; in 1980 the objects began appearing in London. In the early 1990’s there was a legal battle in which the governments of Lebanon, Croatia, and Hungary all claimed ownership of the treasure. In 1993, a New York court rejected all their claims and today the treasure remains in the possession of the Marquess of Northampton, its owner since 1990. The controversy surrounding this treasure has

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76 Leader-Newby 2004, 17.
77 Kent and Painter 1977, 17.
78 Mango and Bennett 1994, 11.
made it difficult to find information regarding dates and places of manufacture and ownership of the treasure in antiquity.

This collection of fourteen late Roman silver vessels and the cauldron in which they were found is decorated with every technique known from late antiquity. There are six different types of vessels including plates, an amphora, ewers, *situlae*, a basin, and a casket. With the exception of one Christian symbol on the Hunting Plate, decorative motifs are comprised of mythological scenes, daily life scenes, and geometric patterns.\(^79\) The collection also includes fourteen inscriptions, three of which refer to the ancient owners of objects in the treasure including Sevso.

Even though important contextual information regarding this treasure is missing, Anna Bennett’s comprehensive technological analysis revealed much about its context.\(^80\) Although the silver vessels were in excellent condition, they were covered with encrustations, which served as a valuable clue to the treasure’s provenience. The calcium carbonate in these encrustations indicates that the treasure was not buried but rather hidden in a limestone cave or cellar.\(^81\)

The second volume of Mango and Bennett’s publication is forthcoming.

**Silverware from the Sixth and Seventh Centuries C.E.**

The sixth century marks the beginning of the Early Byzantine period in which Constantinople emerged as the center of government as well as the church. The culture was Christian and this development was reflected in the silver plate of the time. Churches replaced pagan temples as depositories for valuable collections of gold and silver plate. Silver plate was also produced specifically for religious use, as Mass required different types of silver vessels.

The Kaper Koraon Treasure is a collection of four separate treasures – Stuma, Riha, Hama, and Antioch treasures – discovered near the village of Kaper Koraon (modern Kurin) in

\(^{79}\) Mango and Bennett 1994, 11.  
\(^{80}\) Mango and Bennett 1994.  
\(^{81}\) Mango and Bennett 1994, 21.
northern Syria between 1908 and 1910. Information regarding the exact proveniences of each treasure comes from often contradictory first-hand accounts such as journals and correspondence. The objects changed hands many times so following their trail has been difficult.\(^82\)

The fifty-six objects comprising the four treasures were created between 540 and 640 C.E., a time in which the village was plagued by various military campaigns.\(^83\) They are all “village church treasures of comparable technical quality and monetary value, all are independently dateable to roughly the same decades, and all bear (comparable) inscriptions name individuals who can be organized into a plausible family tree.”\(^84\) It is for these reasons in addition to technological analysis that the treasures have been grouped together and labeled the Kaper Koraon Treasure. Some of the types of vessels include chalices, crosses, patens,\(^85\) lamp stands, bowls, and spoons.

Although this collection of silver plate is rather homogenous, one important distinction is that between stamped and un-stamped vessels. The stamps most likely indicate production in state workshops in Constantinople and the un-stamped pieces could have been produced in any local or regional workshop.\(^86\) The silver of the Kaper Koraon Treasure provides an excellent example of the intricate decoration and different types of vessels common among sixth and seventh century silver plate.

**Conclusions**

This chapter has provided an overview of silver plate from the first to the seventh century C.E. Silver hoards that best represent the century in which they were created and/or deposited

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\(^{82}\) Mango 1986, 20-34.  
\(^{83}\) Mango 1986, 7.  
\(^{84}\) Mango 1986, 7.  
\(^{85}\) Shallow dishes used for holding bread during the Eucharist.  
\(^{86}\) Mango 1986, 14.
have been chosen as chronological fixed points. The silver collection from the San Antonio Museum Art can now be analyzed in respect to this chronology, in order to determine the place where it best fits.
Chapter IV: Discussion of Hoards and Hoarding

Hoardi

ng has occurred throughout history in civilizations around the world and it still
occurs today in the form of a psychological disorder. The difficulty of isolating hoarding
practices specific to different time periods and locations makes hoarding a challenging subject to
address. At the same time, this difficulty makes it especially intriguing for scholars and there
have been many attempts to understand why ancient peoples buried their valuables in the earth
for safekeeping. It is important to investigate the subtleties of this phenomenon and the
motivations behind it because hoarding accounts for the greatest amount of preserved Roman
silver plate.

Two words have been used, mostly interchangeably, to describe collections of silver
objects buried in the ground: treasures and hoards. Confusion surrounding the definitions of
‘treasure’ and ‘hoards’ is still apparent today, especially within certain legal systems. For
example, the English law of Treasure Trove, refers to a collection of gold or silver coin or
bullion buried by its original owner with the intent to recover it later. By this definition, grave
goods and objects not made of noble metals are not considered Treasure Trove. Finally in 1996
the law was amended to account for such objects. This emendation was necessary because the
previous definition of Treasure Trove made it extremely difficult for archaeologists to recover
the hoards/treasures and determine ownership rights.

But there are some important distinctions. The term “treasure” has two meanings. In the
primary sense, treasure refers to a collection objects given a high intrinsic value by a certain
society, usually gold and silver objects and including coinage in Western cultures. The secondary

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87 Johns 1996, 1.
88 Johns 1996, 2.
89 Johns 1996, 2.
meaning can refer to anything understood as being of value, whether in monetary or less quantifiable terms.  

Both hoards and treasures can be groups of valuable objects but the use of the term hoard implies that the objects were stored or hidden together. This is the most important distinction between the two definitions for the purposes of this study. The concept of hoarding can be applied to a variety of materials, including food, especially in the event of shortages. Any surviving archaeological material can be described as hoards as long as they are stored or hidden together. This can include objects made of noble metals, base metals, glass, ceramic, stone or wood. In this study, the term hoard will always be used except when referring to collections of vessels that have already been named “treasures” in the literature.

Some of the most commonly hoarded objects in the Roman world were jewelry, coins, and plate. When used in this manner, “plate” does not refer exclusively to tableware made by plating, or surfacing one metal with another. Instead, it refers to domestic tableware and other utensils made from thin sheets of worked metal (plates), and it usually implies vessels made of gold and silver.

The hoards of coins, jewelry, or plate were usually buried in some kind of container or wrapping. Small hoards of coins were often placed in durable ceramic vessels that ensured their protection. Silver plate often required a larger container like a wooden box or bronze cauldron. Many of the hoards were probably wrapped with some kind of organic material. When hoards are not excavated by archaeologists, microscopic traces of such wrappings are usually lost and with them valuable information that could aid in the interpretation of the hoard.

90 Johns 1996, 1.
91 Johns 1996, 2.
92 Johns 1996, 3.
Many silver hoards can be associated with historical periods of invasion, war, or social unrest. In the Western Roman Empire silver was hoarded with greater frequency in the late third and early fourth centuries as a result of barbarian invasions and in the late fourth and early fifth centuries as a result of collapse. The first scholars addressing this difficult question simply assumed that the majority of these hoards were simply the possessions of wealthy provincials buried during times of emergency.\(^93\) However, one innovative study illustrates how difficult understanding the conditions that trigger hoarding and individual responses to these conditions can be.\(^94\) This study applies types of analyses typically reserved for ancient hoards to two documented hoards, one from seventeenth-century England and the other from twentieth-century Germany. It illustrates the complexities of circumstances behind the concealment of the hoards and the motives of the owners. Even though archaeologists will never fully understand the circumstances that resulted in hoarding, it is still important to envision what might have motivated individuals to bury their valuables in the ground. Hoarding is common during times of invasion or unrest but there are other reasons why individuals might want to inter their gold and silver plate, jewelry, and coins.\(^95\)

When hoards of certain periods or origins are chosen for study above others, it can skew our perception of the frequency and distribution of silver hoards in the Roman empire. For example, literary and archaeological evidence suggests that burying precious metal plate and jewelry in the ground was not common outside of the Roman provinces of Britain, Gaul, the Rhine, and the Danube,\(^96\) and it is in these regions where many hoards dating from the second to the fourth centuries C.E. have been discovered. There is a longer tradition of excavating and

\(^93\) Strong 1966, 182.  
\(^95\) See Johns 1996 for a complete list, including the examples given in the following paragraphs.  
\(^96\) See Figure 3 for a map displaying the distribution of Roman silver hoards in the second and fourth centuries C.E.
studying Roman finds in these parts of the Empire, and it is this that may have accounted for this geographical distortion of silver hoards. (Ancient cultural differences may also have played a role; this is discussed below).

In the west, the threat of invasion from beyond the boundaries of the Empire was very real. Memories of catastrophic defeats stayed with the Romans living in these provinces. On the other hand, very few hoards have been discovered in the eastern and North African provinces of the Empire. This does not mean that these areas were free from war but perhaps the general population did not feel a real threat of invasion.97

Cultural differences also contributed to the unequal distribution of silver hoards in the Roman Empire. In the northwestern provinces of Britain, Gaul, Germany and the Danube hoarding was practiced continuously from the prehistoric period. In these agrarian societies, where individual livelihood depended on the land, it would have seemed natural to entrust one’s valuable possessions to the earth.98 The people of the northwestern provinces may have had a physical and spiritual connection to the land unlike the inhabitants of the eastern regions. In the eastern provinces that had been urbanized for thousands of years, hoarding was less common. Centuries of urban living meant that people had little contact with the land, both physically and psychologically. As a result, entrusting one’s possessions to the earth would have seemed unnatural.

Temples and churches were often used as repositories not only for votive offerings but also for personal or institutional wealth. In addition to objects entrusted to their care by individuals, they usually contained their own hoards. The second century Backworth Hoard from England and the seventh century Kaper Koraon from Lebanon are examples of hoards entrusted

or dedicated to religious institutions. Inscriptions are often the main evidence for determining that a hoard is church or temple wealth. In some cases, these votive offerings were ritually abandoned as gifts to a deity and not intended for human recovery.

Some hoards might have been assembled under illicit circumstances and buried for safekeeping.\(^{99}\) Although there would not be any physical signs that a hoard was stolen, variations in type, date, and condition of these signs might be good indicators. The first century Hildesheim Treasure from Germany would fit into this category as it was probably seized as spoils of war. It is composed of an unusual combination of vessels and was buried along known invasion routes.

The presence of unfinished or broken objects in a hoard might indicate that the vessels were concealed in a workshop or by a craftsman for safekeeping.\(^{100}\) This type of hoard might also include materials and equipment necessary for the production of plate or jewelry.

Some collections of plate, jewelry and coins, might have been lost rather than hoarded. This would be plausible in an ocean environment. In general, it is impossible to tell if a hoard was intentionally abandoned. As with much of our understanding of hoarding, care should be exercised when describing motivations for hoarding. There is a clear difference between a hoard that was “deliberately abandoned” and one that was “ritually abandoned” and these distinctions should be addressed when interpreting hoards.

Most collections of antique silver plate have survived because they were hoarded. Hoarding is both a difficult and intriguing topic because it occurred on such a large scale, geographically and through time. The hoards known to archaeologists represent a small percentage of what has been hoarded throughout history. While threats are one cause of hoarding, the real circumstances behind the deposition of a hoard can be complicated. Valuables

\(^{100}\) Johns 1996, 14.
may be buried to preserve personal or institutional savings, as war spoils, or as votive offerings. The unequal distribution of hoards in the eastern and western provinces of the Roman Empire may be a result of concentrated scholarship in the western areas but the perceived threat and cultural differences might have also contributed to these differences.
Chapter V: Overview of Silver Metallurgy

Silver deposits throughout the Mediterranean world have been exploited for over 5,000 years and over the centuries. Especially in the Roman empire, the process of mining, refining, and manufacturing silver objects became increasingly standardized and efficient. This chapter will provide a general overview of silver metallurgy and the chaîne opératoire necessary to produce vessels such as those in the SAMA collection. The methods of production and decorative techniques discussed here should be kept in mind as a general framework for further analysis of these objects.

Throughout antiquity, silver was obtained by smelting lead ores; the most common of these is galena.\textsuperscript{101} The mines of Asia Minor, Spain, and eventually Britain supplied the Roman Empire with the raw lead ores from which silver was derived. After the silver was separated out, it was then poured and alloyed to increase its strength. Silver is a very soft metal and Roman silversmiths always alloyed it with 1-4% copper to increase its durability.\textsuperscript{102} The metal was then shaped, decorated and polished with a variety of techniques.

There is no ancient text describing the production of silver; everything known about this process comes from interpretation of the tool marks left behind on the objects themselves, and by extension to modern craftsmen who continue to manufacture silver objects with traditional techniques. The first step in the process is raising, which involves hammering an ingot into the basic shape of the vessel.\textsuperscript{103} This is made easier by annealing, heating and cooling the metal frequently to prevent it from cracking. A footring and rim may then be shaped by a combination

\textsuperscript{101} Strong 1966, 3.
\textsuperscript{102} Strong 1966, 4.
\textsuperscript{103} Strong 1966, 4.
of bending and hammering. Some of the vessels have been smoothed by extensive light hammering, a process known as planishing.\(^{104}\)

Silver vessels were then finished by “spinning” or “turning” on a lathe.\(^{105}\) This technique often left behind “a series of very light, closely spaced, horizontal striations made by the pressure of the shaping-tool as the disk from which the bowl was made revolved upon the lathe.”\(^{106}\) It also leaves behind “central depressions, known as pips and serving as centering points.”\(^{107}\) Although there is still debate over the earliest use of the fast-revolving lathe on metalwork, Strong suggests it was introduced in the Hellenistic period.\(^{108}\) The lathe marks on the objects in this collection are significant since they are an important diagnostic feature and provide a date *terminus post quem*.

Repoussé is the most common form of decoration on ancient plate and on the SAMA vessels. It involves hammering or engraving the reverse side of the metal so that the design is projected onto the other side. The fine details are then added by chasing, engraving or incising that is done specifically from the front of the design.\(^{109}\) Engraving or incising is another common technique. Here, a fine pointed tool removes slivers of the metal to create lines.\(^{110}\) Gilding, a technique of laying a thin layer of gold leaf on top of the silver was also a common type of decoration.\(^{111}\) Beading on the rims of vessels was also a common decorative technique. These beads were made by “punching the metal around the rim into a square-headed die.”\(^{112}\)

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104 #1a-b, 40a-b.  
105 For a diagram how this tool worked, see Maryon 1949, 100, Fig. 11-14, 17.  
106 This type of mark has been behind on many of the objects in the collection. See plates XII B, XVI C, and XVIII B. See also Bivar 1961, 192.  
109 Maryon 1949,121. Examples of these techniques can be found on #38a-b. Strong 1966, 10.  
110 The bird motifs on #31, 33, 34 have been made by engraving. See also Mango 1994,31.  
111 See #38a-b.  
112 The beading on #31-34 was made in this manner. Mango 1994, 29-30.
This chapter was meant to provide an introduction to silver metallurgy and the processes by which the vessels in SAMA have been manufactured. Most of the objects in this collection have the turning holes and concentric burnishing lines characteristic of manufacture on a lathe, indicating they were made in a similar manner. The decorative techniques described here are just a small sampling of all those known from antiquity. Decoration is not present on all the vessels in SAMA’s collection and those that have been decorated are fairly simple. More detailed description of specific decorative elements is included in the following chapter.
Chapter VI: Analysis of Selected Objects

Introduction

This study is an attempt to situate the Stark-Willson collection in its social, geographical, and chronological contexts. Thirty-three of the fifty-six objects in the collection will be discussed in chronological order, beginning with the earliest (dating to the third through first centuries B.C.E.) and concluding with the latest, (dating to the third through fifth centuries C.E.). These objects have been chosen because they have features like inscriptions or decoration, that either were dateable or allowed for further research. Each object will be analyzed visually, functionally, and technologically and suggestions for further study will also be provided.

SAMA has the entire collection labeled as first century Roman silver plate and the majority of the collection appears to be from this period. For the pieces without dateable features, the first century date will not be challenged, largely because I did not find any evidence to invalidate this date.

There is sufficient ancient evidence that can be used to identify how this silver plate was used and in what context. Court speeches and literary references describe silver according to function and divided into categories of drinking silver (argentum potorium), eating silver (argentum escarium), show silver, and toilet silver (argentum balneare). A papyrus preserving an inventory of silver tableware revealed more information regarding the classification of Roman silver. This inventory, written in Greek for or by a wealthy Roman in Egypt, lists many kinds of vessels, mostly divided into groups of two, four, eight, and twelve.115 A 1922 study of the inventory revealed that normal sets of eating vessels included twelve pieces,
consisting of four large plates, four bowls, and four small bowls. I was able to identify several sets of vessels in SAMA’s collection and the numbers of vessels in the sets correspond to the numbers listed in this ancient inventory.\textsuperscript{116}

\textbf{# 38a-b. (Plate XXXVII) Ribbed bowl with Locking Lid}

The earliest piece in the collection is a gilt silver ribbed bowl with a locking lid. SAMA has dated this piece to the first century C.E., but I suggest a date in the Hellenistic Period (third-first century B.C.E.) based on its shape, decorative elements, and gilding technique. All of these elements indicate it might have been made and used in the Greek regions of Asia Minor. Its Eastern provenience is even more probable if this vessel was indeed purchased from a dealer in Jerusalem, a possibility suggested in the Stark documents.

\textbf{Visual Analysis}

The hemispherical body and ribbed design of this vessel are uncommon for Roman vessels of the first century C.E. or later. It resembles a vessel of Achaemenid origins popular in Greece in the early Hellenistic period.\textsuperscript{117} A dozen bowls of this type are known; half are from Macedonia (Greece and Bulgaria) and the other half are without provenience.\textsuperscript{118} Of these dozen bowls, the one that and will serve as the main point of comparison is in the Museum of Fine Arts, Boston.\textsuperscript{119} Even though these two vessels had different functions, they have similar shapes and decorative elements. The shoulders of both vessels are ornamented with elaborate gilded designs like circles and guilloche. The bodies of both vessels are ornamented with a distinctive pattern of elongated tongues with raised edges and darts between. The differences between the

\textsuperscript{116} See Figure 4 for a list of suggested groupings.
\textsuperscript{117} Strong 1966 99-101; Oliver 1977, 40.
\textsuperscript{118} Oliver 1977, 40.
\textsuperscript{119} Plate XXXVIII. Oliver 1977, 40, no. 10; MFA Acc. No. 58.319.
vessels are not significant and in some cases, a discrepancy of merely centimeters. While the vessel from the MFA is about 4 cm wider than the piece from SAMA, there is only a 2 cm height difference between the two. Although the vessel from the MFA has a wide flaring rim and the vessel from SAMA does not, elements of this rim have been incorporated into its design. The vessel was left undecorated above the shoulder and it curves inward in a similar fashion. The flat rim was replaced by beading and bossed decoration, which were then gilded.

The ribbed bowl (#38) has a similar shape and decorative elements as other vessels from the third to the first centuries B.C.E. One such example was found in a Boeotian tomb and now resides in Berlin.\(^{120}\) One part of the body is ornamented with a band of guilloche and the bulbous part of this vessel is also ribbed.

**Functional Analysis**

The production of vessels like perfume vases (*unguetaria*), trinket boxes (*pyxides*), mirrors, and strigils was an important part of a silversmith’s work during the Hellenistic Period.\(^{121}\) The ribbed bowl with a locking lid (#38a-b) is an *unguentarium*, a vase used to hold perfume, ointments, or cosmetics.

In general, the hemispherical body of this vessel makes it especially suited to the palm of the hand and it was a popular drinking vessel in the early Hellenistic Greek World. However, SAMA # 38 was not used in this manner, for the gilding close to the base of the vessel shows few signs of wear, much less than the upper parts of this vessel.\(^{122}\) This would suggest that the vessel was used in such a way that the lower parts would be protected. In addition, it would not

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\(^{120}\) Pictures of these vessels were impossible to find since the publications are extremely rare. (*BABesch* 1958, 48, fig. 9; see also *AA* 1899, 129, fig. 11) This comparison is based on written description only. (*Strong* 1966, 103.)

\(^{121}\) *Strong* 1966, 103.

\(^{122}\) Plate XXXVII C-D.
make sense for a vessel related to the consumption of beverages to have a locking lid. It must be toilet silver.

Although this vessel does not have the long, narrow neck of most unguentaria, variations in shape were very common. None of the unguenteria have lids, which might indicate that this vessel had a slightly different function. Perhaps #38 was used for powdered cosmetics rather than perfume. It might have even been used to store jewelry or trinkets. The locking lid suggests that the contents probably had a high monetary value, or at least a high value to the owner. Variations of this type of vessel remained popular throughout the Hellenistic Period. Comparison with the drinking bowl from the Museum of Fine Arts, Boston illustrates how decorative motifs were shared between silver for eating and drinking and toilet silver.

**Technological Analysis**

Analysis of technological processes used to shape and decorate this vessel confirms that it was made during the Hellenistic Period. This vessel was hammered from a single sheet of metal. This can be determined since there are no visible joining techniques such as riveting or soldering. There is a small hole in the center of the vessel’s base that suggests that it was spun on a lathe. There is evidence to suggest that this technique was introduced in the Hellenistic Period and “would have been especially suitable for the mass production of little perfume pots and the like.”

The ornamentation on the rim and shoulder of the vessel was created by a combination of several techniques. The simplest of these is engraving or incising and the lines on the gilt band below the rim and the circle patterns on the shoulder were made using this technique. The circles on the gilt band just below the rim were added separately, after a hole was punched through the side of the vessel. Repoussé and chasing were also used to create the ribbed design on the body.  

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of the vessel and the other designs on the shoulder. A technique related to repoussé utilizing a
carved or moulded punch was used to create the bossed decoration below the rim of the vessel.

It is the gilding on this vessel that sets it apart from all others in the collection. This
feature adds value and also proves to be the most valuable for dating the vessel. The technique of
gilding, applying a layer of gold on top of a less rare metal, originates in the third millennium
B.C.E.\(^\text{124}\) The earliest form of gilding was mechanical and simply involved wrapping gold foil
around a silver object. Over time, the gold foil was hammered thinner to become gold leaf and
the joining was aided by adhesives, eventually creating a chemical join between the two metals.
The application of heat also enhances the gilding process and this technique was common in the
Late Hellenistic and Early Roman periods.\(^\text{125}\) Finally, a process known as mercury-gilding or
fire-gilding became the standard method of gilding by the third or fourth centuries C.E.\(^\text{126}\)

There are two methods for gilding silver using mercury.\(^\text{127}\) In the first, mercury is applied
to the silver before a layer of gold leaf. In the second, a gold and mercury amalgam was made
by either grinding gold dust in a mortar with mercury or by dissolving fragments in boiling
mercury. This amalgam was then spread over the surface of the silver. The final stage for both
methods was to heat the object so that the mercury would evaporate, leaving behind a strongly
adherent film of gold. Although the mercury evaporates, detectable traces remain, regardless of
how much time has passed.\(^\text{128}\)

It is very difficult to distinguish mercury-gilding from other types of ancient gilding on
the grounds of visual inspection alone. Based on the available evidence, I suggest that this bowl

\(^{124}\) Oddy 1981, 74.
\(^{125}\) Oddy 1981, 77.
\(^{126}\) Oddy 1981, 78; Lins and Oddy 1975, 395.
\(^{127}\) Lins and Oddy 1975, 365-366.
\(^{128}\) Lins and Oddy 1975, 370.
was gilt using first process described above, in which mercury is applied before a layer of gold leaf.

The gold on #38 is a much richer, darker color than the pale yellow left behind by the more complex type of mercury-gilding. The vessel #38 bears little resemblance to Roman vessels known to have been guilt with an amalgam of gold and mercury. The chemical combination of gold and mercury before application creates a very strong bond between the gold and silver and the gilt decoration on #38 is worn in a way that suggests it was not gilt in this manner.

In places where the gilding has worn away, straight lines have been left behind, rather than the uneven splashes left behind when the liquid amalgam of gold and mercury is applied. Because it is spread over the surface, it is often difficult to apply in small areas and “splashes of gilding on an otherwise unplated area of the surface” are often left behind. These types of splashes are not present on #38, suggesting that the application of the gold leaf was more controlled and an amalgam was not used.

While I have suggested that this bowl was gilt using the simpler type of mercury-gilding, there is evidence to suggest this bowl may have been gilt without the addition of mercury. The gilt decoration on this bowl (#38) is very similar to the partial gilding on a Statuette on Achaemind King from the early fifth century BC. It is interesting to note that the ribbed design and shape of #38 might have been adopted from a Greek adaptation of an Achaemind style. If this vessel was indeed made in the Hellenistic period, it was probably gilt without the aid of mercury, since mercury-gilding was extremely expensive and rare at this time.

129 See plate XXXIX C for an example from the third century Chaource Treasure.
130 See plate XXXIX for a visual comparison of objects known to have been gilded with and without mercury.
131 Mango 1994, 33.
132 Lins and Oddy 1975, 370.
133 (Plate XXXIX A). Lins and Oddy 1975, no. 2; BM Registration No. 123901.
My analysis of available evidence indicates that this bowl was gilt using mercury applied before a layer of gold leaf. However, it is not possible to know for sure how this vessel was decorated without a chemical analysis of the gilding. Correctly identifying the type of gilding that was used would be incredibly useful for pinpointing the period in which this vessel was created.

**Suggestions for Further Study**

There is an area on the undecorated part of the vessel, just below the missing boss, where there may be an inscription. It is difficult to see without the assistance of a microscope. If these illegible scratchings are in fact some kind of inscription, they might provide further information about the date, ownership, or use of this bowl. Even if they turn out to be “just” tool marks, they may still reveal potentially significant information about the technological processes that went into creating this vessel.

Energy Dispersive X-ray Fluorescence (EDXRF) would reveal the elemental composition of this vessel. This method “is a non-destructive, non-contact method of chemical analysis that provides qualitative and quantitative identification of elements in solid or liquid samples.”\(^\text{134}\) This type of testing would indicate whether or not there are traces of in this vessel. It is important to note, however that the presence of mercury in itself indicate that the mercury was necessarily used in the gilding process.\(^\text{135}\) Some native gold ores have been shown to contain detectable amounts of mercury and gold can also absorb mercury from its environment.

**Conclusions**

This ribbed bowl and locking lid (#38a-b) in SAMA’s Stark-Willson Collection is most likely a toilet vessel, used for holding cosmetics or jewelry, dating from the third through the


\(^{135}\) Lins and Oddy 1975, 370.
first centuries B.C.E. Since the gilding would have greatly added to the vessel’s cost, the owner was likely a person of high social status. Its decoration and shape suggest that it is Hellenistic or Roman Republican, and that it was made in the eastern parts of the Greek world. If scientific analysis reveals that mercury-gilding was used to decorate this bowl, a later date becomes more probable. 136

#36-37 (Plates XXXIV-XXXV) Small Shallow Bowls with Punched Decoration

This pair of bowls has a punched decoration unique in this collection. This decoration also makes it difficult to situate the bowls within their chronological, geographical and social contexts.

**Technological Analysis**

An Achaemenid phiale (libation bowl), now in London, dated to 300 B.C.E. has ornamentation similar to the SAMA pair, and was crafted in a similar manner. 137 The absence of hammer marks on the three vessels suggests they were manufactured on a lathe. 138 Production on a lathe is further confirmed by the small holes and circular striations on the base of each vessel. 139 Furthermore, visual analysis of the three bowls reveals that the lobes (or bosses) were made separately using the repoussé method.

However, it is difficult to determine if the lobes on #36-37 were attached mechanically in the same manner as the London bowl, or chemically. 140 A chemical join would require the use of

136 Lins and Oddy 1975, nos.15, 18. There are several examples of mercury-gilding on vessels from the late Hellenistic period but it was not widely practiced until the Late Roman Empire.
137 Plate XXXVI. Bivar 1961, 197-198; Strong 1966, 99, pl. 25A. This vessel is owned by a London collector.
140 See Bivar 1961, 192 for a description of the mechanical joining techniques.
solder, and although it does look some has been left on the interior of the bowls, I am not able to identify this method positively.

There is a possible numerical inscription on the interior of #37.\footnote{For a drawing of the inscription, see (M) in the catalogue.} It could either represent the Roman numeral XI or IX depending on the orientation of the bowl. Or, as the scratches are faint and appear to have been done hastily, they could just be incidental marks. A series of short parallel lines scratched into the base of bowl #37 also could be part of some numerical system or just tool marks.

**Functional Analysis**

The three vessels of possible Achaemenid origin (Nos. 36-38) in SAMA’s collection have similar bodies to their Achaemenid counterparts (Plates XXXVI, XXXVIII) but are smaller in size. None of the pieces in the SAMA collection have the high, wide rims of the Achaemenid bowls.\footnote{Dr. Mark Garrison, Professor of Art History at Trinity University, and a specialist in Near Eastern art recognized the shape of these vessels as Achaemenid but a confirmed that there was something strange about the rim.} This is because they had different functions. The SAMA bowls are not drinking or libation vessels but toilet silver. There was no need to pour liquid out of them so such a rim was not necessary. If the rim were to be removed from the London *phiale*, its shape would be nearly identical to the pair of bowls from SAMA. The vessels from SAMA are also smaller\footnote{The diameter of the London bowl is 14.6 cm, compared to the 4.7 cm and 4.9 cm diameters of the bases of Nos. 36 and 37.} because they were meant to hold cosmetics or jewelry rather than a larger amount of liquid meant for consumption.

If the SAMA bowls are in fact toilet vessels, the early Hellenistic date must be reconsidered because I have not found any parallels for toilet vessels of this shape from 300 B.C.E. An alternate date for this pair of bowls could be as late as the second or third centuries C.E. During this time, “little pots of various kinds were used to keep cosmetics” and one popular
type had a “bulbous body and low concave neck.” This description sounds very similar to #36-37. There is an example of one of these vessels with “punched circles on the body” from the Berthouville Treasure discovered in France in 1830. This vessel might prove an excellent parallel for the SAMA bowls, but this cannot be confirmed without an image.

Conclusions

These two shallow bowls with punched decoration were probably some kind of toilet vessels used to hold cosmetics or jewelry. Parallels with an Achaemenid libation bowl from the Hellenistic period suggest that the SAMA bowls were produced around 300 B.C.E. in the eastern part of the Greek world. Both vessels have a distinctive bossed decoration and were manufactured in a similar manner on a lathe.

A possible date for this vessel is the second or third centuries C.E., as there was a popular style of toilet vessel that, on the basis of verbal description, seems to resemble the shape of the bowls from SAMA. Images or firsthand visual inspection of the comparanda is needed. Microscopic examination of the production techniques for remains of soldering or mechanical joining could be useful for assigning a later date.

In addition, closer inspection of the tool marks and possible inscriptions found on these two vessels might help to pinpoint their geographic, chronological, and social context. While the origins of the Roman numeral system are debatable, they could have developed from the Etruscan use of tally-marks, which antedate the Hellenistic period by several hundred years. If either of these markings do indeed represent numbers, they do not negate the possible Hellenistic date of this pair of bowls.

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144 Strong 1966, 179. The Berthouville Treasure is a hoard of 63 pieces of ritual and dedicatory plate ranging in date from the first century B.C.E. to around 275 AD when it was buried in a temple. The piece mentioned here is no. 35 in the Treasure and it can be found in the Bibliothèque Nationale, Paris (Strong 1966, 161).

145 Strong 1966, 179.

146 Reynolds and Spawforth. (“numbers, Roman”)
#39 (Plate XL) Ladle

The shape and style of this ladle are unmistakably Roman, dating to the period of the Republic, the first centuries B.C.E. and C.E. Unlike the bowls previously discussed, this piece of silver is certainly associated with eating.

Visual Analysis

Ladle #39 is probably a transitional style between the Hellenistic and Roman Imperial styles; it is a precursor to the Roman *simpulum* of the first century C.E. This ladle has the deep bowl and long vertical handle of the Late Hellenistic ladle. These features limit the latest possible date for this ladle to the first century C.E.\(^{147}\) The absence of Hellenistic features like tangs flanking a duck’s head handle, which “did not survive in common use into the first century A.D.,”\(^{148}\) also confirm a date in the period of the Roman Republic.

Technological Analysis

This ladle was cast and then finished by hammering.\(^{149}\) The hammer marks are visible on both sides of the bowl, where light reflecting off the metal’s surface indicates it is not completely flat or polished.\(^{150}\) This is the common manufacturing technique for Hellenistic and Roman ladles.

Functional Analysis

Ladles were a standard type of utensil throughout antiquity and were used as early as the Mycenaean period.\(^{151}\) A style of long-handled ladle similar #39 first appeared in Phrygia (central

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\(^{147}\) Although the handle of ladle #39 is currently horizontal, it was bent backwards about 90° and was meant to be vertical.

\(^{148}\) Strong 1966. 143.

\(^{149}\) Oliver 1977, 43.

\(^{150}\) (Plate XL)

\(^{151}\) Oliver 1977, 43.
Anatolia) in the late eighth century B.C.E. so by the Late Roman Republican period they had a seven hundred year history.\textsuperscript{152}

Ladles served a critical role in Greek and Roman banquets because they facilitated the serving of wine and its transfer to cups. As a result, ladles and other drinking silver often took a prominent place in depictions of banquets.\textsuperscript{153} There is a mid first-century wall-painting from the House of the Chaste Lovers in Pompeii in which a ladle resembling #39 is shown in the context it was used.\textsuperscript{154} The ladle sits on a side table next to the reclining diners accompanied by several other silver vessels. While there are often strong parallels between silver vessels depicted in wall paintings and real vessels of the first century B.C.E. to the first century C.E., they are not exact replicas.\textsuperscript{155} In the context of an elite banquet like this, ladle #39 would have been owned by the owner of the house but more frequently used by a servant. However, since contextual information is missing, and ladle #39 has a very simple design and is undecorated, it could have just as likely belonged to a lower class individual.

**Conclusions**

This ladle is Roman and dates from the first century B.C.E. to the first century C.E. The combination of the deep bowl with a long handle and the absence of tangs and a duck’s head suggest this is a transitional style, incorporating both Hellenistic and Roman features.

\textsuperscript{152} Oliver 1977, 100.
\textsuperscript{153} Dunbabin 2003, 65.
\textsuperscript{154} Dunbabin 2003, 55, fig. 26
\textsuperscript{155} Dunbabin 2003, 56.
These eight spoons are *cochlearia*, a standard Roman spoon type of the first century CE. They all have the characteristic hemispherical bowls and long, pointed handles of this spoon type. Although the name comes from the use of the pointed handle to open shellfish, ancient sources suggest they were used for other foods like eggs.

**Visual Analysis**

These eight *cochlearia* are all similar in style, shape, size, and decoration and thus are identified here as a set. Sets of vessels with similar features are common in silver hoards of the first century C.E. and later. The existence of such groupings is further confirmed by graffiti and inventories, such as the Berlin papyrus. This register of silver tableware was written on papyrus in Greek for a wealthy Roman in first-century C.E. Egypt. Vessels were listed in groups of four, six, eight and twelve. These numbers were confirmed by sets of twelve in the Boscoreale hoard and the discovery of sets in several houses at Pompeii. In the House of the Menander, for example, a comparable set of twelve *cochlearia* was discovered.

Although the *cochlearia* from SAMA are about the same length as the spoons from the House of the Menander, they are between one and ten grams lighter. Studies have shown that the “numbers of spoons in a set seem to be related to the weight of silver from which they were made.” Martin’s study demonstrates that a dozen *cochlearia* could be made from one Roman pound of silver. The average weight of the eight *cochlearia* from SAMA spoons is 22 g and

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156 Strong 1966, 155-156, fig. 32c.
157 Cochlea is the Latin word for snail. Painter 2001, 69; Martial 14.121 (Shackleton Bailey 1993, 273.)
158 Some of these hoards include Boscoreale, Hildesheim, and Chaourse. Painter 2001, 20.
160 Painter 2001, 16.
161 Painter 2001, 69, M71-78, see also Maiuri 1933, nos. 71-78, pl. LXI.
162 The spoon lengths range from 9.2-16.2 cm and 14.8-16.3 cm respectively.
163 Painter 2001, 23, see also Martin 1984a.
164 1 Roman pound = 327.45 g. Painter 2001, 23. See also Martin 1984a, 84-85.
the total weight is 176 grams, i.e. 152 grams short of a Roman pound. This indicates that between four and six spoons are probably missing from the original set. There is the possibility that no spoons are missing, since eight was a common number for sets of both eating and drinking silver.

As mentioned above, written evidence often aids in the identification of sets of vessels. The most common type of written evidence is graffiti, made by the owners or craftsmen in antiquity to indicate that the vessels belonged together. These inscriptions can be used in the same manner today. Five of the eight cochlearia in this set have been inscribed in some way. Cochlear number 52 has the longest inscription: three rows of characters scratched inside the bowl. However, and unfortunately, it is illegible-faint and difficult to see with the naked eye. Cochlearia numbers 48, 49, 51, and 54 have the letters IOV inscribed in pointillé on the back of their bowls.165

Although, names inscribed on the back of silver objects denoted ownership, punch dotted inscriptions are usually attributed to makers since the process is more time-consuming and requires greater skill than simply scratching the surface of the metal.166 While the inscriptions suggest a later date, the style, size, and shape of the cochlearia all indicate that they were made during the first century C.E. The evidence for the first century date of the spoon is much more convincing than a second or third century date based on the inscription alone.

A Roman silversmith could have inscribed the letters IOV as abbreviated form of his patron’s name. Iov is the Latin name for Jupiter and there are several cognomen derived from the name of the god, including Iovianus, Iovinus, and Iovina.167 Inscriptions including these names

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165 Plate XLIII.
occur most frequently in the Balkan States in the second and third centuries CE.\textsuperscript{168} While this suggests that the inscription is much later than the spoon itself, most scholars have adopted a general rule “that it is unsafe to rely on the inscribed graffito names for identification of final ownership of a treasure.”\textsuperscript{169}

The inscription is not especially helpful for determining the social context of this spoon either. While wealthy individuals often had their silver plate inscribed with their names and weights to keep track of their assets, “there was hardly any family that did not possess some item of table silver.”\textsuperscript{170} For example, there is inscriptive evidence that names derived from Iov were common slave names in the second and third centuries C.E.\textsuperscript{171} Cochlearia were so ubiquitous and there was so little variation in their design that any claims regarding the social context of these spoons would be unsubstantiated. The inscription indicates only one certain thing about these spoons, that at some point in time at least five of them were either owned or created by the same individual.

\textbf{Suggestions for Further Study}

The long inscription on #52, too difficult to read with the naked eye, merits closer inspection. Its length alone suggest that it could provide information significant to understanding the date, owner, or use of this set of spoons.

\textbf{Conclusions}

These eight \textit{cochlearia} are a standard Roman spoon type of the first century C.E. used by individuals of all social classes to eat foods like shellfish and eggs. Eight is a significant number

\begin{flushleft}
\textsuperscript{168} Epigraphische Datenabak Heidelberg HD# HD013225.  \\
\textsuperscript{169} Painter 1993, 111.  \\
\textsuperscript{170} Strong 1966, 124.  \\
\textsuperscript{171} Solin 1996, 23. 
\end{flushleft}
in first century hoards; however, a single pound of silver is also a significant standard for sets. If the latter pertains to this set, there are a number of spoons missing.

The inscriptions reveal little about the people who crafted or owned these spoons. They do, however, indicate indisputably, that at least five of these *cochlearia* are part of a set. They were either owned or made by the same individual at some point in time.

This set of spoons is unusual among SAMA’s collection of Roman silver plate because there are no comparanda of eastern origins.

**# 42, 43, 45 (Plates XLIII-XLVI) Ligulae**

Another standard Roman spoon type of the first century C.E. is the *ligula.* This type of spoon has a larger, pear-shaped bowl and a shorter handle than the *cochlear.* The handles are often offset from the bowls and end a button or another kind of finial. Ancient authors like Martial make clear distinctions between the *cochlear* and *ligula.* These three *ligulae* are discussed together here because they are all from the first century C.E. but there is no evidence to suggest they make up a set.

Spoon #42 almost exactly matches a set of six ligulae from the House of the Menander, all of which have handles with cylindrical sections ending in buttons. It differs only in that it is slightly shorter and lighter. All of these ligulae have handles with cylindrical sections ending in buttons. Like the four *cochlearia* discussed above, this *ligula* has the letters IOV punch dotted

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172 Strong 1966, 155, fig. 32c.
173 Martial 14.120 (Shackleton Bailey 1993, 273.) See also Strong 1966, 129.
174 Plate XLIV, Painter 2001, 69, M65-70, see also Maiuri 1933, 252, 367, nos. 65-70.
175 Ligula #42 is 14.9 cm long and weighs 35 g, whereas the ligulae from the House of the Menander range from 14.2-15.2 cm in length and 40-45 g in weight.
into the back of its bowl and it must be part of the same set. This spoon certainly dates to the first century C.E. and was probably made and used in Italy or one of the adjacent provinces.

Spoons #43 and #45 are common variations of the ligula also popular in the first century C.E. Their bowl shapes are similar to #42 but their handles are rectangular in section and end in cloven hoofs. The cloven hoof was a popular style of finial in the first century C.E. and examples have been found in Naples and Pompeii in Italy but also dispersed as far as Syria and southern Russia. Spoon #45 has an inscription scratched on the top of the bowl. It appears to be part of a Greek name, but it is not entirely legible. Notation in Greek signs and letters often occurs on silver of eastern origin, but I do not think this partial inscription can be used to determine the provenience of this ligula.

Conclusions

These three ligulae are Roman spoons of the first century C.E. The two different styles of handles represent popular variations of this period. While these ligulae are almost identical to spoons that have been found at Pompeii, similar examples have been found at the furthest reaches of the empire. Lacking any contextual evidence, it is impossible to pinpoint an exact provenience for these ligulae.

Spoon #42 with its IOV inscription is part of the aforementioned set of eight cochlearia.

#31-34 (Plates XXIX-XXXII) Set of Four Small Dishes

The division of Roman silver plate into drinking silver (argentum potorium) and eating silver (argentum escarium) was not imposed by modern scholars but actually existed in

176 Plate XLIII C.  
177 Strong 1966, 155-156, fig. 32c.  
178 Strong 1966, 22-23.
antiquity; the terms were used in literature as well as by lawyers.\textsuperscript{179} These four dishes are examples of one of the many varieties of \textit{argentum escarium} used in the first century C.E. They are probably \textit{scutellae} or \textit{paropsis}, general terms for small side dishes.\textsuperscript{180}

These four dishes should be considered a set because they appear to have been made together and are “closely linked by size, type, and decoration.”\textsuperscript{181} This set of four is significant because it is a common number for sets of Roman vessels in the first century C.E.

All four of these dishes have turning holes indicative of manufacture on a lathe, a common method of production by the first century C.E. They all also have small beading on their rims, similar examples of which can be found on \textit{argentum escarium} from the House of the Menander and the Hildesheim Treasure.\textsuperscript{182}

While three of the dishes are oval (# 32-34), and one is circular (#31), it has the same incised bird motif as two of the oval dishes (# 32-33). Birds are also a common motif on silver dishes from the House of the Menander.\textsuperscript{183} Painter describes them as “water birds with long beaks” and this description also fits the birds on the dishes from SAMA. The decorative techniques used on the vessels are different however, as the decoration on the dishes from the House of the Menander is raised rather than incised.

\textbf{Suggestions for Further Study}

These four dishes are some of the most decorated pieces in the collection and further investigation of the bird motif found on three of the dishes could help pinpoint a more accurate date and provenience for this set. A more complete analysis of these dishes would involve a study of bird motifs in Roman decorative arts of the first century C.E. It would be interesting to

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{179} Painter 2001, 16.
\item \textsuperscript{180} Strong 1966, 128-129.
\item \textsuperscript{181} Painter 2001, 16.
\item \textsuperscript{182} Painter 2001, 68, M44-55, see also Strong 1966, pl. 41B.
\item \textsuperscript{183} Painter 2001, 65, M18-19.
\end{itemize}
\end{footnotesize}
know if a specific species of bird was represented here or if it is just a generic representation. If a specific species is shown, the territory of bird could suggest a provenience for these dishes.

Conclusions

These four small dishes are an example of Roman *argentum escarium* of the first century C.E. They were probably used as some sort of side dishes; they would not have held much food as they are only between six and seven centimeters in diameter. The dishes are dated on the basis of the rim-beading and the bird motif. Although they have been dated to the same period as the *cochlearia* and *ligulae*, it is impossible to tell if they were part of the same silver service or even from the same provenience.

#3-8 (Plates II-VII) and #17-18 (Plates XV-XVI) Two Sets of Shallow Circular Dishes

The name Αὔπιανου (Appianou) is scratched within the footring of all eight of these shallow circular dishes from the first century C.E. For this reason they will be analyzed together even though they are two distinct sets of dishes. They were once part of a larger silver service owned by the same individual. The two sets of vessels will be examined independently and then the inscriptions will be analyzed, as this is the one link holding this group of *argentum escarium* together.

#3-8 Shallow Circular Dishes

These six shallow vessels could be described as either plates or dishes. Six was a common number for *argentum escarium* of the first century C.E. and perhaps these are a set. They all have the same concave moulding alternating with engraved lines. Their diameters are either 9.5 or 9.7 cm and their weights range from 96 to 112 grams. The only other variation

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184 Plates II C, III C, IV C, V C, VI C, VII C.
among the dishes is that #6 has a large X scratched into the face of the plate and #3 also has an additional inscription.\textsuperscript{185}

The Romans ate from dishes, plates, and bowls in a variety of shapes and sizes.\textsuperscript{186} Examples of all these variations may not have been discovered or recorded. Ancient authors did not provide names for every single type of eating silver because it seemed a mundane detail to them. For these reasons, it has been extremely difficult to find exact matches for this set of plates (and other sets) in SAMA’s collection. They seem to combine features from different places and time periods. For example, there is a complete set of plates from the House of the Menander consisting of one large serving dish and sixteen smaller plates divided into four sets with diameters of 16 cm, 11.1 cm, 10.1 cm and 7.5 cm.\textsuperscript{187} The diameters of plates #3-8 from SAMA fall in between. The plates from the House of the Menander also have “pronounced convex rim(s)” and “segmental flat handles decorated with cast ornament in low relief.”\textsuperscript{188} None of these features are present on the \textit{argentum escarium} from SAMA.

Most of the plates and dishes I have come across in my research have some kind of decoration and it was difficult to find unadorned vessels of similar shape and with diameters as small as 9.5 cm.\textsuperscript{189} The closest match to dishes #3-8 is actually a sixth century C.E. Byzantine plate from the Smyrna Treasure.\textsuperscript{190} Although the diameter of this only dish is about 4 cm larger than #3-8, and the dishes appear almost identical from the front, it is almost 100 grams heavier. There is also a difference in the manufacturing technology. All of the SAMA dishes were worked on a lathe and have small holes to prove it, but the Byzantine dish was finished by

\textsuperscript{185} Plate XV A.
\textsuperscript{186} Strong 1966, 128.
\textsuperscript{188} Strong 1966, 148.
\textsuperscript{189} Guzzo 2006, 88, #31, 92-93, #50, 53-55, 127, #115-118.
\textsuperscript{190} Mango 1986, 278, no. 106.
hammering.\textsuperscript{191} The lathe marks are indicative of a Roman date, and this is further corroborated by the footrings that look like they have not been made separately and then soldered.

There is an inscription on dish #3 that provides further evidence for the first century date for this set of dishes.\textsuperscript{192} The letters TSS have been made in pointillé within the footring of this dish, opposite the scratched inscription of the name Αππιανοῦ. This means the inscriptions on the back of dish #3 were made by two different individuals, the maker and the owner. The letters TSS most likely represent some kind of weight inscription, as the letters SS were used to represent a weight equivalent to 2/3 of a Roman ounce that was called a \textit{binae sextulae}.\textsuperscript{193} The only difficulty with this hypothesis is the initial letter of this inscription. Most Roman weight inscriptions begin with the letter \textit{P} for \textit{pondo}.\textsuperscript{194} But there is an abrasion over part of the letter T that could have altered the appearance of the character and it might not actually be a T at all.\textsuperscript{195}

While many scholars avoid drawing conclusions from inscriptions, there is enough evidence to suggest that punch dotted inscriptions may indicate makers and graffito (scratched) inscriptions indicate owners.\textsuperscript{196} This means the inscriptions on the back of dish #3 were made by two different individuals, the maker and the owner.

\textbf{#17-18 (XV-XVI) Circular Shallow Dishes}

Two more dishes also have the name Αππιανοῦ scratched inside their footrings and thus were part of the larger silver service with #3-8. These two bowls have two features that set them apart from the other dishes in the set.

\textsuperscript{191} Ross 1962, Plate XX, B, 3. No. 16.
\textsuperscript{192} Plate II C.
\textsuperscript{193} A Roman pound (\textit{libra}) was divided into 12 ounces (\textit{unciae}), which was further divided into 24 scruples (\textit{scripula}). Two thirds of an ounce was equal to 16 scruples. (Strong 1966, 20)
\textsuperscript{194} Strong 1966, 22.
\textsuperscript{195} Plate II C.
\textsuperscript{196} Painter 1993, 111.
First, at 11.2 cm each, their diameters are about 2 cm greater than #3-8. These two plates are some of the largest in SAMA’s collection but not large at all by Roman standards.\textsuperscript{197} Main dishes of a meal were probably served on plates of this size. This measurement of 11.2 cm almost is an exact match to a set of four plates from the House of the Menander.\textsuperscript{198} Although they have different shapes and different decorations, this would suggest 11 cm was a common size for Roman plates in the first century C.E.

Second, both plates have a central rosette in the form a flower. This type of decoration in the center of the plate was also common in the first century C.E. and numerous examples have been found at Pompeii.\textsuperscript{199} A more complete study would include an investigation of the use of flower motifs in Roman decorative arts in order to pinpoint a more accurate date and provenience for these two (and, by extension the entire set of eight) vessels. Like #3-8, these two dishes have small holes, which indicate they were produced on a lathe. The use of identical production techniques in combination with inscriptional indicates that these vessels were made together.

\textbf{Inscription}

The name Απιων ου is scratched into the footrings of these eight dishes.\textsuperscript{200} The eight inscriptions are almost identical and were probably done by the same hand. They were made quickly, as if the owner was in a hurry to mark these dishes as his own. The name is in the

\begin{footnotesize}
\begin{enumerate}
\item A large serving platter from the House of the Menander has a diameter of 30 cm at its rim and one of the largest dishes has a diameter of 92 cm including its handles. (Painter 2001, Plate 20, see also Strong 1966, 149)
\item The plates M32-M35 are 11 cm in diameter (Painter 2001, 67.)
\item Guzzo 2006, 92, no. 53, 127, nos. 115-118.
\item Plates II C, III C, IV C, V C, VI C, VII C.
\end{enumerate}
\end{footnotesize}
genitive case, which suggests that Αππιανός was indeed the owner of these dishes. The name Αππιανός is a very rare Greek name and is more common as Latin name written in Greek.  

Conclusions

These eight dishes were part of a silver service owned by a man named Appianos in the first century C.E. They represent the great variety of shapes and styles of argentum escarium from this period. While the front of dishes #3-8 appear Byzantine, and the entire Stark-Willson Collection was purchased as a set of Byzantine plates and dishes, the backs of the dishes provide evidence for Roman date. The owner of this group of vessels might have been a native Greek speaker since his name is Latin but written in Greek. That is really all that can be known about this set of vessels from visual analysis. Somehow these eight vessels managed to stay together over the course of two millennia until they ended up in SAMA’s collections. Hoarding is the most likely explanation since this is how the majority of ancient Roman silver plate has survived through the centuries.

#41 (Plate XLII) Ligula and #55-56 (Plate XLIX-L) Cochlearia

These three spoons display some of the changes in fashion and design of both cochlearia and ligulae at the end of the first century C.E. into the beginning of the second. Stylistic similarities link the two cochlearia (#55-56) as a set, and the ligula is connected by a graffito inscription it shares with #55.

The cochlear of the first century, with a round bowl and pointed handle (#47-54), is replaced by a pear-shaped bowl with a convex moulding that resembles the shape of the first-

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201 It occurs on 5 times in the online version of the Lexicon Greek Personal Names in three the volumes covering Central Greece, Macedonia, Thrace, the northern regions of the Black Sea and coastal Asia Minor. To give a sense of how rare this name is, the most common name occurs 389 times in one volume.
202 See Fig 1.
century *ligula*. This is exactly the bowl shape of *cochlearia* #55-56. They represent a late first-early second century transitional style that is a hybrid of the *cochlearia* and *ligula* types. Later in the second century, the handle of the *cochlearia* is offset with a downward curving arm, but since the handles on *cochlearia* #55-56 are attached directly to the bowl, this puts them in the earlier stages of this transitional style. The best comparanda for these two spoons are a pair spoons from the Backworth Hoard, now in the British Musem and another spoon of unknown provenience in the Royal Ontario Musem, both dated to the first or second centuries C.E. The dimensions of #55-56 are comparable but they are much lighter.

*Cochlear* #55 and *ligula* #42 have nearly identical punch-dotted inscriptions, which links #42 to the two *cochlearia*. The name ΑΝΤΙΓΟΝΟΥ appears in two rows at the join of the handle and the bowl of *ligula* #41 and on the back of the handle of *cochlear* #55. Since the name is in the genitive case, it is most likely indicative of ownership. This set of spoons was owned by a man named ΑΝΤΙΓΟΝΟΣ (Antigonos) in the late first or early second century somewhere in the Roman Empire. Antigonus was the name of a dynasty of Macedonian kings that succeeded Alexander the Great in Asia from the fourth to the third centuries B.C.E. As a result, it was a common family name for slaves, freedmen, and citizens alike even from the first century B.C.E. to the sixth century C.E.

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203 Strong 1966, 177, fig. 36a.
204 Hayes 1984, 6, no. 7.
205 Plate LI. BM Registration Nos. 1850,0601.12-13; Hayes 1984, 5, no. 4.
206 Only spoon no. 4 from the Royal Ontario Museum has its weight published. At 20 g, it is between 7-8 g heavier than cochlearia #55-56.
207 Previously in this discussion, punch-dotted inscriptions have been attributed to the craftsmen but names of craftsmen on surviving silver plate are incredibly rare (Painter 2001, 28).
208 Scholten 2003, 144-145.
209 Solin 2003, 207-209. It occurs 537 times in the online version of the Lexicon of Greek Personal Names. The majority of occurrences (156,160) can be found in Volume I (The Aegean Islands, Cyprus, Cyrenaica) and Volume IV (Macedonia, Thrace, Northern Shores of the Black Sea).
Conclusions

These three spoons were made at the end of the first or the beginning of the second century C.E. The two *cochlearia* exhibit some of the new features introduced in this period while maintaining some of the earlier period. They represent a transitional type of *cochlear/ligula* hybrid. The *ligula* is typical of the first century but bears a punch-dotted inscription identical to the one on #55. It is for these reasons that these three spoons should be understood as a set. The inscribed name is not especially useful in determining a more accurate or date or provenience for these spoons.

#35 (Plate XXXIII) Oval Dish

Oval dishes were used infrequently in the Early Imperial Period, apparently limited to the consumption of fish.\(^{210}\) They seem to come into more general use in the second and third centuries.\(^{211}\) It was extremely difficult to find images of such dishes and thus it is not possible to suggest a date on the basis of style. The inscription is the most important clue for determining a plausible date and provenience for this dish.

This inscription is unlike any of the others in the collection. At first glance, it appears to be a language other than Greek or even a series of illogical characters.

![L. ΔΑΓΟΓΙΖ](Plate XXXIII C)

But it is actually a weight inscription that uses Greek ligatures to indicate the Roman units of pounds, ounces, and scruples in which weight was measured.\(^{212}\) Greek weight inscriptions are usually dotted and unlike Latin weight inscriptions, specify the units of measure by word.

\(^{210}\) Strong 1966, 128.
\(^{211}\) Strong 1966, 170-172.
\(^{212}\) 1 pound= 12 ounces = 24 scruples, see also Mango 1994, 44.
Inscription L follows this method of notation. The first character in the inscription is the letter Λ, which stands for *libra*, the Latin word for a pound. The second character is the letter A, an alphabetic numeral for the number 1. The third character is a ligature of a gamma with a small omicron, which stands for *uncia*, the Greek word for the Latin *uncia* (ounce). The forth character is the letter Γ, an alphabetic numeral for the number 3. The fifth character is a ligature of the letters ΓΡ, which stands for γράμμα, the Greek word for the Latin *scripulum* (scruple). The sixth and final character is the letter Ζ, an alphabetic numeral for the number 7. When all of these characters are combined, inscription L on oval dish #35 reads 1 pound, 3 ounces, 7 scruples. This is equivalent to a weight of 417.27 g. The modern weight of the dish is 181 g, a difference of 236.27 g. Since the inscribed weight is more than double the modern weight of the dish, this weight inscription must indicate a set of vessels rather than this one individual dish. The inscription furthermore suggests that the oval dish #35 is from a provenience east of Italy because the inscription is in Greek rather than Latin.

The characters used in this inscription are comparable to six inscriptions on four different vessels from the third to the sixth centuries C.E. found in Switzerland, Ukraine, and Romania. Although the dates and proveniences of these vessels are varied, the comparable inscriptions suggest that the oval dish #35 is also from a province outside of Italy and dates from the third to the sixth centuries C.E.

**Conclusions**

The punch-dotted weight inscription under the base of this dish indicates that it was made between the third and sixth centuries C.E. in a part of the Empire where Greek was the

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213 The inscription is read from left to right as shown in the above image.
214 See Woodhead 1981, 112 for a table of alphabetic numerals and further information regarding their use.
215 1 Roman pound = 327.45 g, 1 Roman ounce = 27.287 g, 1 *scripulum* = 1.137 g (Painter 2001, 53).
216 Mango 1994, 42, Nos. 4, 6, 7, 8, 12, 16.
language for trade and commerce. The weight indicated by this inscription is more than double the actual weight of the dish. Thus, the inscription probably refers to a set of dishes rather than this single dish alone.

**#40a-b (Plate XLI) Spherical Vessel and Lid**

The Stark-Willson Collection of the San Antonio Museum Art was originally purchased as a collection of Byzantine silver spoons and dishes. The spherical vessel with a lid (#40a-b) is the one object in the collection for which a Byzantine date is probable.²¹⁷

Like many other vessels in the collection, #40 has the turning holes and concentric burnishing lines indicative of manufacture on lathe, but it also was shaped by hammering. The metal has the characteristic uneven texture left behind by blows of a hammer.²¹⁸ The best comparandum for #40 is a sixth to seventh century C.E. spheroid box from Ma’aret en-Noman Treasure found in north western Syria.²¹⁹ Both vessels were shaped by hammering, finished on a lathe, and “decorated with sets of deeply cut turnings.”²²⁰ Their dimensions are also very similar; the box from Syria is only 2 cm taller and its rim is only 0.6 cm wider than #40. Both vessels also have tears in their rims.

The Syrian box was found with several pieces of ecclesiastical silver and it has been suggested that it had a ritual function, for holding wafers. However, it might also have been used in a secular context and then given to the church for its metal value.²²¹ If used in a secular context, it was probably some kind of toilet vessel used to hold jewelry or other valuables.

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²¹⁷ The shape of the shallow bowl (#1a) is similar to a Byzantine bowl (Mango 1986, 112, no. 16) but I’m not sure if these is enough evidence to draw any conclusions from.
²¹⁸ The shallow bowl (#1a-b) is the only other vessel that planishing, but there is no evidence to suggest that these vessels are related in any way.
²¹⁹ Mango 1986, 240, no. 70.
²²⁰ Mango 1986, 240.
²²¹ Mango 1986, 240.
Conclusions

This spherical vessel and lid is the only object in the collection for which there is a strong Byzantine comparandum. It is also one of two objects (the other is #1a) that were shaped by extensive light hammering, a process known as planishing, in combination with turning on a lathe. With a suggested date of the sixth or seventh century, it is the latest object in the collection. While similar vessels were used in religious contexts, there is no way to know for sure if the San Antonio vessel was used for secular or ritual purposes.
Chapter VII: Suggestions for Further Study

This chapter describes how this initial study of Roman silver plate in SAMA’s collections could be expanded upon. Further study of this collection could result in a more accurate story of the life-cycle of these objects, from their manufacture until their accession by SAMA. A multidisciplinary approach of study might partially compensate for the contextual information that was lost when these objects were removed from their final place of deposition without proper recording. But no amount of study will ever be able to replace the contextual information produced by an archaeological excavation.

Scientific testing and analysis can provide information regarding the metal itself.\textsuperscript{222} Tests such as Inductively Coupled Plasma (ICP) Spectrometry and Energy Dispersive X-Ray Fluorescence (EDXRF) can indicate the purity and content of the metal. Silver has always had a high intrinsic value, which means that it was also highly controlled and standardized. For example, Roman silversmiths preferred to use almost pure metal alloyed with 2-3% copper for coinage and plate.\textsuperscript{223} These standards make the purity of the silver “an important diagnostic characteristic” and an essential test for any complete study of Roman silver plate.\textsuperscript{224} Both tests can detect minor and trace elements, which can be used “as a possible guide to ore sources and manufacturing sites.”\textsuperscript{225} Information regarding the purity and content of the metal would be useful for comparisons among objects within the collection and external silver. The elemental composition and silver content of plates or dishes that were manufactured together should be identical, especially if they were made from the same ingot. This type of information could confirm or negate the groupings suggested in this study. Any deviations with respect to

\textsuperscript{222} See Mango 1994 for a paradigm of technological analysis and application of scientific testing.
\textsuperscript{223} Mango 1994, 34.
\textsuperscript{224} Mango 1994, 34.
\textsuperscript{225} Mango 1994, 34.
elemental composition might be indicative of different proveniences, dates, or even possible forgeries.

ICP Spectrometry and EDXRF can also provide information about the environment in which the silver plate was stored. The metal responds to its environment by corroding and analysis of these corrosion products could shed some light on where these objects have been, especially in the recent past. While most of the residue left behind by the final depositional environment has long been lost, anything that changed the physical makeup of the metal should still be detectable.

Determining how an object was made can provide valuable information since technologies and methods of production evolve over time or are even location-specific. I was able to determine that most of the objects in the collection were turned on a lathe but not much more than that. Analytical techniques such as X-radiography can highlight tool marks which indicate how the metal was worked and decorated. It can even highlight seemingly insignificant scratches and other signs of wear that experts can use to interpret how a vessel was used.

I would suggest that the ribbed bowl with a locking lid (#38), the pair of shallow bowls with punched decoration, and the spherical vessel with lid (#40) all be tested using EDXRF. The styles and shapes of these four vessels are different from anything else in the collection and analysis of the silver content could indicate if they are indeed Roman or from different periods, as I have suggested. This method of testing is non-destructive and the EDXRF laboratory at the University of California Berkley offers testing services for $35 per sample.

Professional photography or drawings of profiles and sections of the vessels is a more practical suggestion. There are many markings on these objects that could be possible inscriptions (# 6, 37, 38, 45, 52) that could be further identified with such photography.
This information could then be published, allowing more scholars and experts to access it and hopefully contribute to the discourse.

If I had more time to continue this study I would like to investigate further the dealer from whom the collection was purchased in the 1920’s or 1930’s. I would also like to address the ethical issues associated with the purchase of unprovenienced antiquities and the problems this creates for archaeologists and other scholars who study these objects.
Chapter VIII: Conclusions

SAMA acquired a collection of fifty-six silver objects in 1986 from the Stark family. The collection was originally purchased in the 1920’s or 30’s as a collection of Byzantine silver spoons and dishes. Nothing else is known about the provenience of these objects. Fifty-three objects are currently on display in the museum; they are labeled as Roman silver from the first century C.E.

This investigation was an attempt to situate these objects within their social, chronological, and geographical context through a process of visual analysis and comparison. Since silver has a high intrinsic valuable and was often recycled throughout history, most surviving Roman silver plate is preserved by hoarding. The first step of this investigation was to determine if this collection was indeed a hoard of vessels owned by one individual and eventually buried as a means of safekeeping.

My research has shown that these silver objects display are a conglomeration of vessels with possible dates ranging from the third century B.C.E. to the sixth century C.E. Although silver vessels are often kept for multiple generations and hoards of vessels ranging over several hundred years are not uncommon, it is not feasible that these fifty-three objects comprised a hoard in antiquity.

The earliest objects in the collection are the ribbed bowl with a locking lid (#38) and the pair of shallow bowls with punched decoration (#36, 37). They are toilet vessels of possible Achaemenid origins dating to the third through the first centuries B.C.E. The majority of the sets of plates, dishes, and spoons are probably from the first century C.E., as there is no evidence to
suggest otherwise. The latest objects in the collection are an oval dish (#35), a small bowl (#1a), and a spherical vessel with a lid (#40) dating from the third to the sixth centuries C.E.\textsuperscript{226}

There are nine distinct sets of vessels in the collection, consisting of two, three, four, eight, and nine vessels.\textsuperscript{227} These suggested groupings are based on similarities in decoration, style, and shape as well as inscriptive evidence.

I believe there is enough evidence to suggest that the majority of the objects, regardless of their date, do have an eastern provenience, even if it is only east of Rome. The toilet vessels of possible Achaemenid origins, combined with the Greek name and weight inscriptions, and the spherical vessels all point to an Eastern provenience. Even if these vessels were not manufactured in an eastern province, they could have been produced in a cosmopolitan city with a strong eastern influence. This conclusion is further strengthened by the fact that the dealer from whom the Stark family purchased some of their collection had a shop in Jerusalem.

I was not able to find comparanda for many of the objects and some of them seem to be strange combinations of features. There are some things that just do not make sense. For example, the pair of bowls with punched decoration (#36, 37) and the ribbed bowl (#33a-b) have Achaemenid shapes but strange rims. The engraved molding on many of the first century Roman plates (#3-8) is almost identical to a Byzantine plate of eastern origins.\textsuperscript{228} Most of the first-century plates and dishes are generally smaller than any similar vessels form this same period. Even the objects that had dimensions similar to their comparanda were usually much lighter.\textsuperscript{229}

This investigation of supposedly Roman silver plate in SAMA’s collections has demonstrated that in spite of the lack of contextual information much can be deduced about the

\textsuperscript{226} #1a-b, 35, 40a-b.
\textsuperscript{227} See Figure 4 for a table showing all of the suggested groupings.
\textsuperscript{228} Mango 1986, 278, no. 106.
\textsuperscript{229} For example, # 9-14, 31-34.
original dates and provenances of these pieces, and also something of their subsequent history. This agglomeration of vases comprises at least nine separate ancient sets, and it was not buried as a single hoard. More can be learned with the application of EDXRF testing and high-quality photography. Both are non-destructive and relatively inexpensive. In the end, though, it must be admitted that so much more could have been learned if these objects had been found in the course of archaeological excavation rather than purchased from dealers or in souvenir shops.
Works Cited


